City of Grass Valley
2020 General Plan

Prepared for and Distributed by:

City of Grass Valley
125 East Main Street
Grass Valley, CA 95945-6588

Contact Person:

Kyle Kollar, Director
Community Development Department
(530)274-4330

Prepared By:

Quad Knopf, Inc.
One Sierragate Plaza
Roseville, CA 95678

In Association With:

Brown-Buntin Associates, Inc.
Cultural Resources Unlimited
Hausrath Economics Group
kdAnderson Transportation Engineers
Mogavero Notestine Associates

Adopted:

November, 1999

Updates (noted in underlined text):

Date	Chapters	Resolution
1/11/2000	4	00-56
5/11/2011	3	2011-32
6/11/2013	4	2013-33
9/23/2014	3, 5, 7	2014-42

Acknowledgements:

Grass Valley City Council:

Bill Hullender, Mayor
Linda Stevens, Vice Mayor
Patti Ingram
Gerard Tassone
John Taylor

Grass Valley Planning Commission:

Lisa Swarthout, Chairperson
Howard Levine, Vice-Chairperson
Leonard Bednorz
Dan Miller
Dick White

Grass Valley City Staff:

Kyle Kollar, Dir. of Comm. Development
William N. Roberts, City Planner
Gary W. Price, Associate Planner
Judy Roth, Planning Commission Clerk

General Plan Update Steering Committee:

Linda Stevens, Vice Mayor
Patti Ingram, Councilmember
Lisa Swarthout, Planning Commissioner
Howard Levine, Planning Commissioner
Paul Aguilar, Member at Large
Paul Schwartz, Member at Large
Sharon Boivin, Member at Large
Mark Johnson, Member at Large,
Former Councilmember,
Mayor

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE
INTRODUCTION

ROLE OF THE GENERAL PLAN

A General Plan is often compared to a "constitution" for local development, and serves as the policy basis for all land use decisions.

The General Plan is a comprehensive plan for growth and development in the City of Grass Valley and the surrounding unincorporated area. Together, the City and surrounding unincorporated area are termed the Planning Area. Every county and city in California is required by State law to adopt a general plan (Article 5, Section 65300 et seq. of the Government Code).

PARTICIPANTS AND PROCESS

The Grass Valley General Plan Update commenced June 30, 1998 with a "kickoff" meeting at the Grass Valley City Hall.

From the outset, Grass Valley General Plan Update was aided by the leadership of an appointed Steering Committee. The Steering Committee had eight members, appointed by the City Council. Two were Council members, two were members of the Planning Commission, and four were Members-at-Large.

Members of the Steering Committee:

- Linda Stevens, Councilmember/Vice Mayor (Committee Chair)
- Patti Ingram, Councilmember
- Lisa Swarthout, Planning Commissioner
- Howard Levine, Planning Commissioner
- Paul Aguilar, Member-at-Large
- Sharon Boivin, Member-at-Large
- Mark Johnson, Member-at-Large (former Mayor)
- Paul Schwartz, Member-at-Large

The Steering Committee was appointed effective June 1, 1998, and participated in consultant selection and pre-project activities. The Steering Committee has guided General Plan activities through bi-monthly meetings with staff and consultants; sponsored Public Workshops designed to afford members of the public opportunity to participate in General Plan development; and served as the City's decision-making body throughout General Plan formulation.

Staff support was provided by City Administrator Gene Haroldsen, Community Development Department Director Kyle Kollar, City Planner Bill Roberts, Associate Planner Gary Price, and Planning Commission Clerk, Judy Roth.

The lead consultant on the General Plan Update was Quad Knopf of Roseville, California, represented by Gene Smith, Vice President and Director of Planning.
Sub-consultants are:

- Mogavero Notestine Associates (Community Design)
- Hausrath Economics Group (Economics, Market and Fiscal Analysis)
- kdAnderson Transportation Engineers (Circulation)
- Brown-Buntin Associates (Noise)
- Cultural Resources Unlimited (Historical/Cultural)

GENERAL PLAN ELEMENTS

The 1998-99 Grass Valley General Plan Update includes revisions to the following General Plan Elements:

- Land Use
- Circulation
- Conservation/Open Space (formerly separate elements being combined)
- Noise
- Safety (formerly Safety and Seismic Safety Elements, being combined)
- Community Design (formerly Urban Design)
- Historical
- Recreation

The consulting team assisting in General Plan preparation conducted the Environmental Impact Report on the General Plan "Issue Areas" addressed in the EIR were:

- Land Use and Planning
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards
- Hydrology and Water Quality
- Noise
- Parks and Recreation
- Public Services and Utilities
- Transportation and Traffic

PLANNING AREA

The planning process reached beyond the City limits to areas that could be impacted by City action or vice versa.

Figure 1-1 shows the Planning Area for the Grass Valley General Plan Update. The Planning Area comprises the city limits plus unincorporated portions of Nevada County surrounding the City of Grass Valley. Figure 1-1 also shows the current Grass Valley Sphere of Influence.

City General Plans typically embrace more than just the city limits, reaching out into peripheral unincorporated areas. This practice allows General Plans, which are updated every 10 to 20 years, to include areas outside the city which: 1) are likely to be candidates for annexation during the life of the General Plan, 2) affect, and are affected by, city actions and 3) receive, or might reasonably be expected to receive, city services.

All California cities have a sphere of influence, typically encompassing an area broader than the city limits. The sphere of influence is useful for purposes of planning service and facility extensions, and for establishing joint city/county land use planning and regulation prior to annexation.

GOALS, OBJECTIVES, POLICIES, AND IMPLEMENTATION ACTIONS AND STRATEGIES

The General Plan is fundamentally a "policy document."

The General Plan is fundamentally a "policy document." The goals, objectives, and policies contained in the General Plan will be used to guide the city's physical growth and development during the next twenty years.

By definition, a "goal" is a general expression of community values which sets a direction or ideal future end, condition, or state. An "objective" represents a specific end condition which is viewed as an intermediate step toward attainment of a goal. A policy is a specific statement to be used in guiding decision making, based on General Plan goals and objectives. Implementation actions and strategies are directives which carry out General Plan policies.

Goals, objectives, policies, and implementation actions and strategies are divided into subject areas based on the various General Plan Elements. The numbering system is based upon the subject area and type of statement. The following abbreviations are used:

- Goal (G)
- Objective (O)
- Policy (P)
- Implementation Action and Strategies (I)

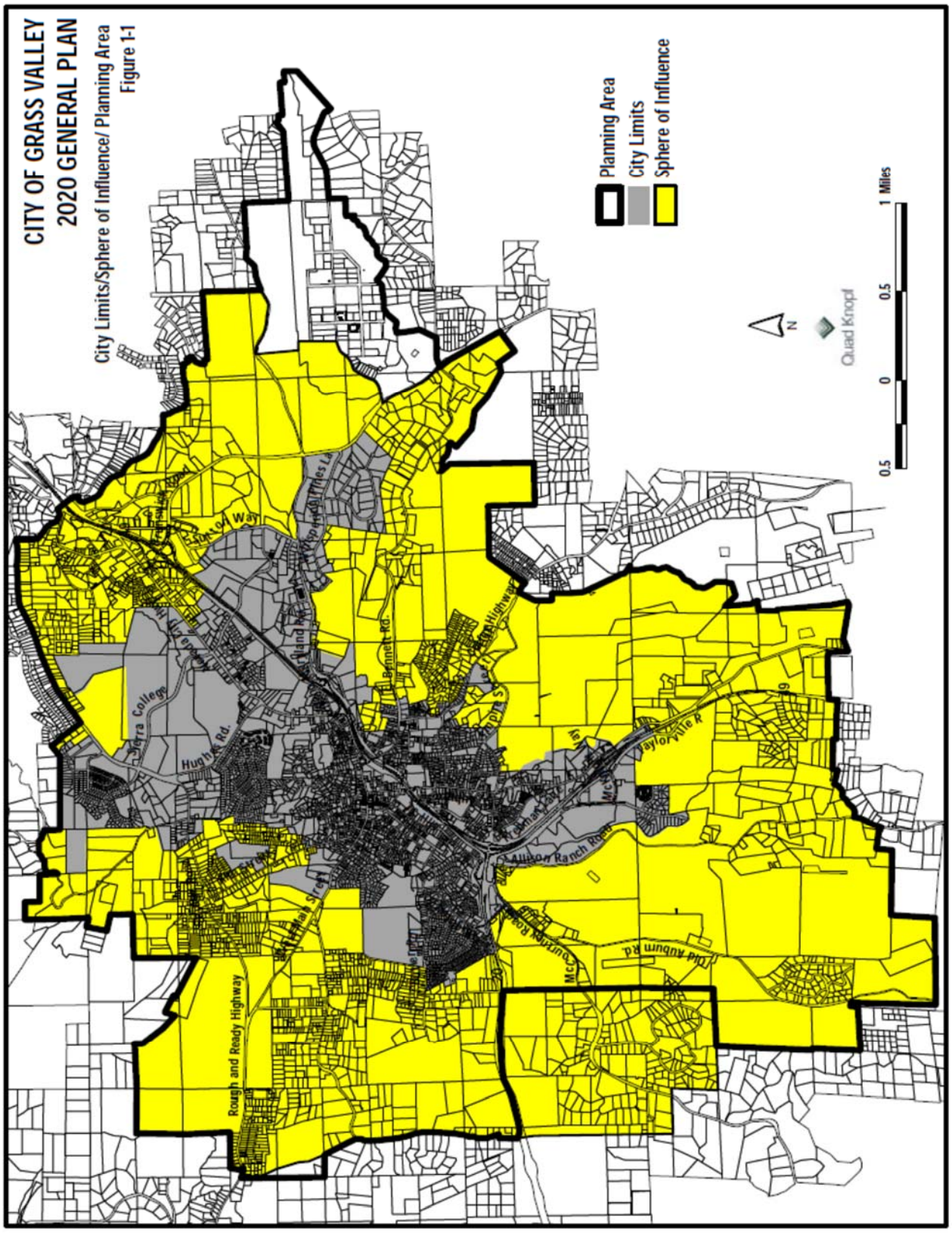
FACTS AND FIGURES

This table contains statistics developed or used during the course of the General Plan Update (Table 1-1)

Table 1-1 Facts & Figures Grass Valley Planning Area

Land Area, in Acres (July, 1999)	
Grass Valley Planning Area, Total	9,894
City of Grass Valley	2,521
Planning Area, Unincorporated Portion	7,373
Population	
Planning Area (estimated, January, 1999)	16,000
Planning Area (projected, year 2020)	23,395
Planning Area (projected increase 1999-2020)	7,395
City of Grass Valley (estimated, January, 1998)	9,475
Median Household Size, Planning Area (estimated 1998 and assumed through 2020)	
Single Family housing units- persons per household	2.40
Multi-family housing units – persons per household	1.95
Housing Units – 2020 Total Projected Net Increase (1999-2020 – Planning Area)	
Total housing units, 2020 (excludes institutions/group quarters)	10,203
Total net housing unit net increase, 1999-2020	2,820
Single Family housing units net increase	1,551
Multi-Family housing units net increase	1,269
Housing Units – Estimated (1999) – Planning Area	
Total housing units (excludes institutions/group quarters)	7,383
Single Family housing units	4,146
Multi-family housing units (includes duplexes)	2,993
Mobile home/Manufactured Housing	244
Housing Units – "Buildout" – Planning Area	
Projected total housing units at Buildout, Planning Area	10,720
Total net housing unit increase, 1999 to Buildout	3,337
Employment Projections – 1999-2020 Net Increases – Planning Area	
Retail/Commercial employment	3,080
Office/Professional employment	1,241
Manufacturing/Industrial employment	1,280
All Other employment categories	1,111
Total Projected Employment Increase, 1999-2020	6,712
Employment-related Additional Acreage Demand Projections-Planning Area-1999-2020	
Retail/Commercial Land Uses (44 workers/acre)	70 acres
Office/Professional Land Uses (26 workers/acre)	48 acres
Manufacturing/Industrial Land Use (14 workers/acre)	91 acres
All other employment categories	No acreage estimated
Total increase, 1999-2020	209 acres +*

*Excludes additional acreage demand for "all other" category, above. All other includes government, institutional non-governmental land uses, self-employed workers, and home-based businesses.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
City Limits/Sphere of Influence/ Planning Area
Figure 1-1
Planning Area
City Limits
Sphere of Influence
N
Quad Knopf
0.5
0
0.5
1 Miles
Sierra College
Hughes Rd.
Bennett Rd.
Idaho Maryland Rd.
Nevada City Highway
Main Street
Allison Ranch Road
Rough and Ready Highway
Old Auburn Rd.

Chapter Two

Vision Statement

CHAPTER TWO
VISION STATEMENT

The 2020 General Plan will serve as our guide and road map for the next twenty years. Extensive analysis, study, and debate have taken place in order to assure our community's thoughts, ideals, and values would be embraced in the updated plan.

The General Plan's goals, objectives, policies, and implementation measures are intended to facilitate a climate of preserving, protecting, maintaining, and enhancing the quality of life we value in Grass Valley. This includes our neighborhoods, commercial and public lands, and areas of future expansion.

Grass Valley plays a significant role in our community region. Our updated General Plan directs us to reach out beyond our traditional functions and facilitate relationships with Nevada County, other public entities, special districts, and agencies to actualize the intent of the General Plan. Ultimately, the General Plan strives to create congruence between our values and the reality of the times in which we live.

Grass Valley General Plan Update Steering Committee
July, 1999

LOOKING TOWARD THE NEXT MILLENNIUM

The 2020 General Plan is Grass Valley's fourth General Plan in more than 100 years of cityhood. The first three General Plans (adopted in 1966, 1972, and 1982 respectively) were built around central themes. All continue to be as important today as in past decades.

- Preserve historical character and encourage restoration.
- Expand public services to serve growing population.
- Encourage variety in residential building types and environments.
- Including high density housing areas in the town center.
- Provide better regional connections.
- Improve the circulation patterns within the City.
- Protect and improve the downtown area.
- Diversify the economy and locate industry to avoid undue traffic.
- Preserve scenic beauty and character.

The General Plan update process has given the leaders and citizens of Grass Valley an opportunity to re-affirm certain directions, reserve others, and introduce new issues and choices.

Many jurisdictions wrestle with conflicts between an expanding economy and environmental quality. Such conflicts can cause lasting rifts unless properly addressed and resolved. Despite the potential for controversy inherent in any change, the fundamental purpose of planning is to deal effectively with change. The General Plan will serve as a vehicle for consensus rather than conflict.

QUALITY OF LIFE

Quality of life factors have been given priority over quantitative measures of success and progress. Quality of life means different things to different people. As used here, it refers to several abstract concepts associated with the livability of a particular place. However intangible, several quality of life factors are of the upmost importance to the people of Grass Valley. Through the General Plan process the City has identified and planned based upon quality of life factors.

Grass Valley residents value highly the City's small town, rural character and sense of community. Grass Valley's friendliness and community consciousness stand in sharp contrast to the perceived alienation often associated with impersonal large cities and modern suburbs. Closely associated with small town, rural character is convenience (nothing is far from anything else) and proximity to open space. The 2020 General Plan strives to maintain Grass Valley's small town character and sense of community in a number of ways, including an emphasis on infill development, neighborhoods integrity, community design and creation of community and neighborhood gathering places.

Aesthetics contribute to Grass Valley's quality of life. As interpreted from public workshops and listening sessions, aesthetic values associated with the City include trees, various other natural amenities, views, architectural features, and the historical look and feel of the downtown area. High on the list of aesthetic priorities are the entryways to and highways corridors through town. Also of prime concern aesthetically: development of now-outlaying properties such as Loma Rica Ranch, North Star, Kenny Ranch, and the Bear River Mill site.

History continues to live in Grass Valley. As well as any Sierra Nevada town, Grass Valley exhibits the settlement and progression of western towns from the mid-19th century through the early 20th century. A sense of history is pervasive, from ever-present reminders of gold mining heritage to fine examples of architecturally interesting and significant buildings. Historic preservation and enhancement figure prominently in the General Plan and supporting implementation measures.

THE ROLE OF GRASS VALLEY IN THE REGIONAL CONTEXT

Despite a relatively small resident population (approximately 10,000) the City of Grass Valley is the regional economic and cultural center for perhaps seven times that population throughout parts of four Counties. Planning for Grass Valley means planning to accommodates the needs of people who use the City but are not necessarily City residents.

Substantial land area is presently devoted to commercial, industrial, and other business uses. The medical community is large and expanding. Sierra College adds to a growing educational community and employment base. Despite some concerns about becoming a bedroom community, Grass Valley and the immediate vicinity have more jobs than employed residents. Any plan to establish a balance between jobs and housing must consider the City's regional function.

Residentially, Grass Valley provides approximately 55% of Nevada County's multi-family housing units, although the City has but 12% of the County's total housing stock. Nearly 60% of City residents rent. Thus, the City of Grass Valley is the regional focal point for rental and multi-family housing, a market likely to expand considerably by the year 2020.

Grass Valley's role as a regional economic and cultural hub, combined with the ambience of downtown, has given rise to a number of interesting civic improvement ideas: a hotel-conference center, a performing arts center, a multi-theater cinema complex, and a large open plaza for various gatherings. Hopefully, the 2020 General Plan will facilitate constructive change.

FUTURE DEVELOPMENT WITHIN THE PRESENT CITY LIMITS

The population of Grass Valley and its Planning Area, estimated at 16,000, is projected to grow to 23,395 by the year 2020. Infill development on undeveloped land within the City of Grass Valley is an important facet of the 2020 General Plan. Infill and a compact development pattern will facilitate efficient use of land with a minimum of public service extensions. About one-quarter of the City remains undeveloped. Some of this land, however, is so constrained by natural factors that development may never occur.

It is realistic to expect infill development to accommodate about one-third of new housing in the Planning Area, including the City in the next 20 years. Depending on market factors, infill may be able to provide a larger percentage of non-residential development, but by no means will it be able to meet the total commercial and industrial land demand.

Although the basic development patterns within the city limits are already established, much can and should be done over 20-year life of the 2020 General Plan. Fine tuning, rather than wholesale reconstruction, should be the watchword. Many outstanding, though subtle, land use concepts and changes can enhance the City incrementally. Downtown may expand outward a bit, accompanied by building "up rather than out". Well-designed higher density housing can fit in if properly located, a concept in keeping with Grass Valley's most significant demographic characteristic – a disproportionately older-than-average population.

Renovation of individual homes and conservation of neighborhoods must keep up with further aging of an already old housing stock. Existing commercial areas must renovate and intensify. Housing code enforcement and effective use of re-development programs are essential "implementers" of the 2020 General Plan.

CITY EXPANSION

Expansion is nothing new to Grass Valley.

Since its early days as an unincorporated settlement, Grass Valley has often expanded its boundaries to embrace and facilitate new development. From on original 361 acre Townsite in 1872, Grass Valley has annexed 87 times to achieve its current, irregularly-shaped 3.9 square miles. All but two expansions have occurred since 1940.

The Planning Area comprises about 15.4 square miles, nearly four times the current area of the incorporated City. A substantial portion of the region's industrial and commercial development is presently outside of the City but within the unincorporated Planning Area.

One of the Nevada County General Plan's central themes is to direct urban growth into community regions that can effectively and economically provide urban types of services. Grass Valley supports a centralized growth concept. For many of the urban types of services required by future development within the region, the City will be the logical service provider. These include both relatively higher density residential land uses and non-residential uses.

Urban densities require urban services, and Grass Valley requires annexation prior to service extension. The 2020 General Plan provides direction to future annexation, while stopping short of dictating a rigid schedule.

ENVIRONMENTAL PROTECTION AND ENHANCEMENT

Grass Valley's environmental setting is both the object of affection and concern for the citizens of Grass Valley. The area's hills, trees, streams, and meadows draw and captivate residents. But these same natural features are sensitive to alteration, and may be destroyed or seriously impaired in the course of land development.

Environmental challenges and opportunities are many: setting aside environmentally sensitive areas; preserving open space; park and nature trail development; and restoring or reclaiming abused areas. All are addressed effectively in the 2020 General Plan, but all require a strong commitment to implementation.

The 2020 General Plan introduces an innovative technique for continually identifying promising open space opportunities without jeopardizing private property rights.

The 2020 General Plan envisions unprecedented support and assistance from private organizations. The Nevada County Land Trust and similar organizations may be of considerable assistance in protecting natural areas while achieving equitable arrangements for landowners willing to negotiate development rights. Rare botanical species and their supporting environs in and near Grass Valley have been identified and described by the California Native Plant Society.

A concept often mentioned in the past General Plans but still awaiting implementation is the Wolf Creek Riparian Corridor and linear trail. The Trail-Sidewalks Network connects outlying areas with downtown Grass Valley, connects parks and recreation areas with one another, provides both recreation and transportation, and assures the protection of a linear wildlife habitat. Wolf Creek, the Nevada County Narrow Gauge Railroad right-of-way and Wolf Creek South Fork are key elements in the Trails-Sidewalks Network.

Grass Valley's existing park system consists of lands donated to the City over the years. While attractive and pleasant, City parks are unevenly distributed, resulting in some areas being well served while others are underserved. The 2020 General Plan contains a framework for a park and recreation system, designed to meet current and future needs throughout the City and expanded in scope to include natural areas, open space, and passive parks as well as active parks and play fields.

TRANSPORTATION

Transportation policy evolved in tandem with land use policy during the course of the 2020 General Plan. The General Plan Update Steering Committee was determined to make the Circulation Element of the General Plan responsive to land use and environmental directives.

Public meetings and workshops made clear the desire of citizens for transportation alternatives to the automobile. At the same time, they expect solutions to present-day congestion. Citizens want to avoid through traffic in residential neighborhoods, or at least want it "calmed", resulting in traffic which is slower, less disruptive, and less dangerous to pedestrians.

Alternatives to the automobile most desired are the bicycle and pedestrian ways, including trails, paths, sidewalks, bike lanes, and similar facilities. Alternative transportation systems need to connect identified nodes, form real networks, and be made known to the general public.

Transit has captured the imagination of many Grass Valley residents, particularly in the form of smaller, flexible vehicles circulating frequently within small geographic areas and serving carefully-defined transportation needs.

Alternative transportation is not expected to render vehicular transportation obsolete. Rather, alternatives should be viewed as supplemental, available in appropriate circumstances. To the extent that alternative transportation can be provided economically, is able to meet the needs of those who use it, and gets cars off the road, it will be a success.

Implementation of the comprehensive Trails-Sidewalks Network is a high priority. Previous General Plans have included versions of a trail system. Certainly, planning and developing a comprehensive pedestrian/bicycle system will be difficult and expensive. For that reason, multi-purpose pathways/trails/sidewalks designed to meet the needs of (and be funded jointly by) both transportation and recreation interests are planned.

INTERGOVERNMENTAL COORDINATION AND COOPERATION

The 2020 General Plan cannot be implemented in a vacuum. Other governmental units and special districts will play a key role in the process and final decisions.

The Nevada County General Plan (adopted in 1995) was instrumental in helping establish the boundaries of the Grass Valley Planning Area and to guide land use and other decisions made during the plan update process. Coordination with the County will increase as implementation of specific recommendations and concepts start to take shape. Likewise, the City of Grass Valley must coordinate with Nevada City, Nevada Irrigation District, fire suppression agencies, forestry and land conservation agencies, school districts, air and water quality regional agencies, and other public service providers.

Chapter Three

Land Use Element

CHAPTER THREE
LAND USE ELEMENT

INTRODUCTION

The Land Use Element has the broadest scope of the mandatory General Plan elements.

> *A land use element … designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal standards of population density and building intensity recommended for the various districts and other territory covered by the plan.*

Government Code Section 65302(a)

> *The land use element functions as a guide to planners, the general public, and decision makers as to the ultimate pattern of development for the city or county. The land use element has perhaps the broadest scope of the seven mandatory elements… it plays a central role in correlating all land use issues into a set of coherent development policies… In practice, it is the most visible and often used element in the local general plan. Although all elements carry equal weight, the land use element is often perceived as being the most representative of the general plan. The land use element has a pivotal role in zoning, subdivision, and public works decisions. The element's objectives and policies provide a long-range context for those short term actions.*

The State of California Office of Planning and Research publication General Plan Guidelines (1998 Edition)

EXISTING LAND USE

Existing land use information is essential to an understanding of current development patterns and acreages devoted to particular land uses. Existing land use information for the Grass Valley Planning area was developed by the Grass Valley Community Development Department in early 1999. The information was entered into the Quad Knopf / City of Grass Valley geographic information system on a parcel basis, then used for statistical analysis and mapping. Figure 3-1 is the Existing Land Use map.

GENERAL PLAN LAND USE CLASSIFICATION SYSTEM

To translate the goals, objectives, and policies of the Land Use Element into diagram or map form, a set of designations or classifications must be adopted to serve as a guide for general land use distribution. Determining the land use designation for any area is generally based on multiple criteria, which may include:

- Existing patterns of development when compatible with goals, objectives, and policies of the General Plan
- Accessibility/circulation
- Availability of public services and facilities and potential for their expansion or extension
- Geo-physical characteristics of the area such as slope, wetland or flood prone designation, soils, geology, vegetative cover, and biological significance
- Existing parcel size
- Desire to protect or buffer certain uses from other, incompatible uses

The land use designations described below and used in this General Plan have been modified from the Grass Valley General Plan adopted in 1982, with some notable changes. Following is a summary outlining the new General Plan Land Use Classification System structure.

Residential Land Uses
- **Urban Estate Density (UED)**
- **Urban Low Density (ULD)**
- **Urban Medium Density (UMD)**
- **Urban High Density (UHD)**

Commercial
- **Commercial (C)**
- **Office and Professional (OP)**

Industrial
- **Manufacturing-Industrial (MI)**

Mixed Use
- **Business Park (BP)**
- **Special Development Area (SDA)**

Overlay Designations
- **Town Center (TC)**
- **Open Space Opportunity (OSO)**

Public and Quasi-Public
- **Public (P)**
- **Institutional, Non-governmental (ING)**
- **Schools (S)**
- **Utilities (U)**
- **Parks and Recreation (PR)**
- **Right of Way (ROW)**
- **Open Space (OS)**

The 2020 General Plan contains two concepts not found in previous Grass Valley General Plans. They are the 1) Mixed Use and 2) Overlay Designations categories.

Within the Mixed Use category are Business Park (BP) and Special Development Area (SDA). For SDA-designated areas, the City shall require petitioning owners to prepare additional plans (such as a specific plan, master plan, or similar instrument) for subsequent submittal to and approval by the City. This procedure may be required for BP -designated areas, at the discretion of the City. Mixed Use allows, but does not require, a combination of residential, "job-generating" and other land uses. Within a Business Park (BP) designation, for example, a typical "mix" includes light industrial and office-professional land uses operating compatibly within the conditions imposed by the business park, as well as the City. Individual land uses within any Mixed Use category are to be designated according to their most generic characteristics (UMD, M-I, OP, etc.). Special Development Area (SDA) is intended to be a temporary designation, pending adoption of a specific plan, master plan, or similar instrument. Thereafter, the General Plan Land Use Classification System land use designations (see page 3-2) or adopted specific plan provisions replace the SDA designation.

Overlay designations are 1) Town Center and 2) Open Space Opportunity. Overlay maps separate from the Land Use Plan map are used to depict Town Center and Open Space Opportunity areas. The Land Use Plan map, itself, depicts land use designations, but does not show the overlay maps.

Town Center (TC) is intended to pertain to and define downtown Grass Valley, the original 1872 Townsite, and areas near downtown which are considered to be" at the doorstep" of downtown. The Town Center is intended to be the City's central "neighborhood" for purposes of design standards, architectural treatment, streetscape improvements, and historical preservation and enhancement.

Open Space Opportunity (OSO) has been a General Plan land use designation utilized by previous General Plans. By making OSO an overlay over the General Plan Land Use map, the City simultaneously expresses its intent to effectuate permanent open space while acknowledging the rights of owners to utilize their properties in other ways if permanent open space status is not achieved. Where OSO designation is implemented on a permanent basis, underlying land use are to be either designated Open Space (OS) or, if appropriate Parks and Recreation (PR) on the Land Use Plan map.

GENERAL PLAN LAND USE DESIGNATIONS DEFINED AND DESCRIBED

Urban Estate Density (UED)

The lowest density residential category in the General Plan, UED, requires one unit or less per gross acre. For properties having access to public water and sewer utilities, the density standard is a maximum of one unit per gross acre. With one of the two utilities (public water or sewer), one-half units per acre (two acres per unit) is the maximum density. With either public water or sewer, the maximum is one-third units per acre (three acres per unit). The designation is utilized on steeper slopes, in areas already subdivided into estate-sized lots, and in other areas where location, availability of public services, and public policy indicate lower overall residential densities. UED may, alternatively, be used to encourage either low density large lots or higher density clusters, both associated with lower overall population densities. Urban Estate Density is most compatible with the Zoning Ordinance's Residential Estate (RE) district.

Urban Low Density (ULD)

ULD requires between 1.01 and 4.0 residential units per gross acre. ULD is intended primarily for single family detached houses, although higher density single family patio homes or Town houses could be accommodated, if offset with sufficient open space to maintain the gross density within the indicated range. ULD is most compatible with the following Zoning districts: Single Family Residential (R-1) and Two-Family Residence (R-2) districts.

Urban Medium Density (UMD)

UMD requires between 4.01 and 8.0 residential units per gross acre. UMD is intended to accommodate single family detached and attached homes, single family patio homes, duplexes, and town houses. Both single family and multi-family housing types are facilitated by UMD designation. Urban Medium Density relates directly to the following Zoning categories: Single Family Residential (R-1); Two-Family Residence (R-2) and Medium Density Residential (R2A).

Urban High Density (UHD)

UHD requires between 8.01 and 20.0 residential units per gross acre. UHD is intended to accommodate town house or row house styles, higher density apartments and condominiums (multiple family structural types), without distinction as to owner- or renter-occupancy. UHD relates directly to the Zoning Ordinance's Multiple Family (R-3) district.

Commercial (C)

Commercial is a broad category intended to encompass all types of retail commercial and commercial service establishments in any one of a variety of locations. Locations include the Downtown Central Business District, shopping centers, local or neighborhood locations, highway-oriented locations, or concentrations along major streets. Commercial (C) relates to the following zoning classifications: Business (C-1); Central Business (C-2); Downtown Central Business (C-2-A); and Heavy Commercial (C-3).

Office and Professional (OP)

The OP classification provides for concentrations of free-standing offices and large office complexes. The designation is intended to facilitate both offices and supporting activities and land uses. Appropriate office uses include medical, dental, legal, architectural, engineering, contractors, and banks. Offices within OP areas should be characterized by relatively low traffic volumes and the absence of outdoor advertising and storage. Office and Professional (OP) designation relates most directly to the Zoning Ordinance's Office Professional (OP) and Corporate Business Park (CBP) districts, and is also compatible with the several commercial districts, particularly Downtown Central Business (C-2-A).

Manufacturing-Industrial (M-I)

M-I designation is intended to accommodate a variety of industrial and service commercial uses. Although occupied by free-standing businesses without any overall internal plan or restrictions, M-I districts benefit from some clustering of compatible industrial or service commercial uses. Typical uses in M-I designated areas are: light manufacturing; automotive services, warehousing/distribution; and wholesale-retail outlets. The potential for adverse impacts from M-I activities heightens the importance of proper location (relative to the surrounding community) and use of perimeter buffering. Zoning districts compatible with General Plan M-I designation are Light Industrial (M-1), General Industrial (M-2), and Industrial/Services (I/S).

Business Park (BP)

The Business Park designation replaces the Planned Employment Center (PEC) designation introduced in the 1982 Grass Valley General Plan. Business Park is categorized as one of two mixed use designations (Special Development Area, SDA, is the other). No changes are made in the substance of the designation, but the Business Park title is both more descriptive and relates better to zoning definitions. The intent of the BP designation is to accommodate a variety of employment-generating land uses in a master-planned, campus-type setting, designed to preserve and enhance the natural environment and to be fully integrated into the larger community. Employment types include a full range of industrial and commercial land uses. BP designation relates directly to Office Professional Zoning (OP), plus two additional Zoning districts added by Ordinance in 1997: Corporate Business Park (CBP) and Industrial/Services (I/S). Both CBP and I/S allow mixed land uses and contain specific performance and design standards.

Special Development Area (SDA)

SDA designation is reserved for areas to be master planned or subject to a specific plan. When imposed, SDA designation replaces previous General Plan designations within the subject property (ies), and serves as a temporary "holding" classification pending completion and approval of a specific plan, master plan, or similar instrument. SDA is a mixed use designation: a variety of land uses might be proposed and approved under the aegis of the specific plan, master plan, or similar instrument. SDA relates directly to the Interim Development Reserve (IDR) and Specific Plan (SP) zoning classifications.

Town Center (TC) - Overlay map

Town Center is one of two new "overlay" designations (Open Space Opportunity is the other). The TC overlay defines Downtown Grass Valley. Town Center designation recognizes that design and architectural features are of greater concern than land use designations in downtown, where "mixed use" is both accepted and encouraged. Protection and enhancement of Downtown's historic character are the primary intentions of the TC district. Various land uses may be accommodated in the TC district, so long as historic character and design / architectural standards are upheld. "Underlying" land use designations are to be maintained on parcels within the TC overlay, although TC standards override those of comparable zoning districts in cases of conflict. Town Center encompasses Downtown Grass Valley properties clustered along South Auburn, Mill, and Main Streets. Street-level commercial, specialty shops, restaurants, upper level residential and offices, and cultural uses are encouraged. As an overlay designation, Town Center does not relate directly to specific zoning districts.

Open Space Opportunity (OSO) - Overlay map

Open Space Opportunity is one of two "overlay" categories. OSO designation may be used to acknowledge, reserve, and protect open space for any of the purposes of open space defined by State law: preservation of natural resources; managed production of natural resources; outdoor recreation; public health and safety. OSO designation may be used to protect either linear features (such as riparian corridors, flood zones, or recreational trail corridors) or non-linear features (parcels comprising would-be nature parks or forest preserves, for example). Underlying OSO designation may be any generic General Plan designation. OSO may be imposed to reflect a permanent imposition of open space status based on regulations, easements, or setbacks. Conversely, it may be used temporarily to show public intent to secure permanent open space status where such status does not yet exist. The OSO designation may be removed if satisfactory arrangements to secure such status from a property owner are not implemented. As an overlay designation, OSO does not necessarily relate to specific zoning districts, although it is directly compatible with the Open Space (OS) Zoning district.

Open Space (OS) - depicted on the Land Use Plan map

Open Space (OS) designation indicates that permanent open space status has been secured. Examples of Open Space designations on the Land Use Plan map are areas set aside through development agreements or previous development project conditions of approval, areas subject to current regulation which effectively precludes development (possibly unique natural areas, wetlands, or high hazard zones), areas which have been dedicated to the City or other governmental entity, or areas placed in permanent open space by virtue of appropriate easement acquisition, CC&Rs, or similar legal provisions. OS designation may apply to lands owned by either private parties or public agencies, although public open space land might alternatively be designated Public (P) or Park and Recreation (PR).

Public (P)

Public designation is used to identify areas in public sector ownership / control, and used for the purpose of providing non-commercial facilities and services to meet public needs. Ownership and control may be that of general purpose governmental units (city, county, State) or quasi-governmental entities (special districts, school districts, commissions, authorities). Purposes for which Public (P) designated areas are to be used are activities typically undertaken by the owning or controlling entities. Examples are: administrative and other public-sector facilities, public parks, natural areas, community centers, fire stations, schools and school properties, hospitals, public senior or child care facilities. P designation is most comparable to the Public (P) zoning district.

Institutional, Non-governmental (ING)

Institutional, Non-governmental (ING) designation is a new designation in the 2020 General Plan. ING is used to identify areas in non-governmental institutional ownership / control. It is intended to accommodate facilities and services to meet community needs. Ownership and control may vary: non-profit organizations, medical and related health care institutions, religious institutions, private academic institutions, pubic service clubs, and the like. Purposes for which ING designated areas are to be used are activities typically undertaken by the owning or controlling entities. Examples are: religious institutions and related properties, administrative facilities, recreational areas, community centers, meeting halls, private schools and school properties, hospitals, senior and child care facilities. ING designation is roughly comparable to the Public (P) Zoning district, although it may relate to various other classifications, depending upon the activities being undertaken.

Schools (S)

Schools (S) designation is used specifically to reserve sites to be limited to school facilities and grounds. The directly related Zoning district is Public (P).

Utilities (D)

The Utilities designation may be used to acknowledge or reserve sites for electric generation / distribution, water storage / treatment / distribution, wastewater collection / treatment, or natural gas / propane transmission / storage/ distribution. Administrative and equipment storage and repair facilities operated by public utilities may also be designated as Utilities. The primary intent of the Utilities designation is to acknowledge the unique operating characteristics of utility operations, and to assure the mutual protection of utilities and surrounding areas from adverse impacts. The compatible Zoning district is Public (P). Conceivably, utility sites might be compatibly located within any Zoning district, if properly conditioned to assure compatibility.

Parks and Recreation (PR)

PR designation may be used to acknowledge or reserve sites for parks and public recreation, including: existing or anticipated parks, public outdoor recreation sites, campgrounds, and the like. PR may also include natural areas intended for recreational use: open space lands, trails and pathways, flood plains, and riparian zones. Parks and Recreation designation is compatible with the Recreation (REC, adopted in 1997), Open Space (OS) and Public (P) Zoning districts.

Selected Zoning Districts and Concepts Pertinent to the General Plan

Planned Unit Development (PUD) Zoning. A floating zone allowing flexibility and innovation within a plan for the development of an area, including concepts as cluster development, a mixture of housing types and of land uses, and common ownership of open space and community facilities.

Specific Plan (SP) Zoning. Provides for the preparation, adoption, and administration of specific plans as a means of systematically implementing the General Plan. Specific Plan enabling law: Government Code Sections 65450-65554.

Interim Development Reserve (IDR) Zoning. Identifies the development potential of an area, but postpones exact zoning boundary designations until after preparation of a master zoning plan or specific plan. IDR

Zoning may be used as a base zoning district or in combination with other zoning district symbols expected to be included following master plan completion. IDR is typically used for land to be annexed to the City, where City zoning is expected to be essentially the same as County zoning.

Combining Zones. Combing zones are used in conjunction with basic zones, and are used to address special concerns and afford special protections not otherwise applicable to the base district. Combining districts are Historical (H), Design Review (DR), and Mobile home and Mobile home Park (MMP).

Mixed Use Zoning. Allowance of two or more uses on a single parcel, or in a single structure or development project.

General Plan/Zoning Compatibility

Land uses associated with a particular General Plan designation may be permitted (either by right or conditionally) in several Zoning districts. The following General Plan Designation / Zoning Consistency Table (Table 3-1) identifies the Zoning categories most compatible with comparable General Plan classifications.

Population Density and Building Intensity Standards

A General Plan must contain standards for population density and for building intensity, as established by California case law. The courts further defined population density as "numbers of people per acre and not dwelling units per acre."

Table 3-2 shows standards related to population density and building intensity for the various General Plan land use designations. The standards are:

- Minimum Parcel Size (in acres or square feet)
- Maximum Units per Acre (for residential designations)
- Maximum Population per Square Mile (for residential designations)
- Maximum Building Coverage
- Maximum Floor Area Ratio (for non-residential designations)
- Maximum Height (Residential)
- Maximum Height (Non-Residential)

TABLE 3-1
GENERAL PLAN LAND USE DESIGNATION AND ZONING CONSISTENCY

GENERAL PLAN	ZONING	Residential Estate	Single Family Residence	Two-Family Residence	Medium Density Residential	Multiple Family	Office Professional	Corporate Business Park	Community Business	Central Business	Downtown Central Business	Heavy Commercial	Industrial/Services	Light Industrial	General Industrial	Public	Open Space	Recreation	Specific Plan
		RE	R-1	R-2	R2A	R-3	OP	CBP	C-1	C-2	C-2-A	C-3	I/S	M-1	M-2	P	OS	REC	SP
RESIDENTIAL																			
Urban Estate Density	UED	Yes																	Yes
Urban Low Density	ULD		Yes	Yes															Yes
Urban Medium Density	UMD			Yes	Yes														Yes
Urban High Density	UHD					Yes													Yes
COMMERCIAL																			
Commercial	C								Yes	Yes	Yes	Yes							Yes
Office and Professional	OP						Yes	Yes			Yes								Yes
INDUSTRIAL																			
Manufacturing-Industrial	M-I												Yes	Yes	Yes				Yes
MIXED USE																			
Business Park	BP						Yes	Yes					Yes						Yes
Special Development Area	SDA																		Yes
OVERLAY DESIGNATIONS																			
Town Center	TC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Open Space Opportunity	OSO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
OTHER																			
Public	P/SP															Yes			Yes
Institutional, Non-governmental	ING															Yes			Yes
Schools	SC															Yes			Yes
Utilities	U															Yes			Yes
Parks and Recreation	PR															Yes	Yes	Yes	Yes

TABLE 3-2
POPULATION DENSITY & BUILDING INTENSITY STANDARDS

		Minimum Parcel Size	Maximum Units per Acre	Maximum Population per Square Mile[4]	Maximum Building Coverage[5]	Maximum FAR (Nonresidential)[5, 6]	Maximum Height (Residential)	Maximum Height (Nonresidential)
RESIDENTIAL								
Urban Estate Density[1]	UED	1 acre to 3 acres[3]	1 to .33	1536	40%		35'	
Urban Low Density[1]	ULD	10,000 sf	4	6144	35%		35'	
Urban Medium Density[1]	UMD	5,000 sf	8	12288	40%		35'	
Urban High Density[2]	UHD	5,000 sf	20	24960	50%		35'	
COMMERCIAL								
Commercial	C	None	N/A	N/A	50%	None Stated		35', 50' or 65'[7]
Office and Professional	OP	None	N/A	N/A	50%	None Stated		35'
INDUSTRIAL								
Manufacturing-Industrial	M-I	10,000 sf to None			50%			35' or 50'[8]
MIXED USE								
Business Park	BP	10,000 sf to None			25%			35'
Special Development Area[9]	SDA				Varies with use			Varies with use
OVERLAY DESIGNATIONS								
Town Center[10]	TC	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Open Space Opportunity[10]	OSO	N/A	N/A	N/A	N/A	N/A	N/A	N/A
OTHER								
Public	P	None	N/A	N/A	None Stated	None Stated		35'
Institutional, Non-governmental	ING	None	N/A	N/A	None Stated	None Stated		35'
Schools	SC	None	N/A	N/A	None Stated	None Stated		35'
Utilities	U	None	N/A	N/A	None Stated	None Stated		35'
Parks and Recreation	PR	None	N/A	N/A	None Stated	None Stated		35'

1 Assumes single family household size for purpose of maximum population density calculation

2 Assumes multi-family household size for purpose of maximum population density calculation

3 Mnimum parcel size and maximum units per parcel determined by zoning and availability of services

4 Average household size 2.40 single family, 1.95 multi-family

5 Not stated in ordinance -- may be calculated for individual sites, based on setbacks and other requirements

6 FAR is Floor Area Ratio: Gross Floor Area of structure divided by Net Land Area of site

7 Higher figure pertains to Downtown CBD only -- others vary with zoning district

8 Higher figure pertains to LI and M-L Zoning Districts

9 Holding category pending Specific Plan or PUD approval

10 Overlay designations derive standards from underlying designation except where standards are shown here

SIGNIFICANT TRENDS

As with any long range plan, the 2020 Grass Valley General Plan is based in part upon certain assumptions and expectations about prevailing social and economic trends. Identification and interpretation of significant plan-affecting trends relied on several sources: City officials, the General Plan Steering Committee, public opinion and advice at workshops and the public opinion survey, and technical research, expertise, and observations of the consulting team.

Probable trends and tendencies, termed "dynamics and directions", were developed for the following major land use categories:

- Commercial
- Office/Professional
- Manufacturing/Industrial
- Residential

Commercial Dynamics

Stimuli for growth will be:

- *Sierra College growth and development*
- *Growth in the medical/health care sector*
- *A growth tourism/visitor-induced economy*
- *Demographic changes, particularly the large and growing senior population.*

1. Commercial "growth" (jobs, sales, tax contributions) occurs mainly in the form of turnover and upgrading within existing shopping centers and commercially-used buildings. Commercial growth is not solely dependent upon a continuing supply of vacant, readily developable, and commercially-zoned land.

2. Commercial turnover and upgrading in Grass Valley will occur in response to several major stimuli, particularly Sierra College growth and development; growth in the medical/health care sector; a growing tourism/visitor-induced economy; and demographic changes, particularly the large and growing senior population.

3. Since 1980, local commercial "infrastructure" has expanded faster than local population growth. With large, modern shopping centers, Grass Valley is capable of fulfilling its role as the regional commercial center for Western Nevada County. In the process, an "equilibrium" between demand (placed on the City as regional center) and supply (establishments, quality of goods, selection, etc.) has been established. Grass Valley is better able to serve the commercial needs of Western Nevada County than it was prior to 1980. In addition to the continued "pull" of Downtown, the Glenbrook area and Pine Creek Shopping Center area have contributed to Grass Valley's regional preeminence.

4. Downtown Grass Valley will remain a viable commercial node, as well as a cultural and historical focal point.

5. Strong growth is anticipated for business-related support retail and services, medical-related goods and services, tourist-related services (lodging, restaurants), and enterprises geared to senior citizens and retirees.

Commercial Directions

Infill opportunities for Commercial Development abound.

1. Intensified commercial activity, resulting from turnover, upgrading and re-development: in the Glenbrook area, Pine Creek Shopping Center vicinity, and along East Main Street from Highway 20/49 to Glenbrook.

2. Commercial re-development, resulting in increased commercial activity in the following areas: East Main Street; Colfax Highway east of downtown; and South Auburn Street south of Highway 20/49.

3. Limited new commercial clusters will develop. These will occur within annexation areas, as committed by annexation agreements and in the Highway 49/LaBarr Meadows Road (Bear River Mill site) vicinity. New clusters may help to fill "niches" not otherwise filled (large floor area establishments, specialized tourism functions, neighborhood service).

4. Some conversions, primarily of residences to commercial uses.

5. Mixed use within new residential developments and in some older neighborhoods.

6. Commercial uses within business parks, as allowed by City regulations.

7. Fringe commercial intensification, primarily at the immediate "edges" of the Glenbrook area and Downtown.

Office/Professional Dynamics

Probable exponential increases in in-home business relying heavily on technology and telecommunications.

1. Considerable future demand fueled by increases in medical services, professional services (engineering, legal) and business support services.

2. Strong demand for small office-space leasing, to accommodate numerous small business operations. This demand will be somewhat tempered by in-home business boom.

3. Less certainty concerning inclinations and tendencies of medium to large businesses, which have the options of building their own facilities, leasing with business parks, or leasing in existing for-lease office buildings. Business park office space occupants will be in the medium to large category - larger space leases but representing a small percentage of total office/professional occupying business community.

4. Probable exponential increase in in-home business relying heavily on technology and telecommunications. Effects may be either modest or dramatic, in relation to the market for office space.

5. Increased demand in office space for services requiring face-to-face client contact, with possible flat or declining demand for other types of services.

6. Quality of office location, surroundings, will be of increasing importance.

Office/Professional Directions

There are many opportunities for reuse and infill office development.

1. Business parks - supply of office/professional land in business parks to be substantial in early years, with Whispering Pines and Litton property available.

2. Hospital vicinity and East Main are strong contenders for new medical-related offices.

3. Downtown office space increase, including street-level, upper stories of some downtown buildings, downtown fringe expansion, and some residential (or even commercial) conversion to offices.

4. More modestly-priced small office complexes in Glenbrook and immediate vicinity, keeping with national trends of offices in or near busy shopping centers.

5. Introduction of smaller complexes and clusters, in contrast to larger business parks.

6. Building up (2nd and 3rd stories) to facilitate offices in advantageous locations.

Manufacturing/Industrial Dynamics

Maintaining Grass Valley's quality of life is an important factor in attracting industry.

1. Difficult to predict, partly because relocations to and startup locations in Grass Valley are often 1) quality of life decisions of corporate decision-makers and 2) high tech firms, whose products and fortunes ebb and flow, defying precise long-term prognostication.

2. Difficult to predict relocations and expansions of "basic" industries, whose products are almost exclusively exported from the Western Nevada County region, and whose fortunes are not tied to increases in local consumption, population, or wealth.

3. For some high tech, research and development oriented firms, local linkages to other firms in the industry provide a rationale for a Grass Valley location.

4. Small manufacturing, distribution, and industrial service companies are predominant in the local industrial community, and are likely to continue to predominate. This has implications for land and facility requirements.

5. While Grass Valley has strong quality of life and high tech "think tank" advantages, it is comparatively disadvantaged in terms of transportation facilities (railroads, interstate highways, commercial air facilities) and large available water supply. Industries requiring those locational features will locate elsewhere.

Manufacturing/Industrial Directions

Additional large quantities of land designated "Planned Employment Center" (allowing industrial and other land uses) exist within three of the Special Development Areas

1. Intensification of industrial land uses and overall upgrading possible at Loma Rica Industrial Park. County interest in enhancement, plus possible availability of Grass Valley City sewer service, point to industrial/employment expansion at Loma Rica Industrial Park.

2. Existing business parks, including both the Whispering Pines and the new Litton Business Park, offer considerable potential for certain types and sizes of light industrial and research and development companies.

3. Additional large quantities of land designated "Planned Employment Center" (allowing industrial and other land uses) exist within three of the Special Development Areas (Loma Rica Ranch, North Star, Kenny Ranch). The term "Planned Employment Center" is being replaced by "Business Park", effective as of adoption of the 2020 General Plan.

Residential Dynamics

1. Demographics continue to dictate a large proportion of single-member and small households (seniors and non-senior singles, empty nesters, young married couples without children, divorced persons).

2. Affordability, long a factor in Grass Valley's housing market, will remain a strong influence. Multi-family housing now accounts for over 40% of Grass Valley's housing stock. Grass Valley's multi-family housing constitutes 75% of the County total. The importance and influence of multi-family housing will grow during the 20-year planning period, and is projected to provide 45% of all new housing in the Planning Area.

3. An older (on average) single family housing stock indicates a future need for widespread code enforcement, rehabilitation, and conservation.

4. Neighborhood enhancement and preservation are considered essential "community builders" by city officials and citizens alike. As neighborhood strengthening improvements such as parks, trails, sidewalks, and other public amenities are provided, investment in and maintenance of older housing occurs.

5. The General Plan projects the need for a net increase of 2,820 new housing units in the Grass Valley Planning area from 1999 to 2020. Of these, 55% (1,551) are projected to be single family units, 45% (1,269) multi-family units.

6. It is assumed that 1,200 additional residential accommodations will be provided in the form of senior living/care facilities of various types during the 20-year planning period.

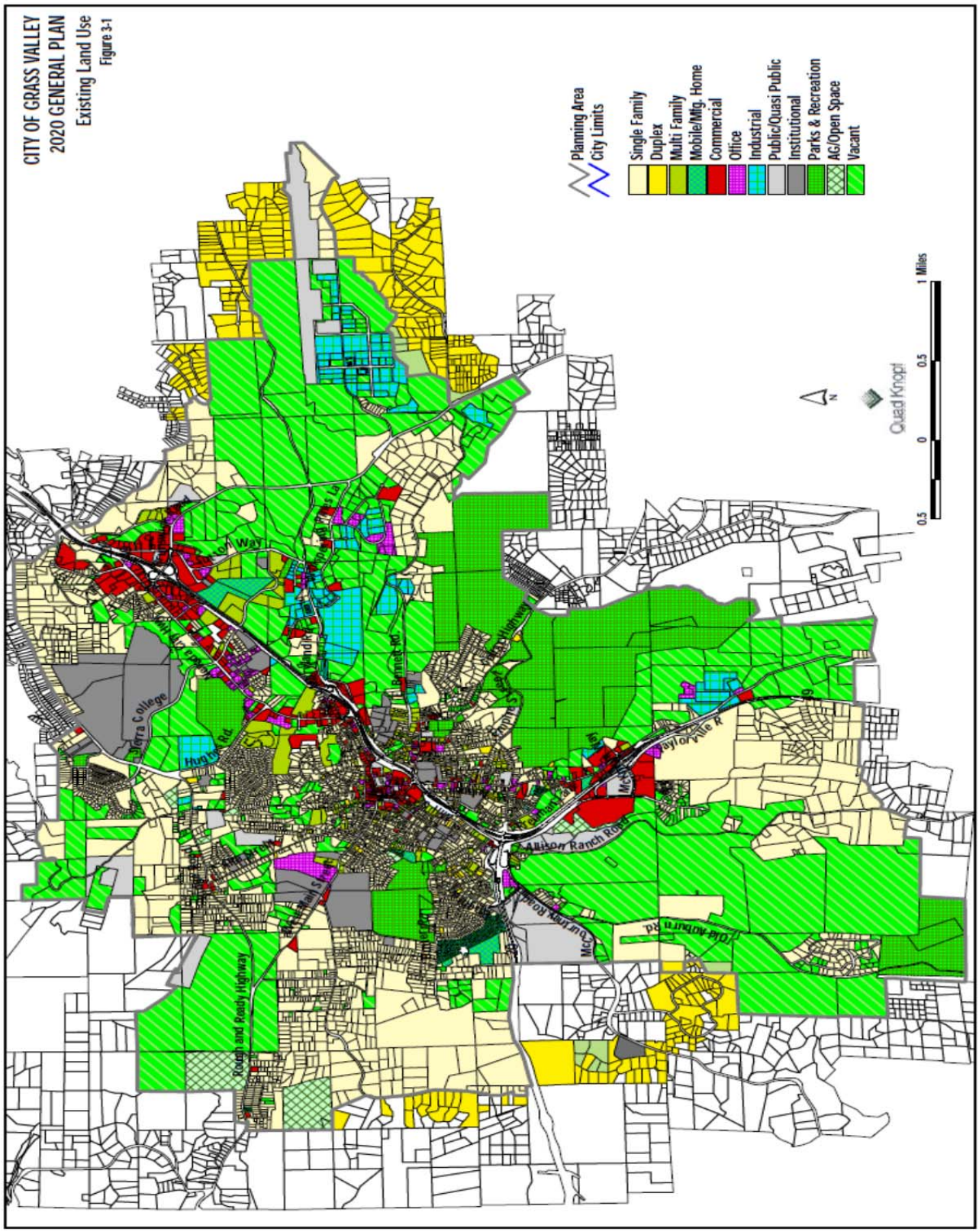
Residential Directions

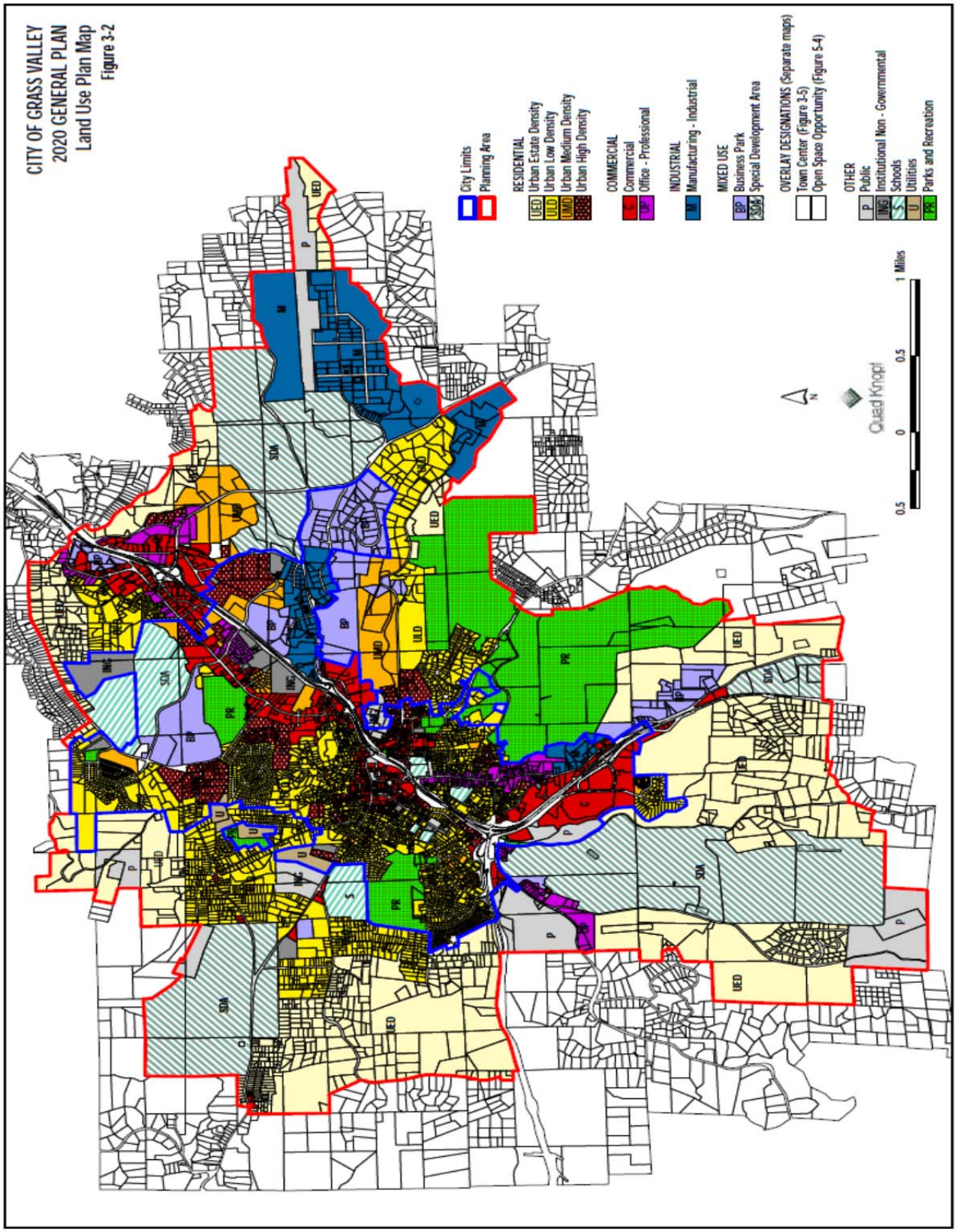
1. Just over one-half of the 20-year housing demand in the Planning area can be accommodated through a combination of infill (vacant residentially-designated land within the city) and annexation agreement commitments to Loma Rica Ranch, North Star, and Kenny Ranch.

2. Optimally, 32% (900 units) of total housing demand (2,820) can be accommodated through infill. Only 23% (643) of the projected 20-year net new housing demand can be satisfied as allowed by annexation agreements, even if the three areas were to "build out" their full housing unit allocations within the 20-year time frame.

3. Multi-family demand will likely be met by medium and high density residential-designated areas in infill areas of the City and new neighborhoods following annexation. The East Bennett neighborhood has been designated medium density to fill this need at a relatively close-in location.

4. Current annexation agreements with Loma Rica Ranch, North Star, and Kenny Ranch could be revised to specify the densities required for multi-family housing and/ or numbers of multi-family units targeted.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Existing Land Use
Figure 3-1
Planning Area
City Limits
Single Family
Duplex
Multi Family
Mobile/Mfg. Home
Commercial
Office
Industrial
Public/Quasi Public
Institutional
Parks & Recreation
AG/Open Space
Vacant
1 Miles
0.5
0
0.5
N
Quad Knopf
Sierra College
Hughes Rd.
Brunswick Rd.
Idaho Maryland Rd.
Allison Ranch Road
Old Auburn Rd.
Rough and Ready Highway


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Land Use Plan Map
Figure 3-2
City Limits
Planning Area
RESIDENTIAL
Urban Estate Density
Urban Low Density
Urban Medium Density
Urban High Density
COMMERCIAL
Commercial
Office - Professional
INDUSTRIAL
Manufacturing - Industrial
MIXED USE
Business Park
Special Development Area
OVERLAY DESIGNATIONS (Separate maps)
Town Center (Figure 3-5)
Open Space Opportunity (Figure 5-4)
OTHER
Public
Institutional Non - Governmental
Schools
Utilities
Parks and Recreation
1 Miles
0.5
0
0.5
N
Quad Knopf

LAND USE PLAN MAP

Figure 3-2 is the 2020 General Plan Land Use Plan map, depicting land uses for the designations described previously. The Land Use Plan map is the end result of:

- Existing (1982) General Plan designations and a City policy to minimize changes in order to maintain continuity with past regulations.
- Supply / Demand studies of various land uses, conducted by General Plan consultants as part of the 2020 General Plan planning process.
- The goals, objectives, policies developed during the planning process and contained within this General Plan.
- Provisions of General Plan Elements, particularly the Housing Element and Mineral Resources Element, unaffected by the 2020 General Plan update.
- Examination of land use alternatives by the General Plan Steering Committee, and selection of a preferred alternative. Alternatives examination and selection considered major "direction setting" factors as public service extension and development within identified watersheds.
- Criteria listed on page 3-2 of this Chapter.
- City Council decisions based on localized and site-specific considerations.

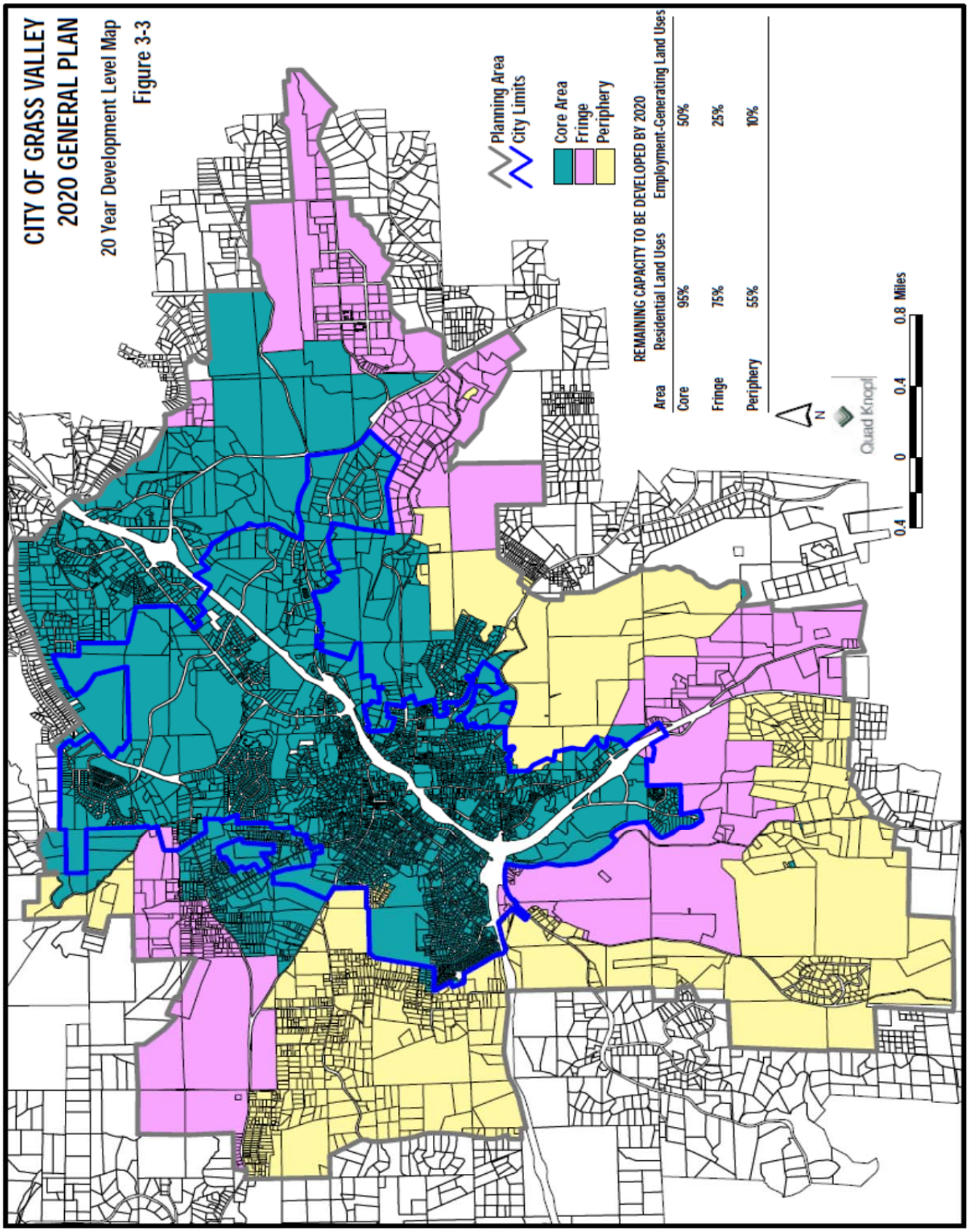
Twenty-Year Development Map

In all three geographic areas (core, fringe, and periphery) residential land use is projected to approach capacity, or "build out", to a greater extent than employment-generating land use by the Year 2020.

The General Plan Land Use Plan map assigns a land use designation to all properties within the Planning Area. If the entire Planning Area were to be developed as depicted on the Land Use Plan map, the Planning Area would be considered "built out". The basic projections developed during the General Plan process for the 20-year planning period (to the Year 2020) - population, housing units, employment, and demand for land - clearly indicate that less than full "build out" will occur by the Year 2020.

Figure 3-3, the Twenty Year Development map, divides the Planning Area into three geographic areas: core, fringe, and periphery. For each area, a percentage of remaining development capacity is shown for 1) residential land uses and 2) employment generating land uses (commercial, manufacturing, Business Park, etc.). Percentages are contained in a tabular form on Figure 3-3.

Using Figure 3-3 in combination with the Land Use Plan map (Figure 3-2) the "build out capacity" of various land uses can be determined (numbers of units for housing, acreage for employment generating land uses). Thus, within the core area, 95% of the potential housing units and 50% of commercial/industrial acreage is projected to be developed during the Planning period. In all three geographic areas (core, fringe, and periphery) residential land use is projected to approach capacity, or "build out", to a greater extent than employment-generating land use by the Year 2020. Figure 3-3 and the percentage formula thereon are not intended to be used as a phasing or sequencing plan for future annexations.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
20 Year Development Level Map
Figure 3-3
Planning Area
City Limits
Core Area
Fringe
Periphery
REMAINING CAPACITY TO BE DEVELOPED BY 2020
Area
Residential Land Uses
Employment-Generating Land Uses
Core
95%
50%
Fringe
75%
25%
Periphery
55%
10%
N
Quad Knopf
0.4
0
0.4
0.8 Miles

Special Development Areas (SDAs)

Four areas are designated Special Development Area (SDA) on the General Plan Land Use Plan map. They are Loma Rica Ranch, North Star, Kenny Ranch, and the Bear River Mill Site. The first three have been subjects of annexation agreements between the City of Grass Valley and the respective owners. Annexation agreements have resulted in the allocation of acreage to various land uses, and a fixed number of housing units to be allowed.

Figure 3-4 shows the locations of the four SDAs. Included in Figure 3-4 are small insets containing the annexation agreement acreage allocations and housing unit commitments for the three SDAs with existing annexation agreements.

The General Plan does not locate the land uses (as committed by annexation agreements) on the Land Use Plan map. This will be accomplished during subsequent development planning. The General Plan does, however, encourage the following regarding land use in the North Star SDA, in order to assure the area's neighborhood continuity with neighborhoods in southern Grass Valley:

> North Star is encouraged to locate all residential and neighborhood commercial land uses in the northern one-third of the North Star property, in order to provide a linkage to existing development within the City and facilitate efficient City service and infrastructure extensions.

Additional SDAs may be designated in the future.

Town Center Overlay

Figure 3-5 is the Town Center Overlay map. As described earlier, the Town Center concept is intended to cover downtown and the surrounding areas. Town Center is intended to be used to designate selected areas and properties for mixed uses, or to apply special development criteria or guidelines separate and apart from those peculiar to their underlying (Land Use Plan map) land uses.

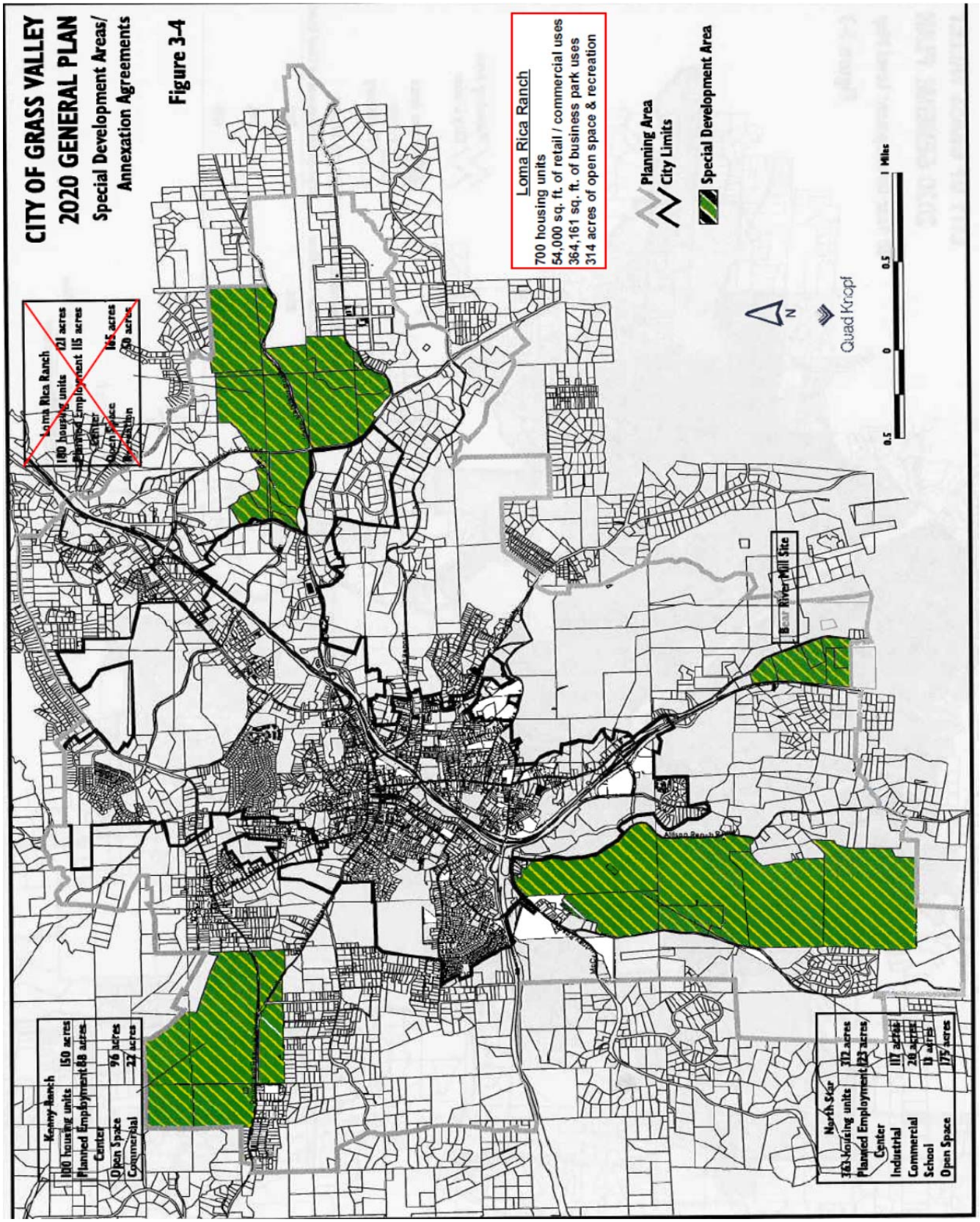
Downtown Grass Valley

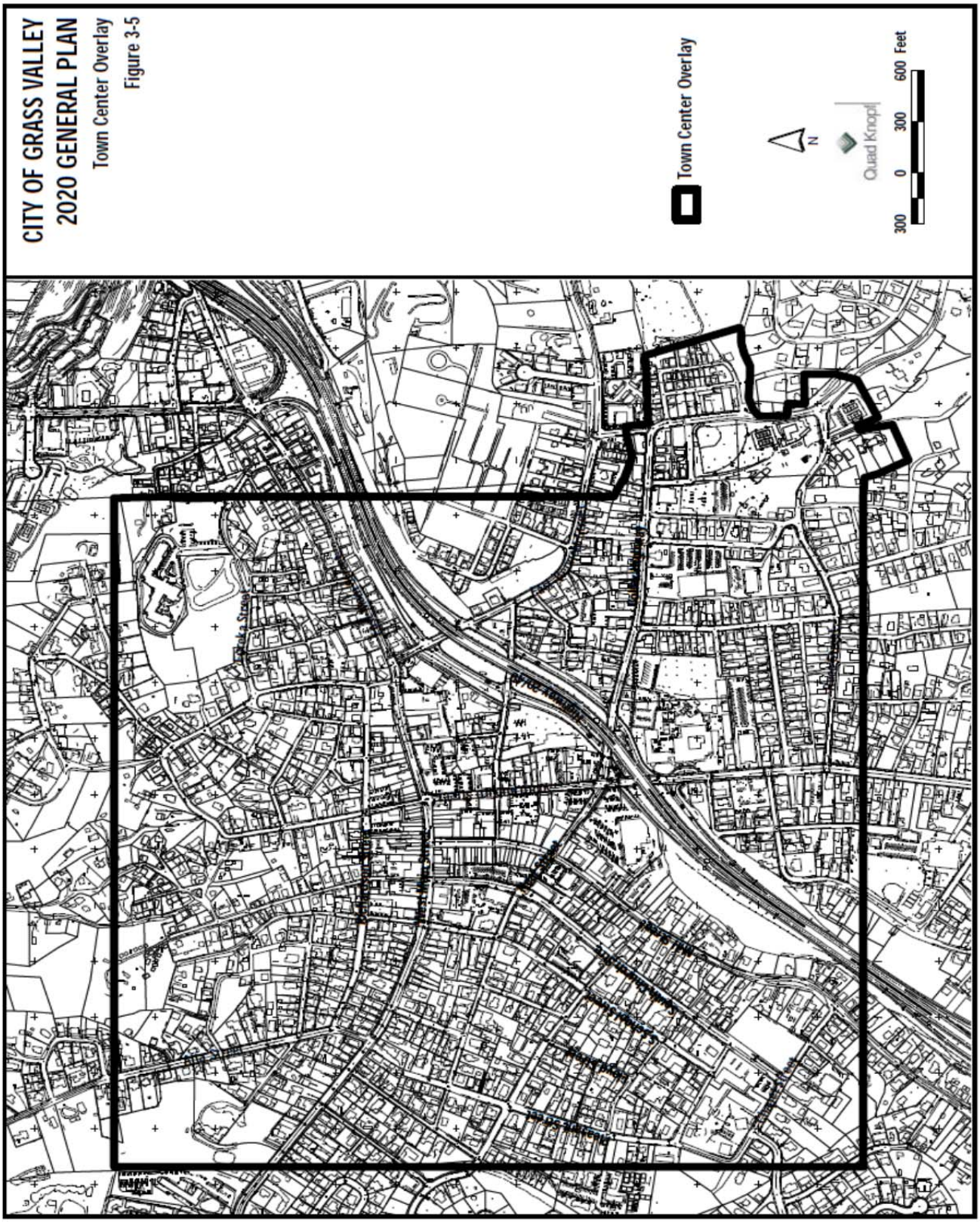
The 2020 General Plan perceives Downtown Grass Valley as continuing its role as the cultural center of the broader western Nevada County region, and recommends policies to assure that role. Numerous individual projects are identified as appropriate for Downtown: a plaza, a conference center, performing arts center; and even transit center.

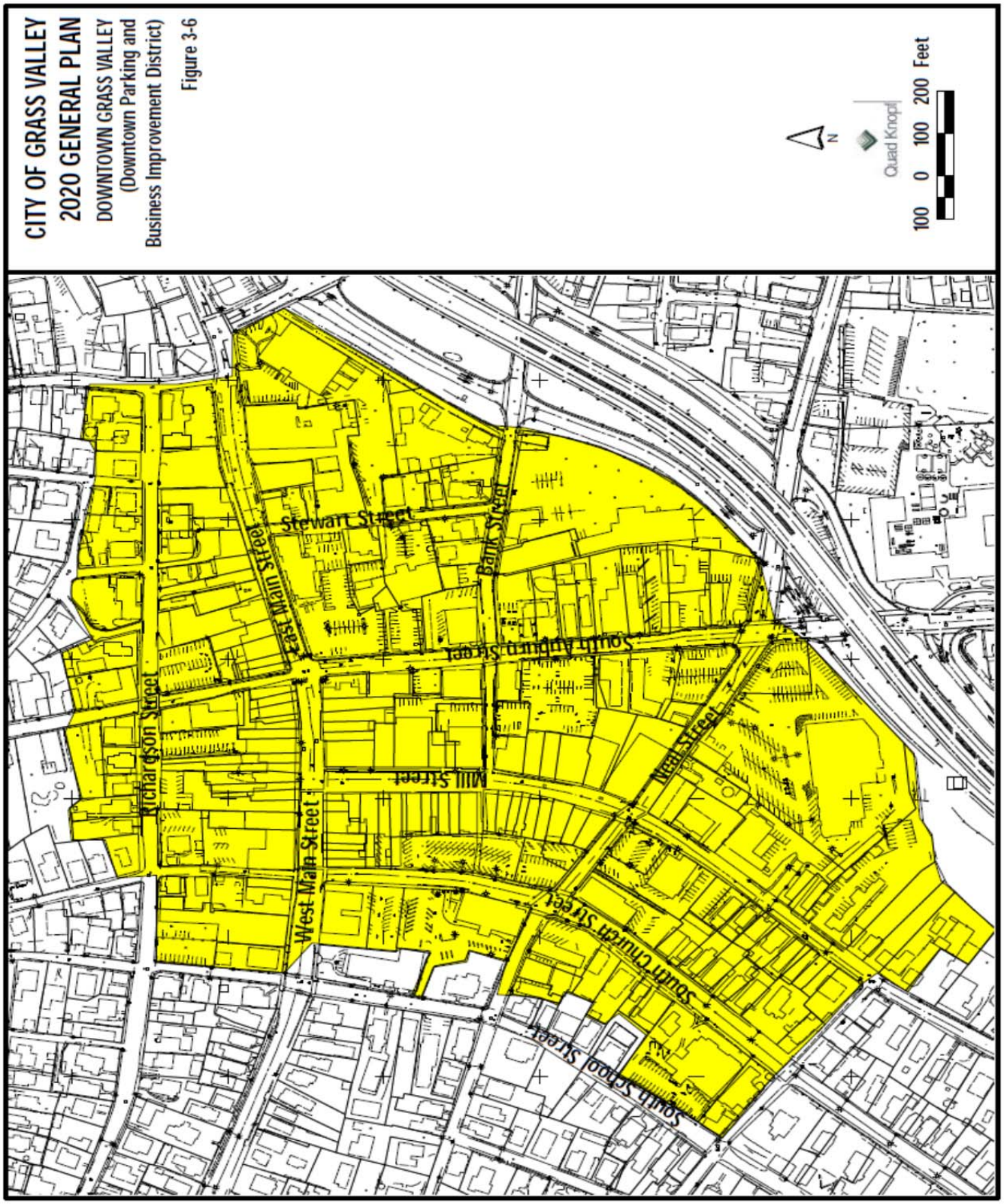
Figure 3-6 is map of Downtown, using the boundaries of the Downtown Parking and Business Improvement District as the definition of the Downtown area.

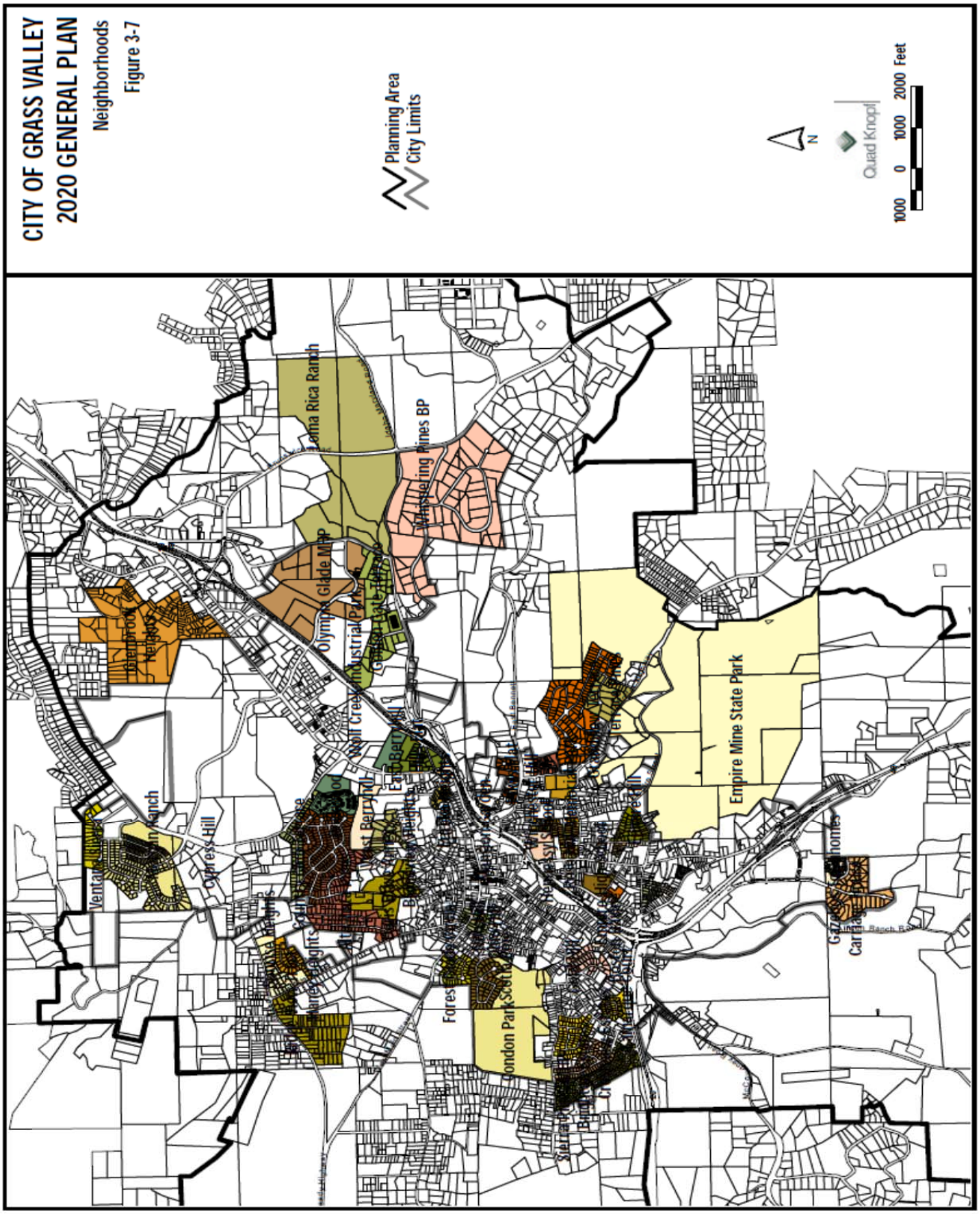
Neighborhoods

Figure 3-7 shows Grass Valley's "neighborhoods", a combination of identifiable historic districts and modern developments. The 2020 General Plan supports the concept of neighborhood identification, preservation, and enhancement. Neighborhoods are to be the basis for appropriate types of planning, facilities, and services. It is understood that, in establishing neighborhoods boundaries, the City of Grass Valley must have considerable flexibility, and that the Neighborhoods map as shown in Figure 3-7 is only intended as a guide to establishing such boundaries.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Special Development Areas/
Annexation Agreements
Figure 3-4
Loma Rica Ranch
700 housing units
54,000 sq. ft. of retail / commercial uses
364,161 sq. ft. of business park uses
314 acres of open space & recreation
Planning Area
City Limits
Special Development Area
Quad Knopf
Bear River Mill Site
Kenny Ranch
180 housing units
Planned Employment Center
Open Space
Commercial
150 acres
88 acres
96 acres
27 acres
North Star
363 housing units
Planned Employment Center
Industrial
Commercial
School
Open Space
212 acres
123 acres
117 acres
26 acres
13 acres
175 acres
Loma Rica Ranch
180 housing units
Planned Employment Center
Open Space
Recreation
121 acres
115 acres
185 acres
20 acres
0.5
0
0.5
1 Miles


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Town Center Overlay
Figure 3-5
Town Center Overlay
N
Quad Knopf
300 0 300 600 Feet


CITY OF GRASS VALLEY
2020 GENERAL PLAN
DOWNTOWN GRASS VALLEY
(Downtown Parking and
Business Improvement District)
Figure 3-6
N
Quad Knopf
100 0 100 200 Feet
Richardson Street
East Main Street
West Main Street
Stewart Street
Bank Street
South Auburn Street
Mill Street
Neal Street
South Church Street
South School Street


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Neighborhoods
Figure 3-7
Planning Area
City Limits
N
Quad Knopf
1000 0 1000 2000 Feet
Loma Rica Ranch
Whispering Pines BP
Olympia Glade MHP
Golden Gate Terrace
Woolf Creek Industrial Park
East Bennett Hill
Ventana Ridge
Cypress Hill
Empire Mine State Park
London Park
Forest
Sierra
Gra
Carri

Analysis of Disadvantaged Unincorporated Communities

In 2011, the governor signed SB 244, which required the City to update the Land Use Element as part of its next revision to the Housing Element. SB 244 requires the City to identify and address any "disadvantaged unincorporated communities" (DUCs). DUCs are defined as a "fringe community" or area within the City's Sphere of Influence (SOI) that has a median household income of 80% or less than the statewide median (80% of Median Household Income in 2012 was $49,120). Based on income levels from the U.S. Census, 2008-2012 American Community Survey, there is one area within the SOI that qualifies as a fringe community. The area is in U.S. Census Tract 5.01, Block Groups 1 and 3. The City consulted with Nevada County LAFCo to confirm the area meets the intent of the law and with LAFCo's DUC-related policies. Current LAFCo policy is that any DUC identified by the City will be recognized by LAFCo. The fringe community is generally located on the east and west sides of Alta Street and the north and south sides of Ridge Road (See Figure 3.8).

The law requires the City to analyze the water, wastewater, storm water, and structural fire protection services in the area along with financing options to help encourage investment in the area should it be needed. The following is an analysis of each of these services based on existing available information. Water Service: Nevada Irrigation District (NID) provides water service to the entire fringe community. According to NID, the area does not contain any water service deficiencies and there are no plans for any upgrades or improvements in the near future. When improvements to the service system are needed, NID's fees are set up to maintain and upgrade the water infrastructure.

Wastewater Service: Currently almost all of the homes in this fringe community have private septic systems. The City of Grass Valley provides public wastewater collection and treatment to less than 10 of the homes in the area. In 2000, the City expanded the capacity of its wastewater treatment plant to 2.78 mgd. The plant currently treats about 1.85 mgd. The plant expansion was completed in anticipation of the City providing wastewater service to address the expected demand of future growth and the developed lands within the SOI. Furthermore, the City's Wastewater Master Plan includes a plan to serve this area in the future. Therefore, the City does plan at providing sewer service to this fringe community if there is a need to do so in the future. The City is not aware of septic system failures or problems in this area.

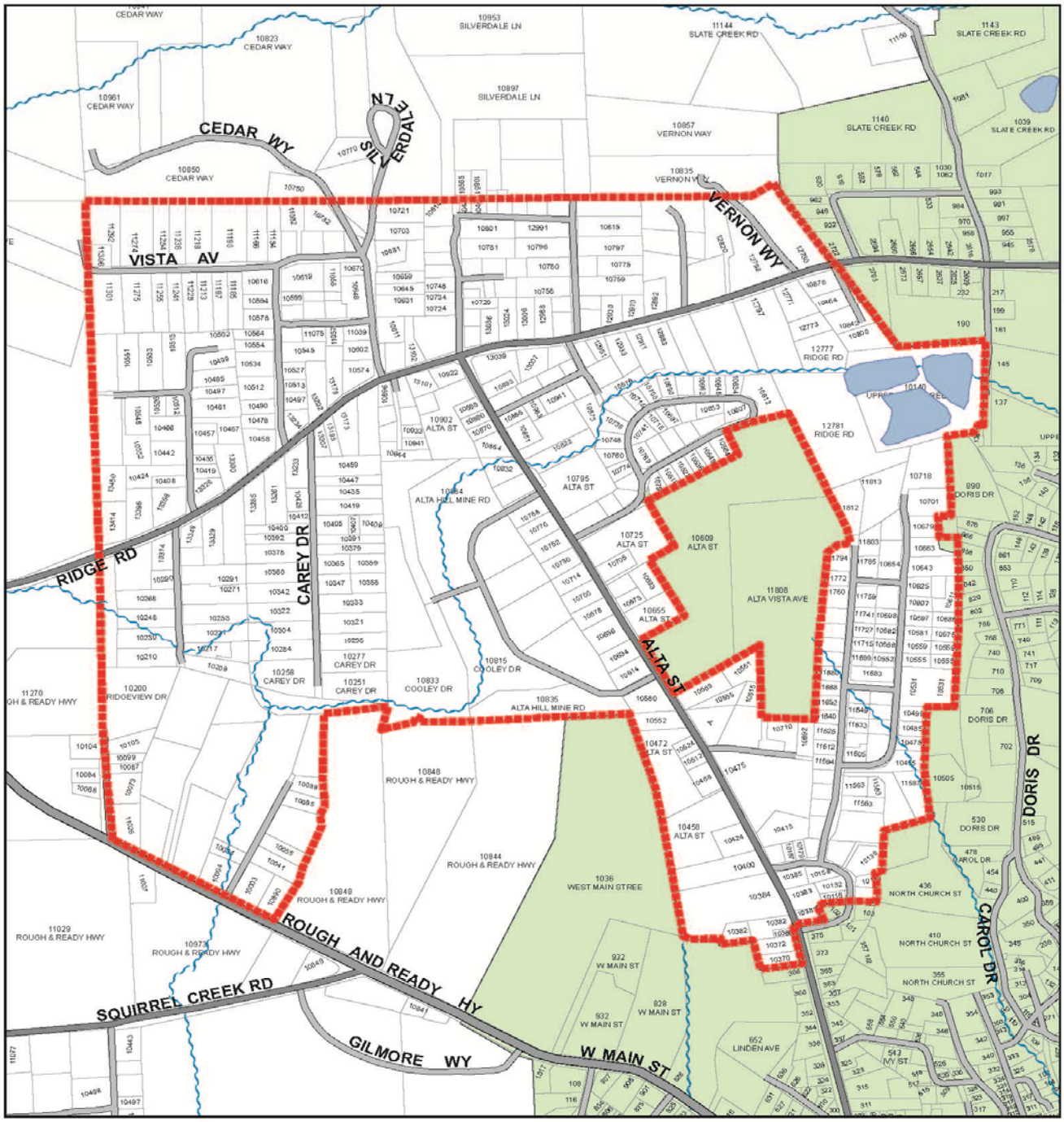
Storm Drainage: This fringe community has limited storm drainage improvements. Ridge Road and parts of Alta Street have formal storm drainage systems. Some of the interior roads include road side ditches similar to that found throughout the County. According to the County Public Works Department, the area does not contain significant storm drainage or flooding issues and there are no plans for infrastructure improvements in the near future.

Structural Fire Protection: NID provides a public fire hydrant system that serves the entire fringe community. Even though the area is within the Nevada County Consolidated Fire (NCCFD), Grass Valley Fire Department (GVFD) provides the primary fire response service. According to NCCFD and GVFD, the hydrant system provides adequate fire coverage for the area. GVFD also noted there are no service issues and the current road network is adequate.

Funding Mechanisms for Services and Facilities: As noted above, the area contains the basic infrastructure needs to serve this fringe community. Public water and a fire hydrant system are in place and there are no known deficiencies in those services. The NID service fee structure includes funding for maintenance of the system. The City notes and plans to provide wastewater services to this area, but that will be driven by specific demands for public sewer. Should storm water or sewer services need to be expanded into the area; the area will likely need to rely on state or federal funds to assist in the extension of these services. Some of these funding sources include the State Water Resources Control Board (SWRCB) Revolving Fund Program, SWRCB Small Community Wastewater Grant Program, and Department of Water Resources

Integrated Regional Water Management Grant Program, Sustainable Communities Planning Grant Program, United States Department of Agriculture Rural Development Grants and Loans, and Community Development Block Grants. Based on the City's past success in obtaining grants, the City believes it is likely to obtain one or more of these funding tools to assist in the extension of infrastructure into the area if needed.

Conclusion: As demonstrated above, this fringe community does not have any service of infrastructure deficiencies, nor could be construed as being a neglected area. The area is well-served with basic infrastructure. The legislative intent of SB 244 clearly expresses concerns with DUCs that lack basic infrastructure so as to threaten the health and safety of the residents. Since this area contains the basic infrastructure and there are no projected health or safety issues, there is not an immediate or foreseen need to plan for significant investments in this area. (Res. 2014-42)



City of Grass Valley ~ Fringe Community Map

Qualifies as Disadvantaged Unincorporated Community

July, 2014

Fringe Community

City Limit

0 250 500 1,000 Feet

LAND USE GOALS AND OBJECTIVES

1-LUG Promote balanced community growth and development in a planned and orderly way.

- **1-LUO** Availability of sufficient building sites properly zoned to accommodate projected growth.
- **2-LUO** Avoidance of future adverse environmental, public facilities and services impacts.

2-LUG Promote infill as an alternative to peripheral expansion where feasible.

- **3-LUO** Reduction in the amount of land necessary to accommodate future growth.
- **4-LUO** Reduction in environmental impacts associated with peripheral growth.
- **5-LUO** Continued revitalization of central Grass Valley.

3-LUG In areas of new development, plan for a diversity of land uses and housing types, including mixed use developments.

- **6-LUO** Reduction in congestion and travel time to acquire needed goods and services.
- **7-LUO** Preservation of open space and unique property features.
- **8-LUO** Provision of a full range of housing opportunities and types.

4-LUG Protect and enhance the character of established single family neighborhoods.

- **9-LUO** Preservation of existing neighborhoods.
- **10-LUO** Protection of present quality of life.
- **11-LUO** Retention of historic structures and community character.

5-LUG Provide for a broad range of housing opportunities, including opportunities for low, moderate and middle income households.

- **12-LUO** Designation of residential building sites sufficient in number and variety to meet projected demand.
- **13-LUO** Provision of sufficient affordable housing units for those working in Grass Valley.
- **14-LUO** Utilization of available programs to promote the construction of affordable housing.

Goals…

- *Promote balanced community growth and development in a planned and orderly way*
- *Promote infill as an alternative to peripheral expansion where feasible.*
- *In areas of new development, plan for a diversity of land uses and housing types, including mixed use developments.*
- *Protect and enhance the character of established single family neighborhoods.*
- *Provide for a broad range of housing opportunities, including opportunities for low, moderate and middle income households.*
- *Promote a job/housing balance within the Grass Valley region in order to facilitate pleasant, convenient and enjoyable working conditions for residents, including opportunities for short home to work journeys.*
- *Create a healthy economic base for the community, including increasing employment opportunities through attraction of new and compatible industry and commerce, and through retention, promotion and expansion of existing business.*
- *Create a sound fiscal environment for municipal government through land use planning and decision-making that ensures a positive return to the local community.*
- *Coordinate peripheral development with the County General Plan and appropriate entities currently providing services in the Planning Area.*

6-LUG Promote a jobs/housing balance within the Grass Valley region in order to facilitate pleasant, convenient and enjoyable working conditions for residents, including opportunities for short home to work journeys.

15-LUO Reduction in the number of vehicle miles driven.
16-LUO An improved quality of life for those working in the Grass Valley Planning Area.
17-LUO Future employment opportunities as adults for today's youth in well-paying local jobs.

7-LUG Create a healthy economic base for the community, including increasing employment opportunities through attraction of new and compatible industry and commerce, and through retention, promotion and expansion of existing businesses.

18-LUO Creation and retention of wealth in Grass Valley.
19-LUO Employment opportunities for present and future residents.
20-LUO An expanding local tax base.
21-LUO Creation of an economy conducive to quality growth and development.

8-LUG Create a sound fiscal environment for municipal government through land use planning and decision-making that ensures a positive return to the local community.

22-LUO A healthy City government and special districts.
23-LUO Adequately funded local government services.
24-LUO Ability to respond to new service demands and the needs of a changing population.

9-LUG Coordinate peripheral development with the County General Plan and appropriate entities currently providing services in the Planning Area.

25-LUO Optimization of service delivery and land use decision making.
26-LUO Avoidance of land use and inter-jurisdictional conflict.

LAND USE POLICIES

l-LUP Maintain a General Plan that reflects the needs of the total community, including residents, businesses and industry.
2-LUP Require adequate information when reviewing development proposals, including full environmental review and fiscal impact analyses, to assure minimization of environmental, public facilities and services impacts.
3-LUP Maintain standards for population density and building intensity for each land use category identified in the General Plan.
4-LUP Identify areas appropriate for infill development and show them on the Land Use Diagram.
5-LUP Actively market infill and available parcels during contacts with developers and community members.
6-LUP Develop a more specific development strategy for identified infill parcels following General Plan adoption.
7-LUP Utilize California Redevelopment Law to provide incentives to infill development.
8-LUP Encourage and facilitate mixed-use developments on infill sites.
9-LUP Provide for higher residential densities on infill sites and in the Downtown area.
10-LUP Annex properties within the Grass Valley Planning Area prior to or in conjunction with their development.
11-LUP Where feasible, treat newly developing areas as Planned Developments.

12-LUP Permit increases in residential density (clustering) on portions of development sites while maintaining overall density.

13-LUP Encourage convenience goods and services opportunities to be incorporated into any significant development proposal.

14-LUP Encourage incorporation of multiple family developments in new development areas while maintaining high design standards.

15-LUP Identify established neighborhoods and show them on the Land Use Diagram.

16-LUP Maintain zoning that promotes protection of existing single family residential areas from inappropriate encroachments.

17-LUP Utilize California Redevelopment Law, where appropriate, to enhance older neighborhoods and protect them from blighting influences.

18-LUP Maintain an active code enforcement program.

19-LUP Provide for a workable number of neighborhood planning/improvement areas, using the General Plan Neighborhoods map as a guide.

20-LUP Avoid circulation improvements that bisect or adversely impact established neighborhoods.

21-LUP Provide for secondary housing units on single-family residential lots.

22-LUP Assure that a sufficient number of sites are zoned for multiple family uses.

23-LUP Encourage mixed developments incorporating a variety of densities on infill sites and in areas proposed for annexation.

24-LUP On large parcels, encourage clustering of residential units on the most developable portions of the site in order to reduce infrastructure and other housing-related construction costs.

25-LUP Utilize clustering and other land use techniques to protect environmentally sensitive resources, such as heritage trees and wetlands.

26-LUP In partnership with housing developers, consider use of Community Development Block Grant funds, redevelopment funds and other funding programs that may become available from time-to-time to reduce the cost of housing for low and moderate income families.

27-LUP Establish a record keeping system enabling the number of jobs created to be correlated with the number of available housing units by type within the Grass Valley Planning Area.

28-LUP Promote the construction of affordable housing utilizing the techniques and approaches described in this General Plan.

29-LUP Promote the establishment and expansion of businesses and industries offering professional, light manufacturing and technical employment opportunities related to existing and developing forms of technology.

30-LUP Encourage mixed use developments on larger parcels in newly developing areas incorporating jobs generating businesses and industry housing.

31-LUP Promote primary jobs and core employment opportunities; those that export goods while importing capital.

32-LUP Encourage development of state of the art telecommunications infrastructure to attract new employers and serve the needs of the telecommuter.

33-LUP Promote Downtown as a hub for area cultural, entertainment and retail development.

34-LUP Prepare and provide a local economic information profile to prospective new businesses.

35-LUP Recognize the importance of and encourage home-based businesses that do not conflict with the character of established neighborhoods.

36-LUP Establish and utilize methods for assessing the fiscal impacts of land use-related projects under consideration by the Planning Commission and/or City Council.

37-LUP Assure that new development pays its fair share of the cost of municipal services.

38-LUP Consider use of special assessments to pay for unique service demands.

39-LUP Assure that acceptable inter-agency agreements regarding future service and facility provision are in place prior to approval of any major new development.

40-LUP Refer all development proposals to potentially affected governmental entities for review and comment.

41-LUP Request and respond to referrals from Nevada County concerning pending land use decisions within the Grass Valley Planning Area.

42-LUP Cooperate with Nevada County to prepare a hillside/slope ordinance to regulate uniformity and appropriately develop density and intensity.

43-LUP Establish and maintain a clear boundary between the City of Grass Valley and unincorporated areas of Nevada County, beyond which urban land use types and density will not be permitted.

44-LUP Encourage the application of City standards throughout the City's Sphere of influence.

LAND USE IMPLEMENTATION ACTIONS AND STRATEGIES

1-LUI Revise the zoning map to reflect new General Plan designations.

2-LUI Revise zoning text to reflect General Plan changes, including density/intensity standards for zoning districts.

3-LUI Review development regulations to assure adequately assess and mitigate environmental and fiscal impacts.

4-LUI Establish and maintain a data base containing information needed to determine the City's jobs-housing balance.

5-LUI Review redevelopment and revitalization programs and activities, and adjust plans to meet the goals, objectives, and policies of the General Plan.

6-LUI Review housing code enforcement practices, and adjust as needed to meet the goals, objectives, and policies of the General Plan.

7-LUI Establish a neighborhood-level planning/improvement program, to be the basis for neighborhood-level service and facility planning and citizen participation in neighborhood-level decision-making. Identify and delineate neighborhoods in a pattern appropriate to neighborhood-level planning and improvement, using the General Plan Neighborhoods map as a guide.

8-LUI Coordinate with LAFCo, Nevada County and other agencies and special districts regarding provisions of the General Plan, application of General Plan provisions incorporated portions of the Planning Area, and the timing and directions of future annexations.

9-LUI Establish standard processes and procedures for planning, annexation, and service provision in the unincorporated Planning Area.

10-LUI Establish uniform procedures and planning requirements for SDA-designated areas.

11-LUI Review service provision/extension plans, policies, and procedures to assure compatibility with the General Plan.

Chapter Four

Circulation Element

CHAPTER FOUR
CIRCULATION ELEMENT

INTRODUCTION

State law requires that a Circulation Element include "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals and other public utilities and facilities". This element defines transportation facilities, and includes the goals, policies and implementation measures for the City's circulation system. The Circulation Element's provisions are mandated by State law to be correlated with, and thus support, the goals, objectives, and policies of the Land Use Element.

It is the underlying goal of the entire Circulation Element that the City's circulation system 1) promote the safe, efficient and reliable movement of the people and goods; 2) facilitate a level of transition from the automobile to other modes of transportation; and 3) provide an adequate level of transportation service for all persons traveling in and through Grass Valley.

Travel demand is expected to increase as the City population increases to the levels forecast for the year 2020. This population increase, coupled with increases in employment, will challenge the City to find solutions which will maintain roadway Level of Service standards.

As in most areas, to travel within or through the Grass Valley vicinity, one is very dependent on the automobile. Until recently, this dependence was not viewed as a critical issue. That is no longer the case. Traffic congestion is no longer confined to major urban centers. Some of the worst recurring traffic conditions in the area occur along Highway 49. Some of the City's collectors and arterials, particularly Main Street and in the unincorporated area of Nevada County, Brunswick Road, are now experiencing regular peak hour congestion.

For these reasons, the City is committed to actively pursuing policies and implementation measures that will promote car-pooling, transit and non-vehicular modes of travel (bicycles and walking) as alternatives to single-occupant automobile use. In this effort, the City will be making a long-term commitment to alternative forms of transportation.

No City or County is an island in its regional setting. It is, therefore, important that the City coordinate its Circulation Element provisions with neighboring jurisdictions, and with regional and State plans.

The provisions of the Circulation Element affect the community's physical, social and economic environment. The location, design and constituent modes of the City's circulation system affect air quality, noise, energy use, community appearance, land use patterns and other factors. The circulation system should be accessible to all segments of the population, including the disadvantaged, the young, the poor, the elderly and the handicapped. In addition, the efficiency of a community's circulation system can either contribute to or adversely affect the community's economy. All of these factors must be considered in developing circulation policy.

The Circulation Element discusses the following components of the circulation system.

1. Functional Classification
2. Level of Service
3. Transit
4. Non-vehicular Transportation

FUNCTIONAL CLASSIFICATION

The objective of functional classification is to group into connecting systems road and streets having similar functions, purposes and importance in the roadway network. In turn, the systems are distinguished by their more general functions and levels of importance.

Careful long-range planning of the City's roadways is needed to meet Grass Valley's Circulation goals. This includes the establishment of a comprehensive designation of all roadways throughout the City. A sound functional classification is essential for:

- Long-range planning and coordination
- Determining right-of-way requirements and preserving right-of-way
- Defining design standards and operations of facilities in each class
- Developing budgets and funding programs according to priority
- Determining acceptable levels of traffic volumes, especially on the local and collector street systems

Roadways have two functions, which are incompatible from a design standpoint: 1) to provide mobility and 2) to provide land access. A functional classification system provides a functional specialization in meeting the access and mobility requirements of the roadways. High and constant speeds are desirable for mobility on regional facilities. Local streets for land access are characterized by slow speeds and frequent stops, and collector streets offer a more balanced service for both functions.

The existing street network in the City of Grass Valley is a product of both roadways that have provided access to the older portions of the City for decades and roadways that were designed to serve the areas of new development. As a result, in the older portions of the City, some roadways function as arterial or collector roadways, but they have not previously been classified as such.

Freeways/Expressways. Freeways and Expressways are regionally important facilities which link the community of Grass Valley with its Nevada County neighbors and with regional destinations. These facilities are high speed, restricted access facilities providing little direct linkage to adjoining property but providing access via interchanges or, in the interim, major signalized intersections. Freeways and Expressways are designed to the standards of the California Department of Transportation (Caltrans) and improvements to these facilities are planned and implemented through a cooperative effort of Caltrans, the Nevada County Transportation Commission, Nevada County, the City of Grass Valley and Nevada City. State Highways 20 and 49 are the Freeways and Expressways serving Grass Valley.

Arterial Streets. The primary function of arterial roadways is to move large volumes of traffic through the community to other sections of the City and beyond. In more recently developed areas the right-of-way for arterials is either 84 or 100 feet, and while most arterials are two lanes, four lane arterials can be developed in response to traffic demands. Some roadways function as arterials due to the current high traffic volumes and their key linkages between one section of the City and another. For these roadways, current right-of-way widths vary, but most contain only two traffic lanes.

Collector Streets. Collector streets generally link local residential streets and commercial and office parking areas to the arterials. In new areas, these streets are generally designed with a 54 or 60 foot right-of-way and contain two traffic lanes with bike lanes. In older portions of the community, a number of roadways function as collector roadways due to moderate traffic volumes and their linkage to the arterial roadway system. Right-of-way widths vary, with most containing two traffic lanes.

Local Streets. Local streets provide direct access to abutting land and access to the collector street system. The right-of-way for local streets is normally 54 feet which provides for two traffic lanes and a narrow parking lane that doubles as a Class II bikeway on both sides. Actual widths for local streets vary throughout the City.

The Circulation Plan (existing and planned arterial and collector roadways system) is depicted in Figure 4-1 and Table 4-1. All roadways not included as freeways, arterial, or collector roadways in Figure 4-1 and Table 4-1 are local streets. Conceptual alignments through planned annexations areas indicate potential ultimate connections of existing and planned arterials. The exact location and need for each new roadway in the Special Development Areas will be evaluated during the preparation of Specific Plans or similar detailed development plans.

New transportation facilities needs as shown on the Circulation Plan (Figure4-1) are:

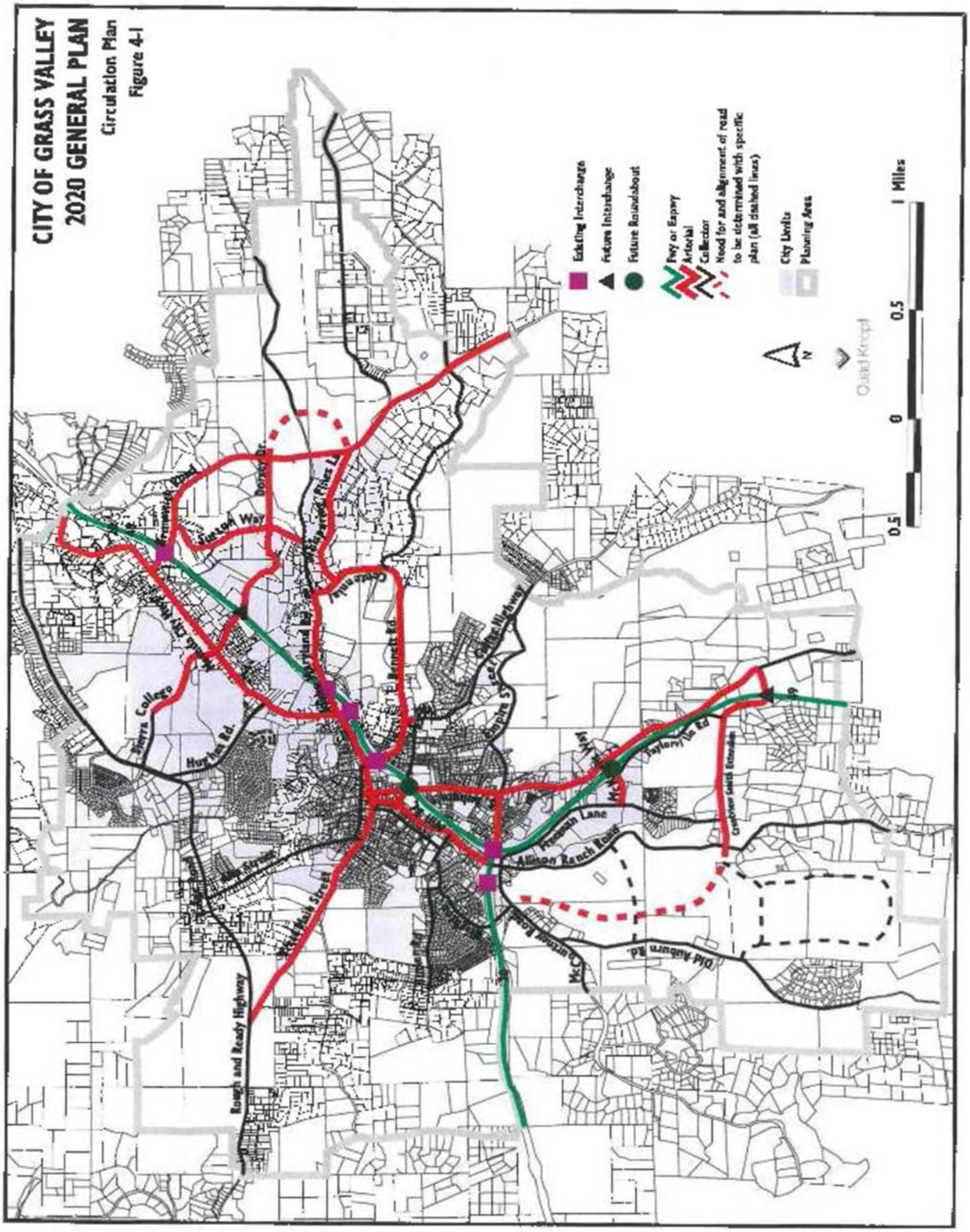
- Construction of a new interchange on Highway 20/49 at Dorsey Drive.
- Construction of a new intersection or interchange on Highway 49 in the area of Crestview Drive-Smith Road in southern Grass Valley.
- Construction of a new arterial road through the North Star area linking the Brighton/McCourtney intersection near Highway 20 with the new Crestview-Smith intersection or interchange on Highway 49. This new road would be connected to a southward extension of Freeman Lane. It is the City's policy, however, that Freeman Lane not be extended southward from its current termination north of Wolf Creek, until and unless the new Crestview-Smith arterial road is constructed.
- Extension of Dorsey Drive easterly to Brunswick Road.
- Reconstruction of the McKnight Way Interchange on Highway 49 to create modern roundabout intersections.
- Reconstruction of the Highway 174/Highway 20/49 interchange as a modern roundabout.
- Construction of a new road network in the northeastern quadrant of the Planning Area, linking existing and planned streets and roads.
- Closure of Idaho-Maryland road at the Brunswick intersection.

TABLE 4-1
FUNCTIONAL CLASSIFICATION
CITY OF GRASS VALLEY ARTERIAL AND COLLECTOR ROADWAYS

ARTERIALS	COLLECTORS
South Auburn Street	Allison Ranch Road
Brighton Street Extension	Alta Street
Brunswick Road	East Bennett
Crestview Extension	Brighton Street
Empire Street	Butler Street
Idaho Maryland Road (part)	Dorsey Drive
LaBarr Meadows Road	Empire Street
Main Street	*Freeman Lane (designated local street south of McKnight Way)
Mill Street	Hughes Road
Neal Street	Idaho Maryland Road (part)
Nevada City Highway	McCourtney Road
Sierra College Drive (part)	McKnight Road
	Mill Street
	Richardson Street
	Ridge Road
	Sierra College Drive (part)
	Sutton Way
	Taylorville Road
	Whispering Pines Lane

All roadways not listed here are designated as local streets.
*Resolution 00-56, 9/11/2000

Another important component of the City's functional classification is truck routes. Currently the City has no designated truck routes within the Grass Valley City limits, although trucks are prohibited on East Maryland Drive.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Circulation Plan
Figure 4-1
Existing Interchange
Future Interchange
Future Roundabout
Fwy or Expwy
Arterial
Collector
Need for and alignment of road to be determined with specific plan (all dashed lines)
City Limits
Planning Area
0.5
0
0.5
1 Miles
Quad Knopf
Sutton Way
Sierra College
Hughes Rd.
Rough and Ready Highway
West Main Street
Allison Ranch Road
Freeman Lane
Old Auburn Rd.
Colfax Highway
Taylorville Rd
Idaho Maryland Rd.
E. Bennett Rd.
Dorsey Dr.
Empire Street

LEVEL OF SERVICE

For General Plan level analysis, the level of service (LOS) on individual roadway segments is determined based on general daily traffic volume thresholds which account for such factors as the level of access control, terrain, traffic control, etc. The thresholds employed in the Nevada County General Plan and by the Nevada County Transportation Commission (NCTC) in previous regional studies were used. These daily traffic volume standards are presented in Table 4-2.

Currently there are four roadway segments in the Planning Area which fail to deliver LOS "D" conditions.

TABLE 4-2
DAILY PLANNING SERVICE VOLUME CRITERIA

Functional Class	Lanes	LOS A	LOS B	LOS C	LOS D	LOS E
Interstate and freeway	4 6	59,400 89,100	69,300 103,950	79,200 118,800	89,100 133,650	99,000 148,500
Arterial	2 4 6	9,300 18,600 27,900	10,850 21,700 32,550	12,400 24,800 37,200	13,950 27,900 41,850	15,500 31,000 46,500
Collector	2	6,600	7,700	8,800	9,900	11,000

As shown in Table 4-3, these are:

TABLE 4-3
EXISTING ROADWAY LEVEL OF SERVICE DEFICIENCIES

ROAD	LOCATION	NUMBER OF LANES	ADT	LOS
Sutton Way	W of Brunswick Road	2	13,661	E
Brunswick Road	S of Idaho Maryland Road	2	14,504	E
Brunswick Road	NW of Loma Rica Drive	2	14,056	E
Nevada City Highway	Grass Valley City Limits	2	14,355	E

The City intends to mitigate these roadway deficiencies through its Capital Improvement Program which is described in the implementation section of this component.

Levels of Service are also determined for intersections using procedures outlined in the 1994 Highway Capacity Manual. Table 4-4 indicates the characteristics of Levels of Service at intersections controlled by stop signs and by traffic signals.

Levels of Service are estimated for future travel conditions to ensure that a roadway will provide acceptable operations for its "design life", which is commonly 20 years. For the General Plan, the year 2020 will be used

for estimating traffic demand and determining Levels of Service on the roadway system. The City has established Level of Service "D" as the goal for both the General Plan and for the development of Citywide and regional traffic impact fees.

EXISTING AND FUTURE TRAFFIC CONDITIONS

TABLE 4-4
LEVEL OF SERVICE DEFINITIONS

LEVEL OF SERVICE	SIGNALIZED INTERSECTION	UN-SIGNALIZED INTERSECTION
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay < 5.0 sec	Little or no delay. Delay < 5 sec/veh
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 15.0 sec and < 15.0 sec	Short traffic delays. Delay > 5 sec/veh and < 10 sec/veh
"C"	Light congestion, occasional backups on critical approaches. Delay > 25.0 sec and < 40.0 sec	Average traffic delays. Delay > 10 sec/veh and < 20 sec/veh
"D"	Significant congestions of critical approached but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 25.0 sec and < 40.0 sec	Long traffic delays. Delay > 20 sec/veh and < 20 sec/veh
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queues may block nearby intersection(s) upstream of critical approach(es). Delay > 40.0 sec and < 60.0 sec	Very long traffic delays, extreme congestion. Delay > 30 sec/veh and < 45 sec/veh
"F"	Total breakdown, stop-and-go operation. Delay > 60.0sec	Intersection blocked by external causes. Delay > 45 sec/veh

Sources: 1994 Highway Capacity Manual

An analysis of the roadway improvements needed to maintain a Level of Service "D" standard in the year 2020 has been conducted using land use growth assumptions and the NCTPA sub-regional travel demand model. Year 2020 roadway improvements needs are shown in Table 4-5. Figure 4-2 is an index map showing numbered locations of traffic counts shown Table 4-5. Numbered locations correspond to road segments in the "Road" column. Figure 4-3 shows road segments requiring four lanes by the year 2020, based upon projected traffic volumes and an assumed LOS "D" or better.

- The planned number of lanes for all new roadways in the annexation areas should be adequate to accommodate projected year 2020 P.M. peak hour traffic flows and provide a Level of Service "D". In these areas, feasible at-grade improvements were identified for all major intersections.

- As shown in Figure 4-3, a number of existing roadways in the infill areas of the City will require widening to provide Level of Service "D" operating conditions in the year 2020. Some of these locations are already deficient, while others will experience increased traffic as a result of future growth. Also, a number of existing intersections will require improvements.

- A number of existing intersections will require improvements to provide Level of Service "D". As shown in Table 4-6, implementation of the General Plan Circulation Element and construction of the improvement projects included in the current General Plan, will result in satisfactory Levels of Service at most locations.

- In some locations the feasibility of widening existing roads to four lanes is problematic. Although forecast traffic volumes suggest the need to widen a portion of Main Street to a four lane section, the City of Grass Valley recognizes that this level of improvement will likely prove to be impractical in the segment of Main from Alta Street east to Idaho-Maryland Road. While the resulting traffic conditions on this road may exceed the LOS "D" standard, the City is committed to maintaining adequate traffic flow in this area by increasing intersection capacity, developing parallel routes, improving pedestrian linkages, promoting alternative transportation modes.

Similarly, widening to four lanes may also be deemed impractical on some collector streets. Ideally, the City will continue to strive to provide at least a Level of Service (LOS) "D" at all locations. However, there may be locations where the City may decide that the impacts and/or costs of the required improvements exceed the benefits of having LOS "D" for all hours of the day. Allowing some flexibility enables the City to identify circumstances in which major improvements are not desirable. While this could lead to some intersections operating at worse than LOS "D" conditions for a limited amount of time per day, it would still maintain an overall high Level of Service standard for the City's roadway system.

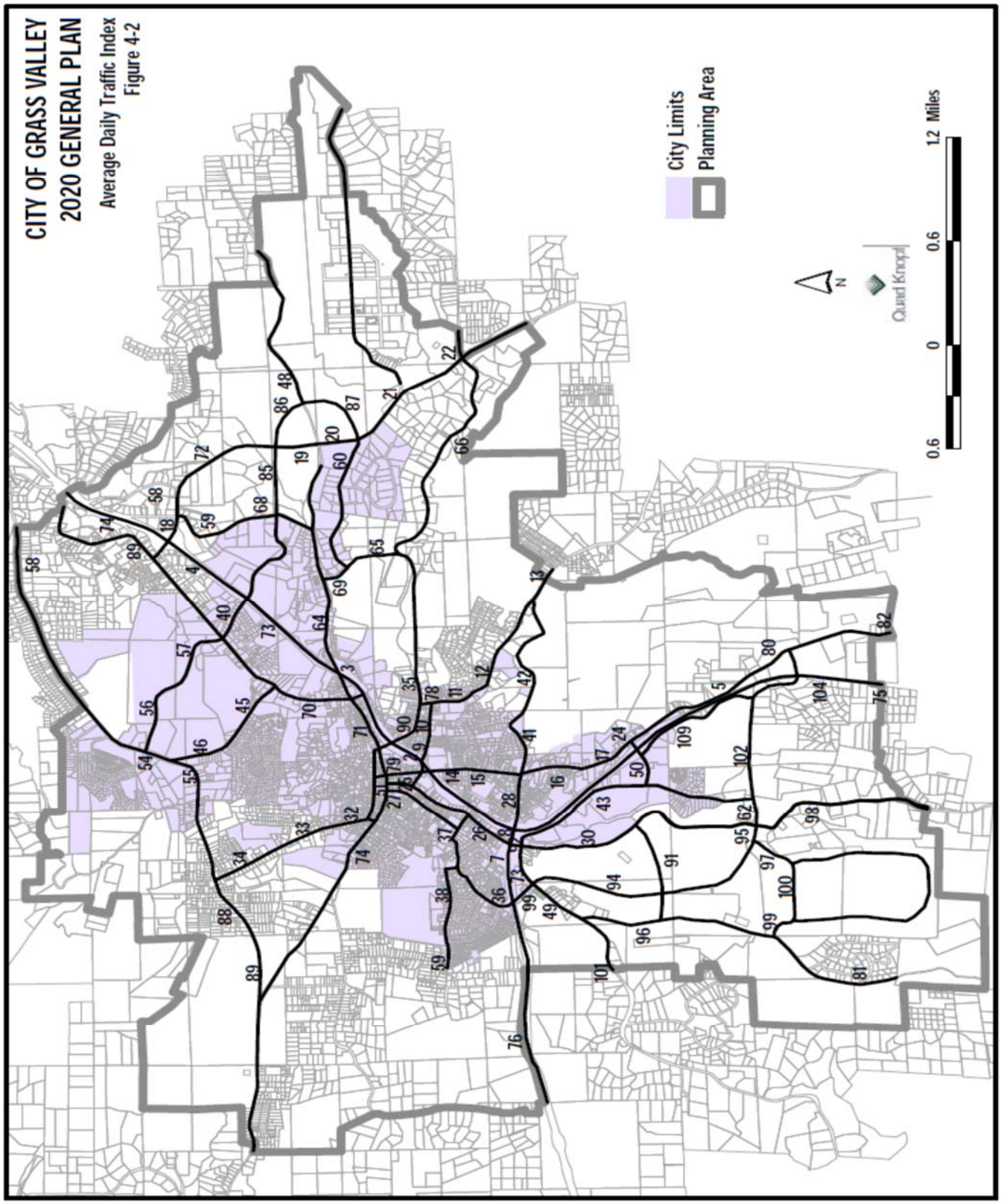

CITY OF GRASS VALLEY
2020 GENERAL PLAN
Average Daily Traffic Index
Figure 4-2
City Limits
Planning Area
N
Quad Knopf
0.6
0
0.6
1.2 Miles

TABLE 4-5
ROADWAY DAILY TRAFFIC VOLUMES LEVELS OF SERVICE
SECTION 1 - FREEWAYS

ROAD	LOCATION	NO. OF EXISTING	LANES YEAR2020	EXISTING ADT	EXISTING LOS	2020 LOS	2020 LOS
1. State Route 49/20	S of N. Auburn St	4	4	29,000	A	59,500	B
2. State Route 49/20	S of Bennett St	4	4	36,000	A	52,500	A
3. State Route 49/20	S of Idaho-Maryland	4	4	37,000	A	64,900	B
73. State Route 49/20	S of Dorsey	4	4	30,500	A	56,600	A
4. State Route 49/20	S of Brunswick Rd	4	4	30,500	A	41,100	A
74. State Route 49/20	N of Brunswick Rd	4	4	30,000	A	40,000	A
75. State Route 49	S of Crestview/Smith Ext	4	4	21,700	A	35,800	A
5. State Route 49	N of Crestview/Smith Ext	4	4	21,700	A	32,700	A
6. State Route 49	S of SR 20	4	4	32,500	A	41,650	A
7. State Route 20	W of Mill St	4	4	14,200	A	25,170	A
8. State Route 20	W of SR 49	4	4	15,000	A	27,500	A
76. State Route 20	W of Brighton	4	4	14,200	A	25,200	A

ADT = Average Daily Traffic
LOS = Level of Service
( ) = Planned Road

TABLE 4-5
ROADWAY DAILY TRAFFIC VOLUMES LEVELS OF SERVICE
SECTION 2 - ARTERIALS

ROAD	LOCATION	NO. OF EXISTING	LANES YEAR2020	EXISTING ADT	EXISTING LOS	2020 ADT	2020 LOS
9. State Route 174	E of SR 20	2	2	6,200	A	12,000	C
10. State Route 174	E of Central St	2	2	4,500	A	7,350	A
11. State Route 174	E of Ophir	2	2	5,100	A	5,150	A
12. State Route 174	S of Race St	2	2	5,400	A	7,250	A
13. State Route 174	E of Empire Mine	2	2	5,600	A	9,000	A
79. South Auburn St	S of Main	2	2	NA	NA	5,700	A
14. South Auburn St	S of Mohawk St	2	2	7,802	A	7,800	A
15. South Auburn St	N of School Alley	2	2	6,852	A	6,950	A
16. South Auburn St	N of Whiting St	2	2	7,139	A	10,400	B
17.South Auburn St	NW of E. McKnight Way	2	4	8,228	A	14,300	A

TABLE 4-5
ROADWAY DAILY TRAFFIC VOLUMES LEVELS OF SERVICE
SECTION 2 – ARTERIALS (CONTINUED…)

ROAD	LOCATION	NO. OF EXISTING	LANES YEAR2020	EXISTING ADT	EXISTING LOS	2020 ADT	2020 LOS
90. Bennett Road	E of SR 49/20	2	2	NA	NA	5,700	A
94. Brighton Ext.	S of McCourtney	(2)	2	NA	NA	4,600	A
95. Brighton Ext.	W of Allison Ranch	(2)	2	NA	NA	5,600	A
18. Brunswick Rd	On Overcrossing 49/20	4	4	26,172	D	17,100	A
72. Brunswick Rd	N of Dorsey Drive	2	4	12,235	C	14,600	A
19. Brunswick Rd	S of Ranchview Ct	2	4	12,235	C	14,600	A
20. Brunswick Rd	N of Whispering Pines	2	4	14,504	E	12,600	A
21. Brunswick Rd	NW of Loma Rica Dr	2	4	14,056	E	18,600	A
22. Brunswick Rd	NW of E. Bennett	2	2	10,686	B	11,200	C
69. Centennial Drive	S of Idaho Maryland	2	2	NA	NA	9,600	B
62. Crestview/Smith Ext	E of Taylorville	(2)	2	NA	NA	6,050	A
102. Crestview/Smith Ext	E of Taylorville	(2)	2	NA	NA	3,100	A
40. Dorsey Drive	SE of Segsworth Way	2	4	5,541	A	15,400	A
67. Dorsey Drive	W of Sutton Way	(2)	2	NA	NA	13,500	D
85. Dorsey Drive	E of Sutton	(2)	2	NA	NA	12,800	D
86. Dorsey/ Whispering Pines Loop	N of Idaho Maryland	(2)	2	NA	NA	12,800	D
87. Dorsey/ Whispering Pines Loop	S of Idaho Maryland	(2)	2	NA	NA	8,250	A
23. Empire Street	E of Le Duc St	2	2	4,923	A	4,900	A
64. Idaho Maryland Rd	E of Railroad	2	4	12,111	C	24,700	C
24. La Barr Meadows	SE of E. McKnight Way	2	2	10,028	B	10,100	B
80. La Barr Meadows	N of Crestview/ Smith Ext	2	2	NA	NA	7,950	A
82. La Barr Meadows	S of Crestview/ Smith Ext	2	2	NA	NA	11,200	C
74. Main Street	S of Squirrel Creek	2	2	5,763	A	10,200	B
63. Main Street	W of Auburn	2	2	NA	NA	9,450	B
71. Main Street	E of Bennett St	2	2	12,172	C	16,500	F
70. Main Street	N of Idaho Maryland	2	4	NA	NA	21,900	C

TABLE 4-5
ROADWAY TRAFFIC VOLUMES LEVELS OF SERVICE
SECTION 2 – ARTERIALS (CONTINUED…)

ROAD	LOCATION	NO. OF EXISTING	LANES YEAR2020	EXISTING ADT	EXISTING LOS	2020 ADT	2020 LOS
73. McCourtney Road	W of 20 Ramps	2	2	NA	NA	9,900	B
50. W. McKnight Way	SW of Taylorville Rd	2	4	8,882	A	16,800	A
25. Mill Street	S of Neal Street	2	2	5,786	A	12,100	C
26. Mill Street	NE of Rhode Island St	2	2	5,750	A	8,600	A
27. Neal Street	E of Church Street	2	2	5,239	A	3,750	A
77. Nevada City Hwy	S of Sierra College	2	4	NA	NA	15,400	A
28. Nevada City Hwy	Grass Valley City Limits	2	4	14,355	E	15,000	A
83. Nevada City Hwy	E of Brunswick Rd	2	2	NA	NA	11,800	C
78. Ophir Dr	S of Bennett Street	2	2	NA	NA	9,050	A
57. Sierra College Dr	E of Main Street	2	4	4,546	A	16,700	A
58. Sutton Way	E of Brunswick Rd	2	2	9,040	A	10,800	A
59. Sutton Way	W of Brunswick Rd	2	2	13,661	F	6,300	A
68. Sutton Way	N of Dorsey Dr	2	2	NA	NA	6,150	A
84. Sutton Way	S of Dorsey Drive	2	2	NA	NA	5,200	A
60. Whispering Pines Ln	W of Brunswick Rd	2	2	1,494	A	8,250	A

ADT = Average Daily Traffic
LOS = Level of Service
NA = Not Available

TABLE 4-5
ROADWAY DAILY TRAFFIC VOLUMES LEVELS OF SERVICE
SECTION 3 - COLLECTORS

ROAD	LOCATION	NO. OF EXISTING	LANES YEAR2020	EXISTING ADT	EXISTING LOS	2020 ADT	2020 LOS
29. Allison Ranch Road	S of McCourtney	2	2	720	A	600	A
30. Allison Ranch Road	N of North Star Mine Rd	2	2	665	A	600	A
98. Allison Ranch Rd	S of Crestview/ Smith Ext	2	2	NA	NA	50	A
31. Alta Street	N of West Main St	2	2	4,203	A	3,000	A
32. Alta Street	S of Alta Vista Dr	2	2	3,587	A	1,300	A
33. Alta Street	N of Alta Vista Dr (S)	2	2	3,476	A	850	A
34. Alta Street	SE of Ridge Road	2	2	3,380	A	1,100	A
96. Old Auburn Rd	S of McCourtney Rd	2	2	NA	NA	1,450	A
81. Old Auburn Rd	S of North Star Connection	2	2	NA	NA	1,750	A
66. E Bennett Street	E of Centennial	2	2	NA	NA	5,250	A
35. E. Bennett Street	E Grass Valley City Limits	2	2	2,142	A	8,150	C
93. Brighton Street	N of McCourtney	2	2	NA	NA	6,750	B
36. Brighton Street	N of McCourtney	2	2	3,830	A	6,750	B
37. Brighton Street	S of Chapel	2	2	2,581	A	3,950	A
38. Butler Street	W of Minnie	2	2	813	A	3,150	A
39. Butler Street	E of Packard Dr	2	2	929	A	3,100	A
65. Centennial Drive	N of E. Bennett St	(2)	2	NA	NA	7,350	B
91. North Collector	W of Allison Ranch	(2)	2	NA	NA	600	A
99. South Collector	E of Old Auburn	(2)	2	NA	NA	1,150	A
100. South Collector	E of North Star Loop Rd	(2)	2	NA	NA	1,400	A
97. South Collector	W of Allison Ranch Rd	(2)	2	NA	NA	1,950	A
41. Empire Street	E of Kate Hayes St	2	2	4,278	A	3,900	A
42. E. Empire Street	E Grass Valley City Limits	2	2	4,178	A	3,900	A

TABLE 4-5
ROADWAY DAILY TRAFFIC VOLUMES LEVELS OF SERVICE
SECTION 3 – COLLECTORS (CONTINUED…)

ROAD	LOCATION	NO. OF EXISTING	LANES YEAR2020	EXISTING ADT	EXISTING LOS	2020 ADT	2020 LOS
43. Freeman Lane	N of McKnight Way	2	2	8,142	C	12,200	F
44. Freeman Lane	SW of McKnight Way	2	2	NA	NA	4,800	A
61. Freeman Lane	E of Mill Street	2	2	NA	NA	9,250	D
45. Hughes Road	NW of E. Main St.	2	2	7,852	C	13,200	F
46. Hughes Road	S of Ridge Road	2	2	3,872	A	10,400	E
47. Idaho Maryland Rd	W of Brunswick Rd	2	2	3,570	A	3,850	A
48. Idaho Maryland Rd	E of Brunswick Rd	2	2	1,918	A	3,050	A
49. McCourtney Road	W of Brighton St	2	2	8,650	C	9,300	D
101. McCourtney Road	W of Old Auburn Rd	2	2	5,676	A	10,100	E
51. Mill Street	N of Bank Street	2	2	5,399	A	5,150	A
52. Richardson Street	E of Alta Street	2	2	1,171	A	2,900	A
53. Ridge Road	W of Ridge Estates Rd	2	2	5,059	A	8,000	C
54. Ridge Road	N of Hughes Rd	2	2	7,815	C	10,900	E
55. Ridge Road	S of Hughes Rd	2	2	7,625	B	10,400	E
88. Ridge Road	W of Alta Street	2	2	5,339	A	7,600	B
89. Ridge Road	E of Rough & Ready Hwy	2	2	4,263	A	11,600	F
56. Sierra College Dr	SE of Ridge Rd	2	2	3,180	A	7,200	B
103. Taylorville Rd	S of McKnight Rd	2	2	NA	NA	0	A
104. Taylorville Rd	S of Crestview/ Smith Ext	2	2	NA	NA	3,100	A

LOS = Level of Service
ADT = Average Daily Traffic
NA = Not Applicable
(2) = Planned Road

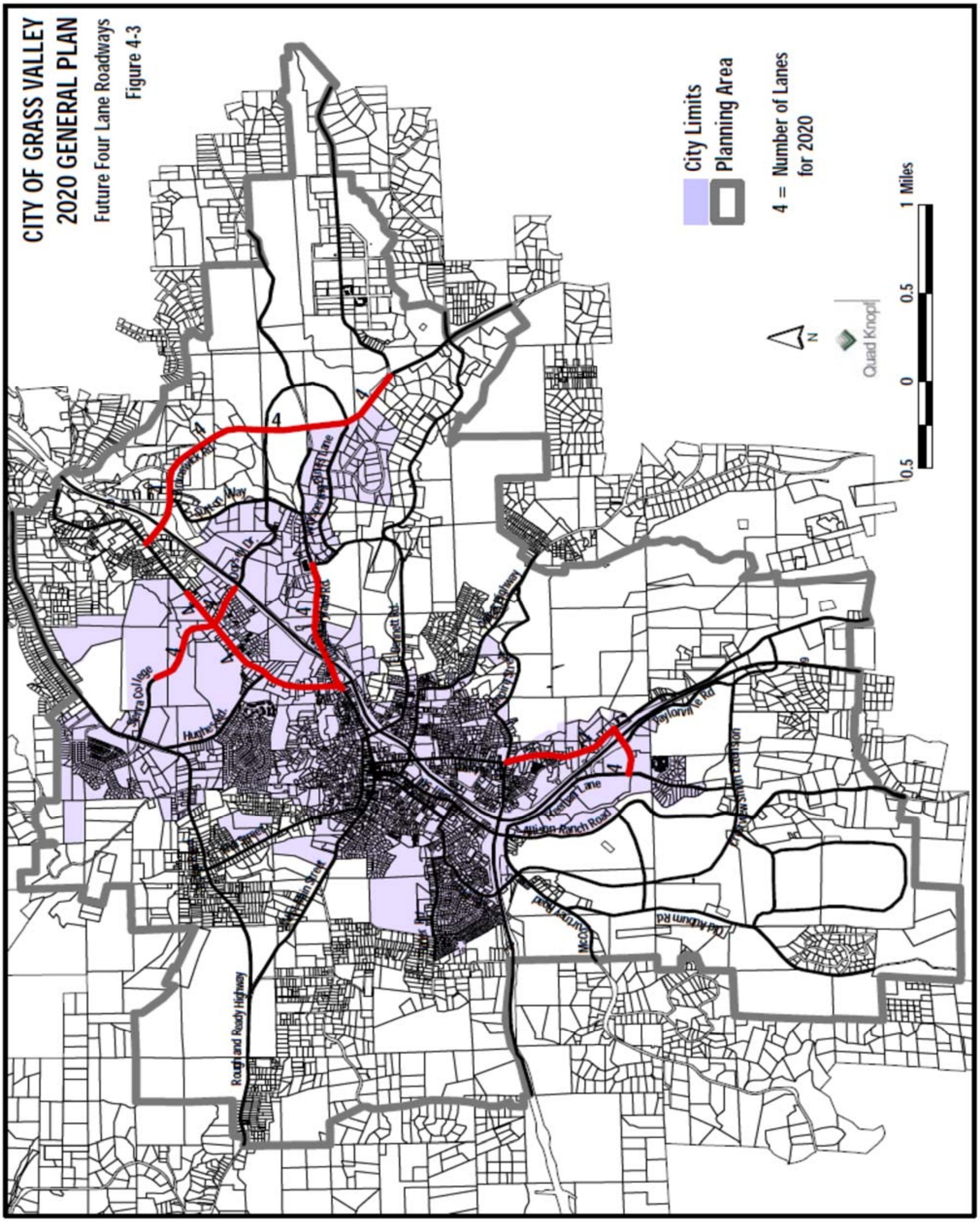

CITY OF GRASS VALLEY
2020 GENERAL PLAN
Future Four Lane Roadways
Figure 4-3
City Limits
Planning Area
4 = Number of Lanes for 2020
N
Quad Knopf
0.5
0
0.5
1 Miles
Sutton Way
Sierra College
Hughes Rd.
Rough and Ready Highway
Taylorville Rd
Allison Ranch Road
Old Auburn Rd

TABLE 4-6
YEAR 2020
INTERSECTION LEVEL OF SERVICE

INTERSECTION	EXISTING LOS	EXISTING DEL/ VEH	2020 LOS	2020 DEL/ VEH	2020 V/C
#381 Colfax Hwy/ SR 49 Frontage			B	14.1	0.633
#383 Main/ Idaho Maryland/SR 49 SB Ramps	C	17.9	F	129.5	1.285
#384 Idaho Maryland?SR 49 EB Ramps	A/C	2.4	C	17.4	0.747
#385 Brunswick/SR 49 NB Ramps			B	11.5	.659
#386 Brunswick/SR 49 SB Ramps			C	15.2	0.394
#397 Idaho Maryland/Centennial	A/C	3.7	C	6.2	
#398 Whispering Pines/Centennial			C	20.3	0.512
#409 Bennett/Centennial			F	9.6	
#413 Freeman/McCourtney/Mill/Allison	B	7.8	C	21.5	0.633
#414 Mill/SR 20 WB Ramps	C	12.9	C	16.8	0.629
#415 McCourtney/SR 20 EB Ramps	A/E	3.5	C	17.0	0.509
#454 Sierra College/Litton/Robert Ross Way	F	53.2	D	23.1	1.451
#565 SR 49/Crestview			C	23.5	0.930
#640 Main/Bennett/Washington			C	21.5	0.760
#641 Colfax Hwy/Ophir			C	19.5	0.594
#669 Main/Alta			C	24.1	0.793
#675 McKnight/SR 49 SB Ramps	C	22.6	C	21.0	0.773
#676 McKnight/SR 49 NB Ramps	C	19.6	C	19.6	0.729
#677 Empire/SR 20 SB Ramps			D	36.8	1.030
#678 Empire/SR 20 NB Ramps			B	13.8	0.513
#750 East Main/Sierra College			C	24.3	0.691
#751 East Main/ Hughes			C	19.3	0.760
#754 Ridge/Hughes	B	7.1	B	9.5	0.750
#755 Sierra College/Morgan Ranch/Ridge*	B/F	5.5	C	19.2	0.511
#766 McCourtney/Brighton	A/C	1.6	D	27.1	0.752
#770 Auburn/Empire	B	9.1	F	79.6	1.061
#797 Brunswick/Nevada City Hwy			C	15.1	0.350
#799 Auburn/Main	B	12.9	C	15.5	0.554
#804 Mill/Neal	B	8.7	F	66.1	1.027
#805 Bennett/Ophir			C	19.9	0.675
#813 Auburn/Neal			C	23.3	0.621
#817 Brunswick/Sutton			D	26.3	0.822
#818 Dorsey/Sutton			C	19.4	0.655
#819 Idaho Maryland/Sutton	A	1.5	A	2.9	0.000
#831 Freeman/McKnight	C	10.4	F	108	0.788
#1006 Auburn/SR 49 Frontage			B	10.9	0.352
#1841 Brunswick/Whispering Pines			F	ovrfl	
#2007 Brunswick/Dorsey			F	ovrfl	

V/C = Volume to Capacity Ratio;
LOS = Level of Service
Delay presented in seconds per vehicle;
A/F = Average Intersection Delay/Worse Case Delay
* = AM Peak Hour

PUBLIC TRANSIT

Public transportation will be of increasing importance during the planning period. Several trends contribute to the need for a reponsive transit system: a growing elderly population, already over 30-percent of the City population; demand for tourist-oriented public transportation linking Downtown and places of interest; commutation on Highway 49 south and, to a lesser extent, on Highway 20 and 174; clustering of business and commercial activity (as called for by this General Plan) so as to facilitate public transportation routing and scheduling.

The Grass Valley area is currently served by three public transportation sevices:

- Gold Country Stage. A fixed system serving populated centers in western Nevada County plus Colfax.
- Dial-a-Ride. Demand-based para-transit service operated by a private, non-profit organization.
- Gold Country Telecare. Private, non-profit system for handicapped and elderly patrons, using vans and similar vehicles to transport passengers to shopping and medical appointments.

Express bus commuter service is planned for a route serving Nevada City/Grass Valley/Sacramento.

The future outlook for transit depends upon some key factors and substantial commitments by the City of Grass Valley:

- A sound plan for transit, based on realistic demand and finanical projections.
- A commitment to sustained dependable service, and an understanding of the level of subsidy necessary to support such service.
- Coordination and cooperation among service providers.
- Limiting the number of public transportation providers, so as to discourage proliferation of small, ineffectual enities.

TRAILS-SIDEWALKS NETWORK (INCLUDING BIKEWAYS)

In the past 25 years, numerous bicycle, pedestrian, and equestrian trails have been planned in Grass Valley. Few have materialized. The only formal trails in Grass Valley are the Empire Mine State Park and the Litton Trail. The 1996 Nevada County Master Bicycle Plan identifies bike lanes within the City of Grass Valley. The City has not yet adopted this plan. Currently, the only designated bike facilities with the City and immediate vicinity are on Ridge Road from Hughes Road to the Nevada Union High School and on East Main from Hughes to the Nevada City Highway.

Both from the standpoints of transportation and recreation, demand for non-vehicular routes is large and growing. In addition, saftey concerns make pedestrian ways imperative, particularly along busy, high speed streets. The General Plan Land use establishes a future land use pattern conducive to non-vehicular circulation, if a non-vehicular infrastructure network can be provided. Aspects of the Land Use Plan "friendly" to non-vehicular plans are: locations of traffic generating uses close enough to residential areas to facilitate walking and bicycling; support for infill and higher density residential areas "close in"; and measures to minimize sprawl.

This General Plan includes a Trail-Sidewalks Plan (see Recreation Elements for description and map). The system is intended to provide for multi-purpose use of off-road trails and, where trails are impractical, sidewalks for pedestrian use. Trails and sidewalks link together to form a viable network plan.

The Trails-Sidewalks Plan contemplates bicycle paths within trail easements to the extent possible. Bike lanes along roadways are considered less desirable, but inevitable if no other alternative exists. Selected existing streets and roads (not served by bike paths within the trail system) should be retrofitted with bicycle lanes. Bicycle lanes should be provided on all new streets and roads, other than freeways and expressways.

CIRCULATION GOALS AND OBJECTIVES

Goals…

- *Provide a circulation system that utilizes a variety of transportation modes, including alternatives means of transportation.*
- *Ensure that street and roadway improvements complement and support land use goals.*
- *Provide for the safe and efficient movement of people and goods in a manner that respects existing neighborhoods and the natural environment.*
- *Maintain, improve and expand the existing circulation and transportation system to provide reasonable ingress, egress and internal movement.*
- *Maintain Adequate Emergency Access.*

1-CG Provide a circulation system that utilizes a variety of transporatation modes, including alternative means of transportation.

1-CO Development of a viable pedestrian and bicycle transportation network (side-walks paths, lanes and trails) providing alternatives to motorized vehicular transportation.

2-CO Ongoing examination of transit opportunites and funding mechanisms.

3-CO Inclusion of alternative transportation in local and regional transportation plans, as appropriate.

2-CG Ensure that street and roadway improvements complement and support land use goals, objectives, policies and plans.

4-CO Placement of public transportation access at convenient locations.

5-CO Convenient, safe and functional facilities for pedistrians, bicyclists and equestrians.

6-CO Flexible standards that respect existing neighborhoods.

7-CO Use of City standards throughout the Planning Area.

3-CG Provide for the safe and efficent movements of people and goods in a manner that respects existing neighborhoods and the natural environment.

8-CO Routing of through-traffic around neighborhoods to collector streets.

9-CO Use of traffic calming techniques to protect neighborhoods and residents from adverse traffic impacts.

10-CO Protection of streams courses, riparian areas and other natural features.

11-CO Development and implementation of a comprehensive traffic safety program, including improvement of facilities serving pedestrian needs.

4-CG Maintain, improve and expand the existing circulation and transportation system to provide reasonable ingress, egress and internal movement.

12-CO Establishment of and adherence to functional hierarchy of streets and highways, both within the city and throughout the Planning Area.

13-CO Improvement of the transportation system to facilitate commerce and economic development.

5-CG Maintain Adequate Emergency Access

14-CO Improvements and maintenance of adequate emergency access throughout the city.

CIRCULATION POLICIES

1-CP Coordinate bikeway and trail system planning with Nevada County, linking the City network with similar facilities in unincorporated areas.

2-CP Plan for multi-purpose transportation/recreation and pedestrian facilities to optimize facility useage and enhance potential funding.

3-CP Improve public transportation to better link existing and future residential areas with high traffic generating commercial/industrial nodes.

4-CP Develop plans for free or low-fare transit serving the downtown are, Empire Mine and other areas of particular interest.

5-CP Develop plans, in conjunction with existing transit agencies, for a shuttle bus service to accommodate inter-modal transfers and to make transit facilites more convenient.

6-CP Locate transit stops and park and ride facilities near freeway interchanges and in conjuction with higher density residential and mixed-use developments.

7-CP Provide park and ride facilities to encourage car pooling and dicourage automobile usage.

8-CP Incorporate separated, non-motorized paths in street cross-section designs whenever feasible.

9-CP Adopt appropriate designs, techniques and standards to calm traffic through residential neighborhoods.

10-CP Encourage Nevada County to utilize City roadway, access and circulation standards within the Planning Area.

11-CP Design selected streets and intersections employing modern roundabouts and other traffic calming techinques.

12-CP Adhere to high safety standards where pedestrians and bicyclists are exposed to motorized vehicles.

13-CP Assure the continuity of sidewalks by instituting a city-wide sidewalk planning/construction programs.

14-CP Provide street lighting in existing neighborhoods as neccassary.

15-CP Avoid environmentally sensitive areas, to the extent feasible, when expanding the roadway network.

16-CP Eliminate curb cuts and other vehicular encroachments along arterial and collector streets where feasible and practical, to promote both efficient traffic flow and traffic safety.

17-CP Redesign and reconstruct freeway access and connector streets, to include a new interchange at Dorsey Drive and Highway 20/49.

18-CP Study bypass routes designed and located to avert undesirable through-traffic in residential and non-residential neighborhoods.

19-CP Add vehicular parking in the downtown area.

20-CP Redesign intersections on collector streets to improve and “smooth” traffic flow.

21-CP Defer to preservation of community character, including historical and architectural features, when planning and implementing transportation improvements.

22-CP Remove impediments to emergency access from public streets and rights-of-way.

23-CP Establish and periodically review emergency access standards in appropriate city development codes and ordinances.

24-CP Coordinate circulation and development plans with public safety agencies, fire departments/districts and emergency service providers.

25-CP Defer the extension of Freeman Lane southward across Wolf Creek until such time as the Crestview-Smith extension is constructed between North Star and Highway 49.

26-CP Develop design standards to ensure that road segments being improved to four lanes incorporated aesthetic treatments, including landscaping, landscaped medians, setbacks for sidewalks, street lights, street furniture, signage restrictions, and other design elements.

27-CP Provide pedestrian friendly and walkable streets; protect the historical character of the Downtown, LOS E is an acceptable LOS for the following intersections: 1) Mill & Neal; 2) W.Main & Mill; 3) W. Main & Church 4) W. Main & School; 5) Bank & S.Auburn; 6) State Route 20/49 Southbound ramp & Bennett. LOS D is an acceptable LOS for all other intersections and road segments. Pursuant to Implementation Action 7-CI, the City may relax the LOS D standard on a case-by-case basis provided the Concil considers the factors in 7-CI. *Per Resolution 2013-33*

CIRCULATION IMPLEMENTATION ACTIONS AND STRATEGIES

1-CI Adopt the roadway classification system outlined in the Circulation Element. The city shall plan, design and regulate roadways in accordance with functional classification system reflected in Figure 4-1 and Table 4-1.

2-CI Regularly update Development Impact Fees.

3-CI Ensure that proposed specific plans are consistent with the provisions of the functional classification component. This shall include incorporation of consistent design standards for roadways, associated bikeways and trails, and landscape areas. Require that large developments propsals and specific plans include comprehensive financing plans for streets and highways.

4-CI Work with neighboring jurisdictions and regional planning agencies to coordinate the classification of roadways that cross the City's boundries. Strive to have compatible functional classifications for gateway roadways.

5-CI Continue to refine and improve the design standards for the roadway system. The design standards shall reflect functional classification and include the following elements:

- Right-of-way requirements
- Roadway cross-sections including landscaping and bikeways
- Signalization and access control
- Land use compatibility, orientation and design standards
- Vehicle and pedestrian safety

Exceptions to the standards may be necessary but should be kept to a minimum and should be evaluated on a case-by-case basis.

6-CI Monitor truck traffic. As conditions warrant, develop, enforce, evaluate and update a truck route system to ensure safe and efficent routes through the City.

7-CI Continue to update the Capital Improvements Program to implement policy which strives to maintain LOS "D" at all locations during the weekday P.M. peak hour. Define "normally accepted maximum" improvements that are consistent with the character and terrain of Grass Valley. If forecast traffic volumes connot maintain LOS "D", the City Council may consider additional "extraordinary" improvements. The City Council may determine, on a case-by-case basis that "extraordinary" improvements are not feasible are not feasible or desirable and may relax the LOS "D" standard for a particular intersection or roadway segment. In considering exceptions to the LOS "D" standard, the City shall consider the following factors:

- The number of hours per day that the intersection or roadway segment would operate at conditions worse than LOS "D".
- The ability of the improvement to reduce peak hour delay and improve traffic operations.

- The impact on accessibility to surrounding properties
- The right-of-way needs and the physical impact on surrounding properties.
- The visual aesthetics of the required improvements and its impact on community identity and character.
- Environmental impacts including air quality and noise impacts.
- Construction and right-of-way acquisition costs.
- Impacts on pedestrian and bicycle accessibility and safety.
- The impacts of the required construction phasing and traffic maintenance.

In no case should the City plan for worse then LOS "E" at any intersection or roadway segment during the afternoon peak hour.

8-CI Base the Capital Improvement Program on a 20 year horizon and update the Program regularly. Update concurrently with the approval of any significant modification to the land use allocation assumed by the Citywide travel model.

9-CI Regularly monitor traffic volumes on City streets and prepare an annual report documenting recent trends and current Levels of Service.

10-CI Require that Specific Plans contain transportation improvements consistent with the standards of the Circulation Element, and that Specific Plans demonstrate what measures will be required to maintain the City's Level of service standard and how these measures will be funded. Utilize development agreements to secure improvement, sequencing and funding provisions.

11-CI Prepare a Long-Range Transit Master Plan consistent with the provisions of the Circulation Element. Explore potential benefits of improved transit service on the City's Level of Service standard through the Long-Range Transit Master Plan.

12-CI Evaluate the feasibility of enacting a Transportation Systems Management Ordinance. If a TSM ordinance is enacted, the City shall assess the effectiveness of a TSM Ordinance in reducing vehicle trips, or in making street, parking facilities, public transit and bikeway more effective. Evaluate the TSM Ordinance's overall performance annually. If, after two to three years the trip reduction goals are not being achieved, revise the TSM Ordinance to include measures to achieve stated goals.

13-CI Prepare a Bikeways Master Plan consistent with the Trails-Sidewalks Plan in this General Plan. Adopt the 1996 Nevada County Master Bicycle Plan and Trails Master Plan. The intent is to ensure the coordinated implementation of non-automotive circulation systems.

14-CI Coordinate with surrounding jurisdictions to provide acceptable and compatible levels of service on roadways connecting the City. Work with the Nevada County Transportation Commission to implement applicable Level Service standards. Work with appropriate air pollution control agencies to implement transportation improvements and measures that help meet the established air goals and standards.

15-CI Ensure adequate funding to meet established Level of Service policies. Continue to implement and update traffic impact fees on new development and to obtain gas tax and other revenues tofund the Capital Improvement Program. Explore funding for transit and for non-motorized circulation improvements, to be identified in the Trails-Sidewalks-Bike-ways Master Plan. Consider alternative funding sources, such as establishment of assessment district(s). Work with regional planning agencies to explore funding opportunities for all components of its transportation system that are required to meet Level of Service standards.

16-CI Monitor the status of regional planning efforts and Caltrans design work in order to be cognizant of future right-of-way requirements and local responsiblities. Maintain a current record of Caltrans and Nevada County Transportation Commission activity for major facilities so future right-of-way needs can be addressed when reviewing development proposals and shall incorporate measures to preserve rights-of-way into development agreements and conditions of approval.

17-CI Identify appropriate environmental traffic volume thresholds for residental streets and shall consider those thresholds in development review. Use traffic calming measures to ensure that these thresholds are maintained on existing streets and provided on local streets in new development.

18-CI Develop a plan for parking that identifies park and ride lots. Consider the need for park and ride facilities and for facilities serving alternative transportation modes when evaluating development proposals. Require construction of these facilities concurrent with development, or fair-share developer contributions in lieu of actual construction.

Chapter Five

Conservation/Open Space Element

CHAPTER FIVE
CONSERVATION / OPEN SPACE ELEMENT

INTRODUCTION

Open space can serve a variety of purposes. It can be used as the focal point of a community in the form of local and regional parks or as a means of preserving significant features in the area. Open space may be designated and set aside for natural resource protection, recreation, or aesthetics.

The Conservation and Open Space Elements are being combined in the 2020 Grass Valley General Plan Update. Both are mandatory General Plan Elements under State law.

The Conservation/Open Space Element addresses those aspects of conservation and open space determined most important to Grass Valley. It supplements, but does not replace, the Mineral Resources Element adopted by the City in 1993.

Government Code Section 65302(d) mandates that a Conservation Element address the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. Other issues may be addressed as deemed appropriate by the local jurisdiction including, but not limited to: The reclamation of land and waters; prevention, control and correction of erosion; flood control; prevention and control of the pollution of streams and other waters; and protection of watersheds. The Conservation Element requirements overlap those of the Open Space and Land Use Elements as well as the Safety and Circulation Elements. The Conservation Element is distinguished by being primarily oriented toward natural resources.

Government Code Section 65560 et seq., outlines the relevant issues to be addressed in an Open Space Element including, but not limited to, open space for the preservation of natural resources, managed production of resources, recreational use, and public health and safety. The Open Space Element overlaps with the Land Use, Conservation and Safety Elements. State law mandates an ambitious and detailed planning effort for open space, comparable only to the requirements for the Housing Element.

Open space can serve a variety of purposes. It can be used as the focal point of a community in the form of local and regional parks or as a means of preserving significant features in the area. Open space may be designated and set aside for natural resource protection, recreation, or aesthetics. It may be incorporated into and complement development. Open space may be either private or public land, and may or may not be suitable for public access. It may be productive economically, such as agriculture or timber lands, or it may have no economic value other than the raw land itself.

DEFINITIONS

The following definitions are provided as background for the Conservation and Open Space Element:

Conservation: *The management of natural resources* to prevent waste, destruction, or neglect.

Open Space Land: As defined in Section 65560(b) of the Government Code, "open space land" is any parcel or area of land or water which is essentially unimproved and devoted to an open-space use such as:

> Open Space for the *preservation of natural resources* including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecological and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lake shores, banks or rivers and streams, and watershed lands.
>
> Open space used for the *managed production of resources*, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of ground water basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.
>
> Open space for *outdoor recreation*, including but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.

It is important to note that conservation means proper use of resources, and does not necessarily connote 1) public ownership, 2) non-use or severely restricted use of land, or 3) guaranteed public access. It is equally important to note that open space 1) may take many forms, 2) may serve a variety of purposes, 3) may be relatively permanently or merely temporarily "open", and 4) does not necessarily connote either public ownership or public access. These caveats are fundamental to an understanding of the roles and responsibilities of the City of Grass Valley in conservation and open space related matters.

CONSERVATION / OPEN SPACE GOALS AND OBJECTIVES

1-COSG Provide a balance between development and the natural environment, protecting and properly utilizing Grass Valley's sensitive environmental areas/features, natural resources and open space lands.

- **1-COSO** Inventory of sensitive environmental area and features.
- **2-COSO** Multi-purpose open space lands, accommodating the needs and requirements of open space/conservation, habitat, recreation, and aesthetics.
- **3-COSO** Protection of rare and endangered animals and plants.
- **4-COSO** Reduction of urban development impacts on native vegetation, wildlife and topography.
- **5-COSO** Encouragement of wildlife through habitat protection.
- **6-COSO** Assurance of appropriate resource conservation and environment protection measures as prerequisites to development.

2-COSG Protect, enhance and restore hydrologic features, including stream corridors, flood plains, wetlands and riparian zones.

7-COSO Development of an extensive trail network providing recreational and educational opportunities.

8-COSO Minimize interference with the natural functions of flood plains and naturally flood-prone areas.

3-COSG Ensure the protection of Grass Valley's trees and forested areas.

9-COSO Identification of heritage trees for special recognition and protection.

10-COSO Identification of significant groves and groupings of trees for permanent open space designation.

4-COSG Protect and enhance town entryways, visual corridors and important viewsheds including ridgelines.

11-COSO Identification of particular corridors and views requiring protection or enhancement.

12-COSO Identification of specific aesthetic considerations important to the protection/enhancement of particular corridors and views.

Goals….

- *Provide a balance between development and the natural environment, protecting and properly utilizing Grass Valley's sensitive environmental areas/features, natural resources and open space lands.*
- *Protect, enhance and restore hydrologic features, including stream corridors, flood plains, wetlands, and riparian zones.*
- *Ensure the protection of Grass Valley's trees and forested areas.*
- *Protect and enhance town entryways, visual corridors and important viewsheds including ridgelines.*
- *Maintain close relationships with public agencies and private organizations regarding conservation, open space and environmental protection.*
- *Assure compliance with and understanding of air and water quality regulations and standards.*

5-COSG Maintain close relationships with public agencies and private organizations regarding conservation, open space and environmental protection.

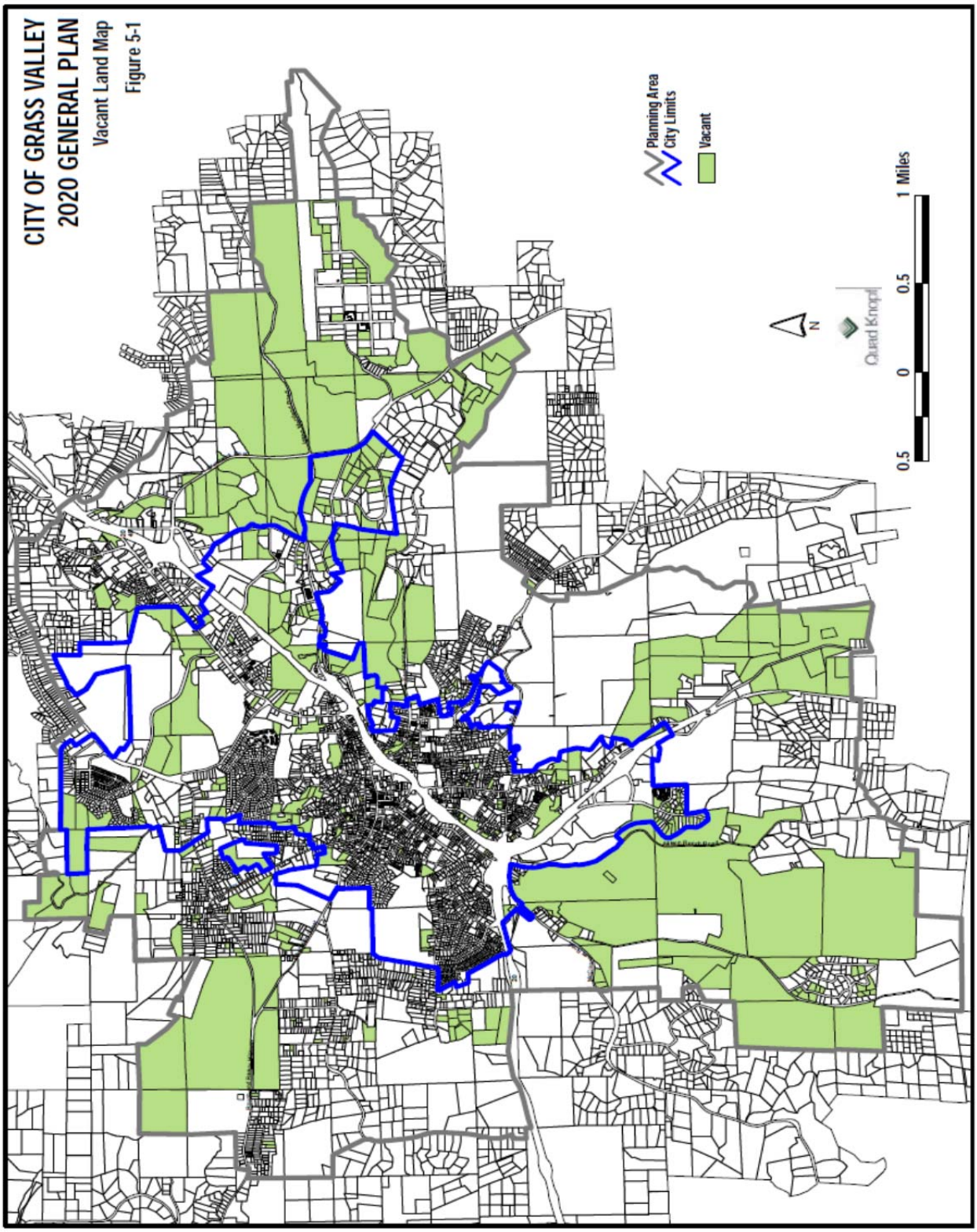
13-COSO Ongoing communication of information, plans, and concepts.

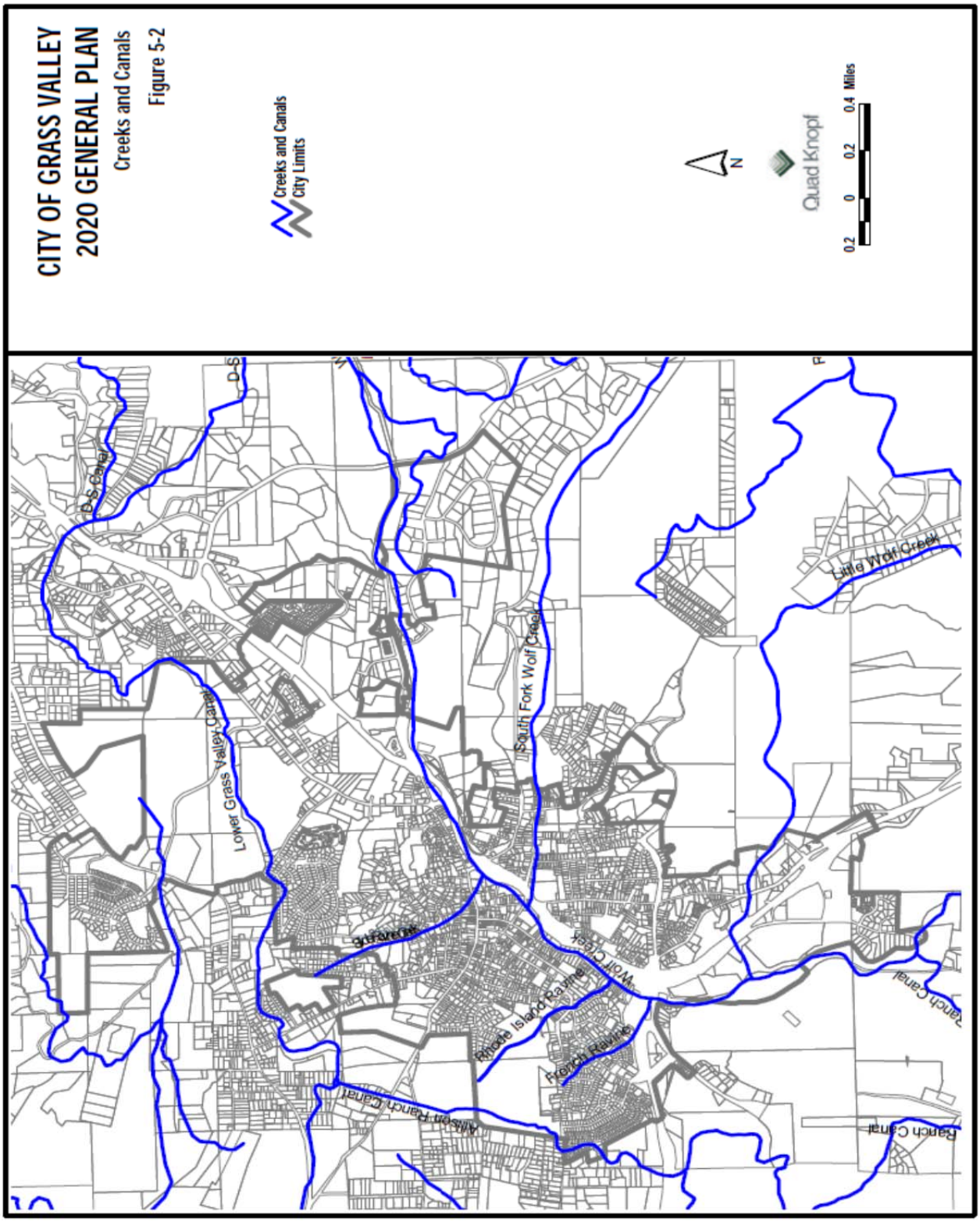
14-COSO Creation of joint efforts and shared funding responsibilities.

6-COSG Assure compliance with and understanding of air and water quality regulations and standards.

15-COSO Protection of ground- and surface water quality.

16-COSO Inclusion of air and water quality considerations in land use decisions rendered by the Planning Commission and City Council.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Vacant Land Map
Figure 5-1
Planning Area
City Limits
Vacant
N
Quad Knopf
0.5
0
0.5
1 Miles


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Creeks and Canals
Figure 5-2
Creeks and Canals
City Limits
N
Quad Knopf
0.2 0 0.2 0.4 Miles
D-S Canal
Lower Grass Valley Canal
South Fork Wolf Creek
Little Wolf Creek
Wolf Creek
Rhode Island Ravine
French Ravine
Ranch Canal
Ranch Canal

CONSERVATION / OPEN SPACE ISSUES

Vacant Land

The availability of vacant land is a major consideration in identifying open space land designations. California law requires the Open Space element to include an inventory of vacant land. The existing land use survey and resulting Existing Land Use Map constitute the vacant land inventory for purposes of the 2020 General Plan.

Vacant land is essentially open space as long as it remains undeveloped, though it may not be considered "permanent" open space unless expressly designated, owned, and/or managed as such.

Vacant land within the Planning Area, including the City of Grass Valley, is shown in Figure 5-1.

The City of Grass Valley contains 476 acres of vacant land, approximately 19% of the City's total land area of 2,521 acres. According to recent City estimates, as much as 300 acres of the vacant land inventory may be developmentally constrained due to difficult topography, limited access, environmental constraints, or economic constraints (high cost of developing). Developmentally constrained parcels are better candidates for open space opportunity designation than are more readily developed parcels.

The unincorporated portion of the Planning Area contains significant undeveloped (vacant) acreage, presenting a potential for designating and protecting substantial open space outside of the City limits. Of the unincorporated Planning Area's 7,373 acres, 2,787 acres (38%) is vacant.

Three of the four Special Development Areas (SDAs) designated on the Land Use Plan map have annexation agreements with the City of Grass Valley. They are Loma Rica Ranch, North Star, and Kenny Ranch. Combined, they contain nearly 57% of the unincorporated Planning Area's vacant land supply. Annexation agreement commitments to be implemented at the time of development require of the SDAs a combined 436 acres of open space and 50 acres of "recreation" land.

Hydrologic Features

Permanent and intermittent streams and their surroundings comprise the Planning Area's principal hydrologic features. These include stream corridors, flood plains, riparian zones, wetlands, and canals. Figure 5-2 shows creeks and canals. By protecting and enhancing hydrologic features, there in an opportunity to improve riparian habitat, to improve ground water recharge, and to better manage storm and flood waters.

Grass Valley and the balance of the Planning Area lie primarily within the Wolf Creek drainage basin. The South Fork of Wolf Creek and Little Wolf Creek drain the eastern and southeastern portion of the Planning Area and discharge into Wolf Creek in the central Grass Valley area. Northwestern and western areas are within the upper reaches of the Deer Creek drainage basin, but do not include Deer Creek or substantial tributaries.

Stream corridors areas are high priorities for conservation efforts and open space designation. As "riparian" zones, the natural attributes and habitat values of river and stream corridors are sensitive to alteration. If such values are to be preserved, protection from alteration must be afforded the riverine environment. The City's Development Code includes Chapter 17.52, Creek and Riparian Resource Protection. This Chapter provides standards intended to protect and enhance water courses and riparian resources.

Flood prevention and protection of life and property similarly justify management of the flood prone areas of stream corridors. Grass Valley's location near the headwaters of Wolf Creek and its tributaries minimizes the quantity and velocity of storm water flows through town. However, future development upstream could increase downstream flooding unless appropriate mitigation measures are employed. Keeping development out of flood prone areas is the most expeditious and effective mitigation measure. Flooding during a "100-year event" is limited to relatively narrow areas along Wolf Creek and tributaries (Wolf Creek South Fork and Little Wolf Creek) as they approach and course through Grass Valley.

Grass Valley's Flood Insurance Rate Maps (FIRM) prepared by the Federal Emergency Management Agency (FEMA), establishes floodways and flood plains for streams subject to flooding. Chapter 15.52 of the Grass Valley Municipal Code, Flood Damage Prevention, provides specific standards designed to reduce flood loses in the community. For stretches of stream corridors not covered by the FEMA maps, the 100' setback is used to define the OSO-designated zone. OSO designation will be reinforced by OS designation on the General Plan Land Use Plan map when better information for corridor delineation becomes available.

Wetlands in Grass Valley are generally small, isolated features dependent on riparian water, ditch leaks or overflows, diversions, or natural seeps or springs. Man-made or naturally occurring wetlands provide an important biological resource both through provisions of localized habitat and habitat for migratory species and as a natural water filtration system. Wetlands are identified and defined by plants, soils, and frequency of inundation.

The presence of wetlands is a consideration for any development. Conservation or mitigation measures must be implemented in the course of any development project likely to have an impact, direct or indirect, on identified wetlands. Figure 5-3 shows delineated wetlands in the Planning Area, as identified on the U.S. Department of Interior's National Wetlands Inventory Map. Delineated wetlands are designated on the OSO overlay.

Trees and Forested Areas

The decline in recent years of the logging industry in western Nevada County has been paralleled by support for maintenance of healthy forested areas throughout the foothills, including Grass Valley and vicinity.

Forest management poses significant challenges on the western slope of the Sierra. The multiple-use forest management concept requires balancing the demands of myriad, often competing, land uses and management practices. These include timber growth and forest management, water quality and watershed protection, recreation, wildland fire considerations, aesthetics, and wildlife management/protection.

Perhaps even more difficult challenges arise in the realm of "urban forestry." Here, too, competing demands require balanced approaches. The generally wooded character of Grass Valley and its environs is a large part of the area's allure for residents and visitors, alike. In the absence of a single owner or management entity, however, the future of the "forested character" is in the hands of individual owners, land developers, and local government.

The City of Grass Valley has several planning/ordinance provisions addressing trees. They include:

- Heritage Tree Ordinance for protection of outstanding individual trees
- Environmental review of development projects
- General Plan provisions

The Land Use Element and other Elements of this General Plan provides for a future land use and development pattern conducive to, but not necessarily guaranteeing, a healthy urban forest for the Planning Area. Key provisions in this regard are designation of high intensity land uses for areas presently sparsely-treed, low-intensity land uses in areas now heavily forested; a flexible Open Space Opportunities land use overlay to the General Plan; and a trails network planned to develop in tandem with natural resource protection. To meet the goals, objectives, and policies of this General Plan, however, additional steps must be taken (see Implementation Actions and Strategies).

Entryways, Viewsheds, and Aesthetic Considerations

Grass Valley and vicinity have a wide variety of landscapes and scenic resources which provide passive recreational opportunities for residents and visitors alike. Chief among these scenic resources are the views available from many roadways to surrounding open areas as well as to vistas of the foothills and mountains.

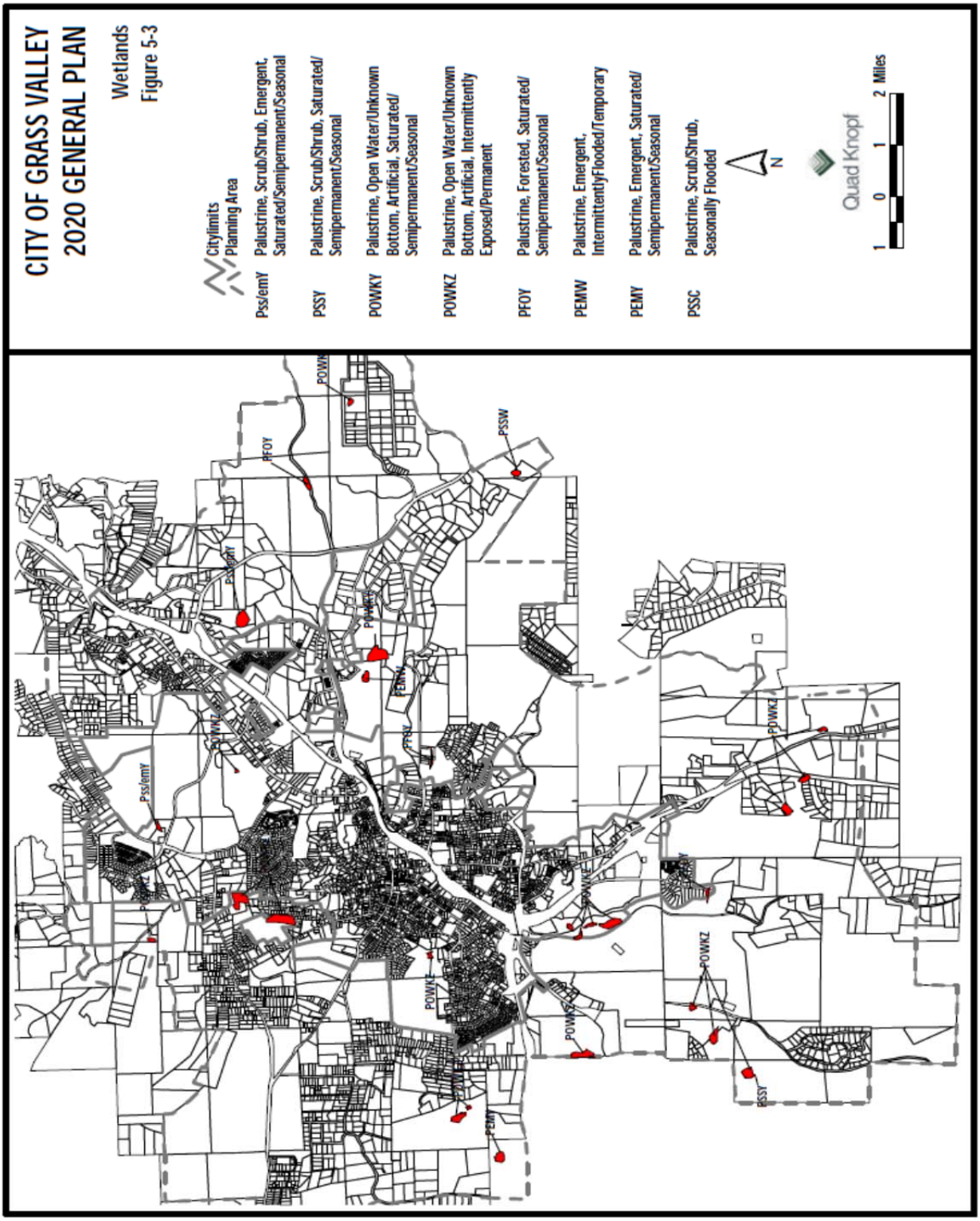
The 1972 Grass Valley General Plan established State Highway 20 and Highway 49 as scenic highways, and their routes near and through Grass Valley were designated scenic corridors. The purpose of scenic route/corridor designation is to protect views from impacts which could impair aesthetics along identified stretches of a highway corridor. The 1972 General Plan proposed scenic highway policies prohibiting billboards and off-premise outdoor advertising structures along scenic highways, and encouraged landscaping and tree planting along public rights-of-way within the scenic corridor. Scenic highway standards were described within the General Plan which includes land use regulations, sign and outdoor advertising regulations, and grading and earth moving regulations.

The 1982 General Plan reinforced previous scenic highway efforts through new policies and actions designed to enhance City “entryways”. Entryways are Highway 49 and Highway 20. 1982 General Plan policies regarding entryways were: strengthen entryway identity through landscaping, preserve and promote the scenic quality of City streets, preserve and promote visually pleasing arterials and highways, and regulate signs and billboards.

The 1982 General Plan recognized the need to address the aesthetic qualities of steep terrain “viewsheds” in and around Grass Valley with the following language: “Preserve the scenic resource value of surrounding prominent hills and ridgelines (policy)” and “establish hillside development standards which will preserve the scenic quality of surrounding hills (action)”.

Grass Valley has implemented some aspects of the scenic highway/entryway and hillside/ridgeline General Plan provisions through a combination of zoning and design guidelines.

However, this General Plan renews the mandate to identify specific corridors and views and to identify specific aesthetic considerations important to their protection (Conservation/Open Element and Community Design Element).


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Wetlands
Figure 5-3
Citylimits
Planning Area
Pss/emY Palustrine, Scrub/Shrub, Emergent, Saturated/Semipermanent/Seasonal
PSSY Palustrine, Scrub/Shrub, Saturated/ Semipermanent/Seasonal
POWKY Palustrine, Open Water/Unknown Bottom, Artificial, Saturated/ Semipermanent/Seasonal
POWKZ Palustrine, Open Water/Unknown Bottom, Artificial, Intermittently Exposed/Permanent
PFOY Palustrine, Forested, Saturated/ Semipermanent/Seasonal
PEMW Palustrine, Emergent, IntermittentlyFlooded/Temporary
PEMY Palustrine, Emergent, Saturated/ Semipermanent/Seasonal
PSSC Palustrine, Scrub/Shrub, Seasonally Flooded
N
Quad Knopf
1 0 1 2 Miles

Air and Water Quality

Air quality is subject to the regulatory provisions of the California Clean Air Act (CCAA) and the Federal Clean Air Act (FCAA). The Northern Sierra Air Quality Management District is the Responsible Agency for administering air quality laws and regulations in Nevada County, pursuant to Section 40000 et seq. of the California Health and Safety Code.

This General Plan addresses air quality in several ways. Among the more prominent are: non-motorized circulation modes (trails and sidewalk network; public transit support; urban forestry and open space provisions; future land use patterns which discourage sprawl.

Protection of water quality in Grass Valley and western Nevada County is the responsibility of several agencies, principally the Environmental Protection Agency (EPA) at the Federal level, State Water Resources Control Board (SWRCB) at the State level, the Central Valley Region of the SWRCB at the sub-state regional level, and Nevada County and Grass Valley at the local level.

Primary sources of water pollution in and around Grass Valley are treated wastewater discharge and "non-point" source pollution, particularly storm runoff and siltation from construction projects. Grass Valley is currently engaged in a wastewater treatment facility expansion and storm water separation project in compliance with all State and federal requirements.

Mineral Resources

Mineral resources, particularly gold, have played a major role in the history of Nevada County and Grass Valley. Since 1849, when gold was first discovered in the area, to the years preceding World War II, most of the County's population was economically supported, directly or indirectly, by the local gold mining industry. Metals produced in the Grass Valley area since 1850 include lode gold, chromite, crushed stone, and placer gold.

In order to promote the conservation of the state's mineral resources, and ensure adequate reclamation of mined lands, the Surface Mining and Reclamation Act of 1975 (SMARA) was enacted.

Pursuant to SMARA, the City of Grass Valley adopted a Mineral Resources Element of the General Plan in 1993. That Element remains current, and is not being revised or updated at this time.

SMARA requires that the State Geologist classify land in California for its mineral resource potential. Local governments are required to incorporate the mineral and classification reports and maps into their general plans and consider the information when making land use decisions.

Areas subject to mineral land classification studies are divided into various Mineral Resource Zone (MRZ) categories that reflect varying degrees of mineral potential. Areas classified MRZ-2 are those containing potentially significant mining deposits. The existence of deposits may be actually measured or indicated by site data (MRZ-2a), or inferred from other sources (MRZ-2b). All areas within Grass Valley and the Planning Area are classified by the State Division of Mines and Geology as MRZ-2.

Mineral land classifications will be of continuing importance as Grass Valley prepares for annexation of formerly productive mine properties. Also of importance will be the state of abandoned, un-reclaimed mines and the dangers they pose to life and property (see Safety Element for discussion of mine hazards).

CONSERVATION / OPEN SPACE POLICIES

1-COSP Continue to identify mineral resources and to develop policies addressing their protection from competing land uses, minimizing impacts on mining activities, in compliance with State law.

2-COSP Establish an active program of land/development rights acquisition in order to protect sensitive environmental areas and features.

3-COSP Encourage clustering, density averaging, and other techniques in larger-scale new developments, as means of preserving open space and natural systems.

4-COSP Establish standards for inclusion and management of permanent open space in new developments.

5-COSP Carefully regulate development on steep slopes.

6-COSP Prevent excessive alteration of the natural topography.

7-COSP Recognize and reinforce Grass Valley's public park system.

8-COSP Study the potential for inter-jurisdictional transfer of development rights.

9-COSP Carefully regulate development for location in flood hazard areas.

10-COSP Establish a city trail network program for friendly acquisition, development and administration of a natural trails system.

11-COSP Return to open space, areas within which flooding poses a clear danger to life and property.

12-COSP Enhance the City's tree ordinance addressing tree maintenance and protection both within new developments and elsewhere in the City.

13-COSP Assist property owners wishing to preserve and protect heritage trees and significant groves.

14-COSP Establish a program to identify and administer a viewshed/view corridor protection program.

15-COSP Assign responsibility for the viewshed/view corridor program.

16-COSP Incorporate viewshed/view corridor standards into the Design Element of the General Plan, City Design Guidelines and other appropriate developmental documents.

17-COSP Utilize the services and expertise of organizations involved in resource conservation and open space protection.

18-COSP Develop and achieve agreement with the County of Nevada on a strategy for conservation and open space protection within the Grass Valley Planning Area and City's Sphere of Influence.

19-COSP Enlist the interest and efforts of appropriate state and federal agencies and private foundations regarding conservation and open space protection.

20-COSP Establish, in cooperation with Nevada County, an urban limit line beyond which urban land uses, densities, facilities and services will not extend.

21-COSP Continue to implement water quality improvement plans, including storm water separation and sewage treatment plant expansion.

22-COSP Implement circulation/transportation measures designed to reduce reliance on the automobile.

23-COSP Respond appropriately to state and federal air and water quality policies and policy changes, understanding the implications of regulations and standards, and maintaining a continuing public education program.

24-COSP Continue to protect and enhance existing water courses, riparian and other hydrologic features for the purpose of improving ground water recharge and runoff infiltration through implementation of existing City standards and ordinances.

Open Space Opportunity Overlay and Description

Figure 5-4 shows the Open Space Opportunity (OSO) overlay as previously described in the Land Use Element. The Open Space Opportunity overlay is a flexible tool to be altered as needed. At all times it will depict 1) areas already secured as permanent open space or related (parks and recreation) General Plan designation and 2) areas which, for a variety of reasons, the City has determined to place in permanent open space or related use.

An example of the OSO map being used effectively would be to identify a potential park sites in advance of actual purchase. The Land Use Plan map would retain current designations for the time being, enabling owners to use their properties as designated by the General Plan until properties are secured by the City. Once the land is secured as open space (by virtue of public ownership or other arrangement), the "underlying" designation on the Land Use Plan map is changed to an appropriate category. The same approach applies to areas potentially subject to City non-development restrictions. Designation on the OSO overlay indicates City intent, but only actual change on the Land Use Plan map permanently changes the underlying designation.

The initial Open Space Opportunity (OSO) overlay map presented here contains the following:

- Existing Parks (including City Parks, Empire Mine State Park)
- The Nevada County Fairgrounds
- Nevada County Country Club/Golf Course
- Trail portions of proposed Trails-Sidewalk Network
- Floodplains/Riparian Corridors along Wolf Creek and South Fork Wolf Creek
- Possible Neighborhood Park site in the Glenbrook Basin
- U.S. Department of Interior-delineated Wetlands
- Proposed Union Hill Meadows Natural Area (East Bennett and South Fork Wolf Creek)
- Open spaces reserved by past development conditions of approval and development agreements.

The initial OSO overlay does not at this time depict open space in the three SDA areas with annexation agreements. When specific plans or other planning instruments are initiated, however, the City shall identify open space opportunity areas equivalent to allocated acreage for that purpose, and amend the OSO overlay accordingly.

CONSERVATION / OPEN SPACE IMPLEMENTATION ACTIONS AND STRATEGIES

1-COSI Identify, inventory and map essential information related to conservation and open space, utilizing the City's geographic information system. Include definition, delineation, and mapping of sensitive environmental areas. Maintain and update the information base as warranted.

2-COSI Coordinate information inventories and mapping with Nevada County, particularly for unincorporated portions of the Planning Area.

3-COSI Implement the Open Space Opportunity overlay/Open Space Land Use map designation procedure to ensure ongoing designation of appropriate open space lands in the General Plan. Establish open space restrictions, easements, and other protective measures in conjunction with OSO/OS designations. Inventory and place on OSO and Open Space Land Use maps all open spaces previously reserved by past development conditions and development agreements.

4-COSI Maintain a development review process which documents compliance with the various goals, objectives, and policies of the Conservation/Open Space Element.

5-COSI Establish and assign responsibility for land/development rights acquisition for conservation, open space, and park/recreation purposes.

6-COSI Review development ordinances and regulations to assure adequate provision for clustering, density averaging, and other techniques.

7-COSI Prepare and adopt an ordinance regulating development on steep slopes and on ridgelines, for purposes of natural resource and aesthetic protection.

8-COSI Establish and assign responsibility for a continuing program to rehabilitate, restore, and reclaim abused areas. Abused areas include but are not limited to streams and stream corridors, deforested areas, and un-reclaimed mines.

9-COSI Establish and assign responsibility for a continuing information and technical assistance program for local residents regarding trees and other natural resources. Enlist the support and participation of the Cooperative Extension Service and the California Department of Forestry and Fire Protection in this effort.

10-COSI Assign responsibility for coordination with federal, state, and local agencies regarding conservation/environmental matters.

11-COSI Review sign regulations and landscaping requirements, upgrade City ordinances as required, and develop an effective enforcement program.

12-COSI Review all development regulations germane to flooding and flood prevention. Assure periodic updates of official flood zone maps.

13-COSI Prepare and adopt guidelines for street tree placement and maintenance.

14-COSI Review the Heritage Tree Ordinance and amend the ordinance to provide better protection to unique trees.

15-COSI Prepare and adopt an ordinance for the identification and protection of groves and clusters of trees deemed of special natural and/or aesthetic value.

16-COSI Study and consider a permanent ban on open burning within the City limits.

17-COSI Incorporate applicable mitigation measures specified in the Indirect Source Review Guidelines of the Northern Sierra Air Quality Management District, 1996-1997, in all future discretionary land use approvals.

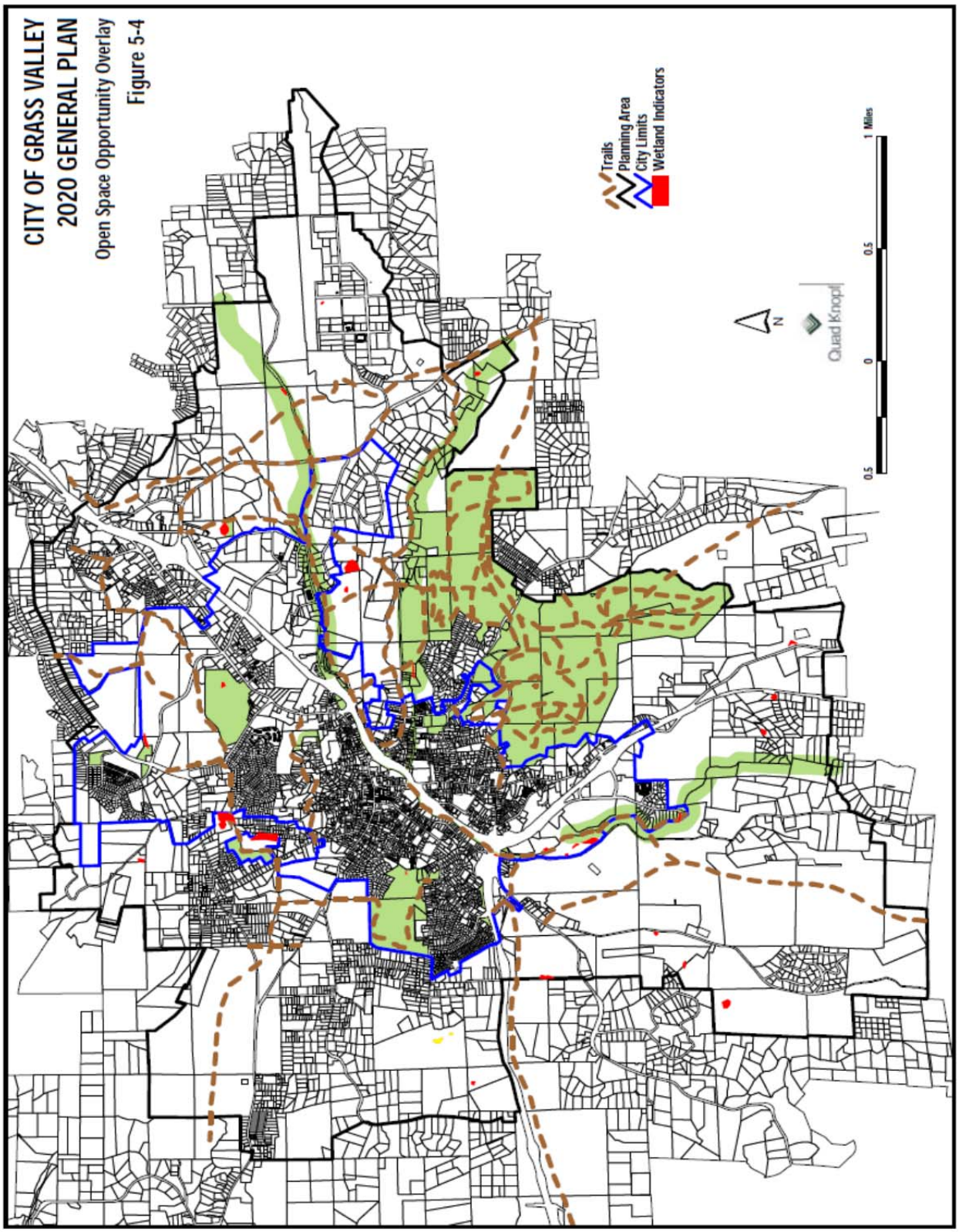
18-COSI Amend the City of Grass Valley Storm Sewer Master Plan to reflect provisions of the 2020 General Plan.

19-COSI Re-examine the fiscal basis upon which the Storm Sewer Mater Plan is constructed, including development fees and other sources.

20-COSI Coordinate the timing and phasing of planned wastewater facility extensions/ improvements with planned extension of other services, expansion of City sewer services areas, annexations, sphere of influence amendments, and other extraterritorial activities.

21-COSI Assure adequate provision for extending sewer service to areas experiencing inadequate on-site disposal systems, should the need arise.

22-COSI Monitor development trends and on-site disposal system inadequacies to ensure that the City's current plans reflect actual conditions.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Open Space Opportunity Overlay
Figure 5-4
Trails
Planning Area
City Limits
Wetland Indicators
N
Quad Knopf
0.5
0
0.5
1 Miles

Chapter Six

Noise Element

CHAPTER SIX
NOISE ELEMENT

INTRODUCTION

The Noise Element identifies and appraises noise problems and forms a basis for land use distribution.

The Noise Element is a mandatory General Plan element. The Noise Element identifies and appraises noise problems and forms a basis for land use distribution. The State Office of Planning and Research Noise Element Guidelines require that major noise sources be identified and quantified by preparing generalized noise contours for current and projected conditions. Significant noise sources include traffic and major roadways and highways, railroad operations, airports, and representative industrial activities and fixed noise sources.

Noise is often described as unwanted sound, and thus is a subjective reaction to characteristics of a physical phenomenon. Researchers for many years have grappled with the problem of translating objective measurements of sound into directly correlated measures of public reaction to noise. The descriptors of community noise in current use are the results of these efforts, and represent simplified, practical measurement tools to gauge community response.

DEFINITIONS

A-Weighted Sound Level (dB): The sound pressure level obtained by using the A-weighting filter of a sound level meter, expressed in decibels (dB). All sound level referred to in this policy document are in A-weighted de-emphasizes the very low and very high frequencies of sound in a manner similar to the human ear. Most community noise standards utilize A-weighting, as it provides a higher degree of correlation with human annoyance and health effects.

Community Noise Equivalent Level (CNEL): The equivalent energy (or energy average) sound level during a 24-hour day, obtained after addition of approximately five decibels to sound levels in the evening from 7:00 p.m. to 10:00 p.m. and ten decibels to sound levels in the night before 7:00 a.m. and after 10:00 p.m. The CNEL is generally computed for annual average conditions.

Day/Night Average Sound Level (L_{dn}): The equivalent energy (or energy average) sound level during a 24-hour day, obtained after addition of ten decibels to sound levels in the night after 10:00 p.m. and before 7:00 a.m. The L_{dn} is generally computed for annual average conditions.

Equivalent Sound Level (L_{eq}): The sound Level containing the same total energy as a time varying signal over a given sample period. Thus, the L_{eq} is a single value that expresses the time-averaged total energy of a fluctuating sound level. The L_{eq} is typically computed over1, 8 and 24-hour sample periods.

Fixed Noise Source: Any fixed or mobile source not preempted from local control by federal or state regulations. Fixed noise sources which are typically of concern include, but are not limited to, the following:

HVAC Systems	Cooling Towers/Evaporative Condensers
Pump Stations	Lift Stations
Emergency Generators	Boilers
Steam Valves	Steam Turbines
Generators	Fans
Air Compressors	Heavy Equipment
Conveyor Systems	Transformers
Pile Drivers	Grinders
Drill Rigs	Gas or Diesel Motors
Welders	Cutting Equipment
Outdoor Speakers	Blowers

The types of uses which may typically operate the noise sources described above include, but are not limited to: industrial facilities, lumber mills, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up restaurant windows, car washes, loading docks, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields. Noise due operation of powered equipment for real property maintenance or temporary construction activities is not subject to the Noise Element standards.

Noise-Sensitive Land Uses:

- Residential development, expect temporary dwellings
- Schools: preschool to secondary, college and university, and specialized education and training
- Hospitals, nursing and personal care
- Churches
- Hotels, motels, and bed and breakfast lodging

Outdoor Activity Areas: Common outdoor activity areas of multi-family dwellings, back yards of single-family dwellings, and designated outdoor recreation/activity areas for transient lodging, hospitals, nursing and personal care facilities.

Transportation Noise Source: Traffic on public roadways, railroad line operations and aircraft in flight. Control of noise from these sources is preempted by federal and state regulations.

ROADWAYS

Traffic data representing annual average traffic volumes for existing conditions were obtained from Caltrans for the State highways within the City of Grass Valley, and from the General Plan traffic consultants for local roadways. Day/evening/night traffic distribution for State Routes (SR) 49, 20, and 174 were based upon 24-hour noise measurement data. Truck mix data for the State highways were based upon Caltrans data. Using these data and Federal Highway Administration (FHWA) methodology, explained later in the Noise Element, traffic noise levels as defined by CNEL were calculated for existing traffic volumes for the State highways and local roadways.

Distances from the center lines of each of the roadway segments to the 60 and 65 dB CNEL contours are summarized in Table 6-1. Figure 6-1 is a map showing these contours. Figure 6-2 is a map of future (Year 2020) noise contours, based upon projected traffic volumes and road width specifications (see Circulation Element).

TABLE 6-1
EXISTING TRAFFIC NOISE CONTOUR DATA

Segment	Description	CNEL At 100 Feet*	Distance to Traffic CNEL Contour 60 dB	Distance to Traffic CNEL Contour 65dB
State Route 49				
1	Begin Freeway to Grass Val. Int.	69.7	444	206
2	Grass Val. Int. To S.R. 20	71.1	554	257
3	S.R. 20 to N. Auburn Street	71.6	593	275
4	N. Auburn Street to S.R. 174	72.5	684	318
5	S.R. 174 to Bennett Street	72.5	684	318
6	Bennett Street to Idaho Maryland	72.6	697	324
7	Idaho Maryland to Brunswick Rd	71.8	613	284
8	Brunswick Rd to Banner Ridge	71.7	599	278
State Route 20				
9	West Boundary to Mill Street	67.6	321	149
10	Mill Street to S.R. 49	68.0	340	158
State Route 174				
11	Brunswick Road to Empire Mine Rd	59.6	94	44
12	Empire Mine Rd to Race Street	56.9	62	29
13	Race Street to Ophir Rd	56.7	60	28
14	Ophir Rd to S.R. 49	57.4	69	32
Alta Street				
15	West main to Alta Vista	54.9	46	21
16	Alta Vista to Ridge Road	54.1	40	19
South Auburn Street				
17	Mohawk Street to School Alley	57.6	69	32
18	School Alley to Whiting Street	57.0	63	29
19	Whiting Street to McKnight Way	57.2	65	30

Source: Brown-Buntin Associates, 1998.

TABLE 6-1
CONTINUED

Segment	Description	CNEL At 100 Feet*	Distance to Traffic CNEL Contour 60dB	Distance to Traffic CNEL Contour 65dB
Banner Lava Cap				
20	Entire Length	54.6	44	20
Brighton Street				
21	McCourtney to Chapel	54.5	43	20
Brunswick Road				
22	49/20 O.C. to Idaho Maryland	62.8	155	72
23	Idaho Maryland to Loma Rica Dr	60.3	104	48
24	Loma Rica Dr to Bennett Street	60.3	104	48
Dorsey Drive				
25	Ridge Road to E. Main Street	53.7	38	18
26	E. Main Street to Segsworth	56.1	55	25
Empire Street				
27	49/20 O.C. to Le Duc Street	55.6	51	24
28	Le Duc Street to Kate Hayes Street	55.0	46	21
29	Kate Hayes Street to Grass Val. Limit	54.9	45	21
Freeman Lane				
30	McKnight Way to Taylorville Road	57.8	71	33
Hughes Road				
31	East main Street to Ridge Road	57.6	69	32
Idaho Maryland Road				
32	Brunswick Road to 49/20 O.C.	54.2	41	19
La Barr Meadows				
33	Entire Length	58.7	82	38
Loma Rica Road				
34	Entire Length	57.0	63	29
McCourtney Road				
35	Entire Length	58.0	74	34

Source: Brown-Buntin Associates, 1998.

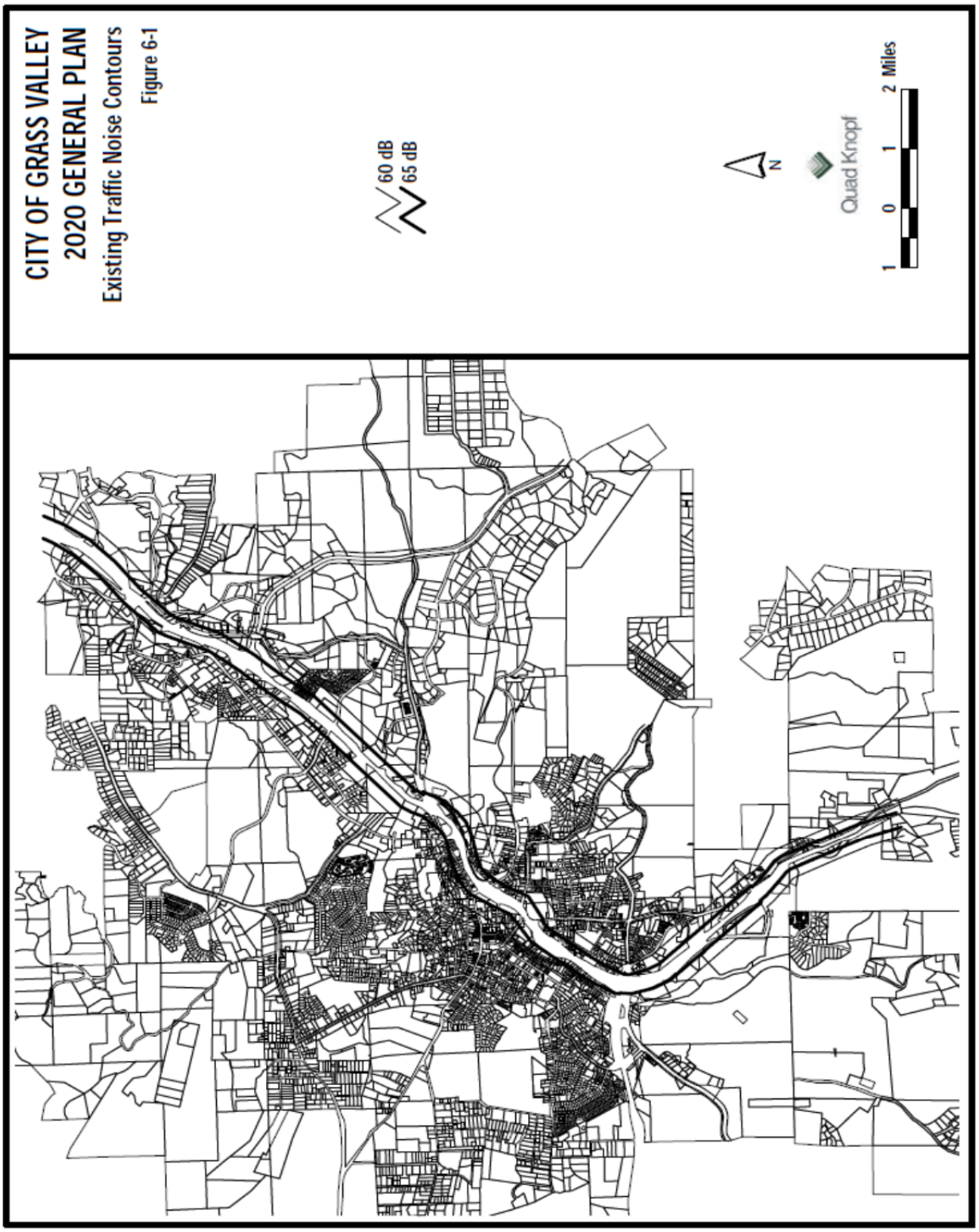
TABLE 6-1
CONTINUED

Segment	Description	CNEL At 100 Feet*	Distance to Traffic CNEL Contour 60dB	Distance to Traffic CNEL Contour 65dB
West McKnight Way				
36	Taylorville Road to Freeman Ln	58.1	75	35
Mill Street				
37	Main Street to Neal Street	56.0	54	25
38	Neal Street to Rhode Island St	56.3	57	26
Neal Street				
39	East of Church Street	55.9	53	25
Ridge Road				
40	Ridge Estates Road to Hughes Road	55.7	52	24
41	Hughes Road to Alta Street	57.6	69	32
Sutton Way				
42	South of Brunswick	58.2	76	35
43	North of Brunswick	60.0	100	47
Taylorville Road				
44	Freeman Lane to McKnight Way	52.7	33	15
45	McKnight Way to Mill Street	57.3	67	31

Source: Brown-Buntin Associates, 1998

In some cases, the actual distances to noise level contours may vary from the distances predicted by the FHWA model. Factors such as roadways curvature, roadway grade, shielding from local topography or structures, elevated roadways, or elevated receivers may affect actual sound propagation. Therefore the distances reported in Table 6-1 are generally considered to be conservative estimates of noise exposure along roadways in the City of Grass Valley.

Significant variations in topography occur in the Grass Valley area. In many cases, the existing topography which occurs adjacent to the major roadways affects sound propagation due to roadway traffic. The effects of factors such as topography, roadway curvature, grade, etc. can be compared to the FHWA model results by entering the observed traffic volumes, speed and distance as inputs to the FHWA model. The differences between the measured and predicted noise levels can be used to adjust the FWHA model and more precisely determine the locations of the traffic noise contours.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Existing Traffic Noise Contours
Figure 6-1
60 dB
65 dB
N
Quad Knopf
1 0 1 2 Miles

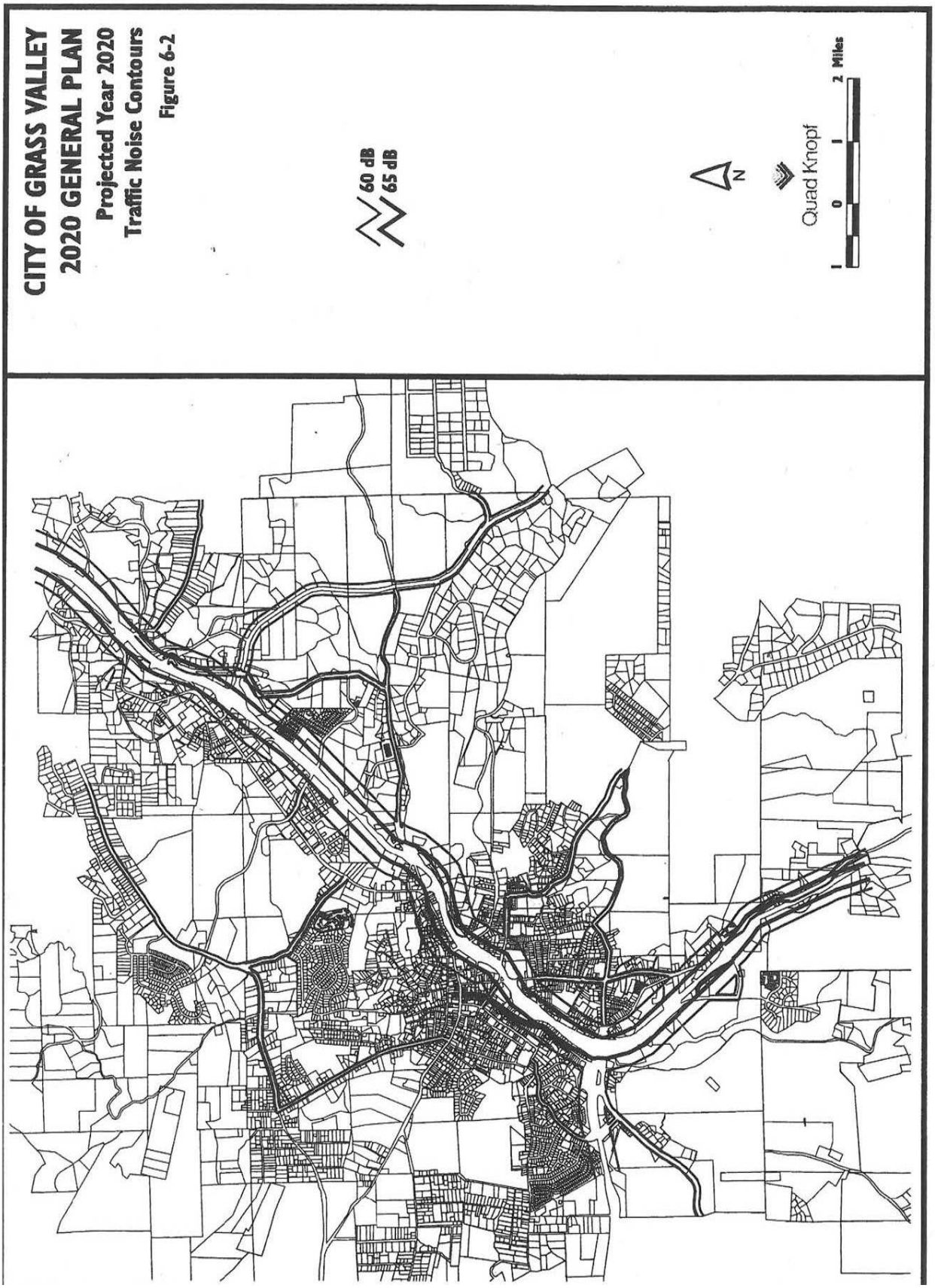

CITY OF GRASS VALLEY
2020 GENERAL PLAN
Projected Year 2020
Traffic Noise Contours
Figure 6-2
60 dB
65 dB
N
Quad Knopf
1
0
1
2 Miles

Table 6-2 has been prepared to serve as a guide when applying the traffic noise exposure contour information presented in this section to areas with varying topography. The table is used by adding the correction factor to the noise level predicted at a given distance. It should be noted that the adjustment factors presented in this table are intended to provide conservative results, and that complex situations should be evaluated by an acoustical consultant where the potential for significant noise impact exists.

TABLE 6-2
TRAFFIC NOISE ADJUSTMENTS FOR VARIOUS TOPOGRAPHIC CONDITIONS

	Distance from Center of Roadway (Feet)		
Topographic Situation	**<200**	**200 – 400**	**>400**
Hillside overlooks roadway with full view of traffic	-0-	+1 dB	+3 dB
Roadway Elevated (>15')	-5 dB	-2 dB	-0-
Roadway in cut/below embankment	-5 dB	-5 dB	-5 dB
Dense vegetation (100 feet or more)	-5 dB	-5 dB	-5 dB

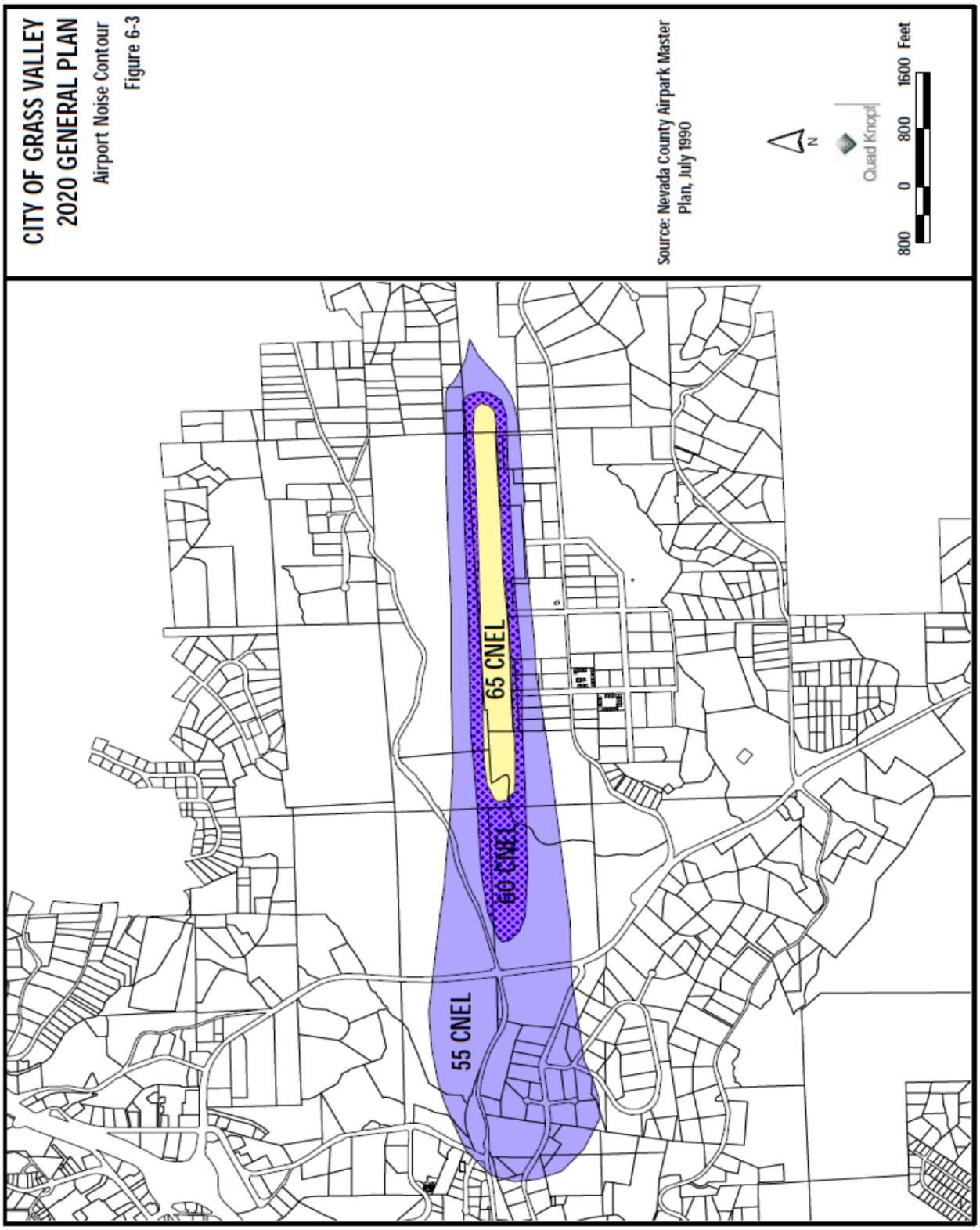
Source: Brown-Buntin Associates, 1998

Traffic noise contours were not developed for all segments of local roadways in the City of Grass Valley. For arterial traffic, the predicted distance to the 60 dB CNEL contours is determined by the Average Daily Traffic Volume (ADT) and the posted speed limit. CNEL contours derived from Table 6-1 are only indicators of potential noise conflicts, requiring more detailed analysis to determine traffic noise levels at any given location.

AIRCRAFT NOISE LEVELS

The Nevada County Airpark is located east of Grass Valley. The facility is a base for local personal and recreational flyers. The Airpark also serves as a transportation facility for business/corporate aviation and aerial fire-fighting operations. Based upon the July, 1990 Nevada County Airpark Master Plan prepared by Hodges and Shutt, there were 160 based aircraft with 75,000 operations per year in 1989. Future upgrades of the facility are recommended in the Master Plan, and the 20-year forecast projects an increase in operations to 116,000 per year.

Figure 6-3 shows the 1989 (considered existing for purposes of the Noise Element) CNEL contours for the Nevada County Airpark, which are contained in the Airpark Master Plan.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Airport Noise Contour
Figure 6-3
Source: Nevada County Airpark Master Plan, July 1990
N
Quad Knopf
800 0 800 1600 Feet
55 CNEL
60 CNEL
65 CNEL

FIXED NOISE SOURCES

The production of noise is a result of many industrial processes, even when the best available noise control technology is applied. Noise exposures within industrial facilities are controlled by Federal and State employee health and safety regulations (OSHA and Cal-OSHA), but exterior noise levels may exceed locally acceptable standards. Commercial, recreational and public service facility activities can also produce noise which affects adjacent sensitive land uses. These noise standards can be continuous and may contain tonal components which may be annoying to individuals who live in the nearby vicinity. In addition, noise generation from fixed noise sources may vary based upon climatic conditions, time of day and existing ambient noise levels.

From a land use planning perspective, fixed-source noise control issues focus upon two goals: to prevent the introduction of new noise-producing uses in noise-sensitive areas, and to prevent encroachment of noise sensitive uses upon existing noise-producing facilities. The first goal can be achieved by applying noise level performances standards to proposed new noise-producing uses. The second goal can be met by requiring that new noise-sensitive uses in near proximity to noise-producing facilities include mitigation measures to ensure compliance with noise performance standards.

The types of uses which may typically produce the noise sources described above include, but are not limited to: wood processing facilities, pump stations, industrial facilities, trucking operations, tire shops, auto maintenance shops, metal fabricating shops, shopping centers, drive-up windows, car washes, loading docks, public works projects, batch plants, bottling and canning plants, recycling centers, electric generating stations, race tracks, landfills, sand and gravel operations, and athletic fields.

Discussions with the City of Grass Valley planning staff indicate that noise complaints within the City of Grass Valley have generally been confined to four types of noise sources. The noise sources which have generated noise complaints include car washes, quarry operations, delivery trucks and construction activities.

CHEVRON CAR WASH

The one specific noise source which the City staff identified as eliciting noise complaints included the Chevron Station car wash which is located at East Main Street and Idaho Maryland Road. The car wash is open 24-hours per day, and has been a source of noise complaints from residents in close proximity. Primarily during the nighttime period when noise due to roadway traffic along SR 49 is low, the noise level due to the car wash operations become more apparent and noticeable.

Noise level measurements were conducted of car wash operations on August 13, 1998. The noise level measurements were conducted from a distance of 50 feet from the entrance to the car wash. Major noise sources associated with the car wash included the automatic wash and dry cycles. The blowers associated with the drying cycle of the car wash are the dominant noise source. Noise levels associated with operation were approximately 78dB L_{max} and 89 dB SEL for each wash and dry cycle. Assuming that a maximum of 8 operations (4 wash only cycles and 4 wash & dry cycles) occur during a busy hour indicates that distances to the 50 and 55 dB L_{eq} noise level contours are approximately 160 and 90 feet respectively from the entrance/exit of the car wash.

NORTH STAR QUARRY

The North Star Quarry is located east of SR 49 on Idaho Maryland Mine Road. The North Star Quarry is a rock and gravel mining operation. Noise sources associated with the operation include truck traffic to

and from the site, excavation of resource material with a CAT D-8 dozer, loading of aggregate material with CAT 966 & 988 wheel loaders, and processing equipment which includes a jaw crusher, roll crusher and deck screen.

Brown-Buntin Associates, Inc. conducted an analysis of noise impacts associated with the operations of the North Star Quarry in June 1992. The analysis indicated that the distance to the 50 and 55 dB hourly L_{eq} noise level contours is approximately 900 feet and 500 feet respectively from the center of the excavation area. The distance to the 60 dB L_{dn} noise level contour is approximately 160 feet from the center of the excavation area. Review of current operations at the quarry indicates that they have not changed significantly from the operations used in the analysis which was conducted in 1992.

TRUCK DELIVERY AND LOADING DOCK NOISE

Loading dock and truck delivery operations generally occur at most commercial and industrial type uses. The types of uses include, but are not limited to, supermarkets, hardware supply stores, large warehouses and warehouse-size retail establishments, and post offices.

Studies of noise levels at loading docks indicate that typical busy loading docks with semi-truck arrivals and departures, unloading activities, semi-truck passbys on the service roads, and step-side type delivery trucks produce an average hourly noise level of 60 dB L_{eq}, and a maximum noise level of approximately 82 dB at a distance of 50 feet from the loading dock. Generally, the maximum noise levels are due to heavy truck passbys on the service road and the sudden discharge of air from the air brakes. Overall hourly average noise levels are due to all activities including arrivals and departures of trucks, revving of engines, and activities on the loading docks.

Residential uses located adjacent to loading dock can be exposed to noise levels which may be considered annoying. Loading docks generally experience use between 3 and 4 hours out of the day. When using a 60 dB L_{dn} noise level standard, the noise from the loading docks would not be considered to be a major noise source, with the 60 dB L_{dn} contour located approximately 20 feet from the loading docks or service road. However, the 50 dB hourly L_{eq} noise level contour is located approximately 150 feet from the loading dock.

CONSTRUCTION NOISE

During the construction phases of any large commercial, industrial or municipal project, noise from construction activities can dominate the noise environment in the immediate area. Activities involved in construction will generate noise levels, as indicated in Table 6-3, ranging from 70 to 90 dB at a distance of 50 feet. Construction activities can be temporary in nature, but can also be long-term.

TABLE 6-3
CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Maximum Level, dBA at 50 feet
Scrapers	88
Bull dozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85

Source: *Environmental Noise Pollution*, Patrick R. Cunniff, 1977

Construction typically occurs during normal working hours, although due to climatic conditions or impending changes in the season, extended working hours from early morning to late in the evening also can occur. Construction noise impacts could be significant, as nighttime operations or use of unusually noisy equipment could result in annoyance or sleep disruption for nearby residents. It is difficult to determine the location of a noise contour associated with construction activities due to the variations in types of equipment, number of pieces of equipment and the hours of operation. Therefore, the noise level shown in Table 6-3 only indicates maximum noise levels.

COMMUNITY NOISE SURVEY

A Community Noise Survey was conducted to document noise exposure in areas of the City containing noise sensitive land uses. For that purpose, noise sensitive land uses in the City of Grass Valley Planning Area were considered to include residential areas, parks and schools. Noise monitoring sites were selected to be representative of typical residential conditions in the City.

Short-term noise monitoring was conducted at three sites on August 12, 1998. Each site was monitored three different times during the day and night so that valid estimates of CNEL could be prepared. Three continuous hourly noise monitoring sites were established in the City of Grass Valley as part of the General Plan Update to record day-night statistical noise level trends. The noise level measurements were conducted between August 13 and August 17, 1998. The data collected included the L_{eq}, the maximum level during the measurement period (L_{max}) and other statistical descriptors. Noise monitoring sites, measured noise levels, and the measured and estimated CNEL values at each site are summarized in Table 6-1.

Community noise monitoring systems were calibrated with acoustical calibrators in the field prior to use. The systems comply with all pertinent requirements of the American National Standards Institute (ANSI) for Type I sound level meters.

The Community Noise Survey results indicate that typical noise levels in noise sensitive areas of the City of Grass Valley Planning Area are in the range of 46.9 dB to 68.9 dB CNEL. Traffic on State and local roadways, industrial activities, aircraft overflights and neighborhood activities are the controlling factors for background noise levels in the majority of the Planning Area. In general, most areas of the City of Grass Valley which contain noise sensitive uses are moderately quiet to noisy, and are representative of an urban environment. Some residential areas have outdoor activity areas directly exposed to major noise sources such as State Route 49 and existing industrial areas. Noise exposure at some of those residences may be considered in excess of generally acceptable noise exposure criteria.

The L_{eq} values in Table 6-4 represent the average measured noise levels during the sample periods. The L_{eq} values were the basis of the estimated CNEL values. The L_{max} values show the maximum noise levels observed during the samples. The L_{50} and L_{90} values represent the noise levels exceeded 50 percent and 90 percent of the time during the sample period.

TABLE 6-4
SUMMARY OF MEASURED NOISE LEVELS AND ESTIMATED DAY-NIGHT AVERAGE LEVELS (L_{dn}) IN AREAS CONTAINING NOISE SENSITIVE LAND USES

Site	Location	Time Period	Sound Level dB				
			L_{eq}	L_{50}	L_{90}	L_{max}	Estimated CNEL
1	Memorial Park at Oak Street	**8/12/98**					**55.6**
		11:00a.m.	51.2	50	46	60.2	
		7:25 p.m.	50.0	49	47	57.5	
		10:20 p.m.	48.4	45	43	56.4	
2	Condon Park	**8/12/98**					**51.5**
		11:30a.m.	48.5	47	44	54.9	
		8:10p.m.	47.5	47	44	56.0	
		11:15p.m.	43.5	41	40	49.5	
3	Sierra College at Robert Ross Way	**8/12/98**					**46.9**
		12:30a.m.	42.8	43	41	51.2	
		8:45p.m.	42.3	41	40	50.1	
		11:50p.m.	39.4	38	36	44.7	
4*	Corner of Broadview & Hill	**8/13-14/98**					**48.3**
		Ld	44.6			67.9	
		Le	43.0			62.9	
		Ln	40.9			57.1	
		8/15/98					**51.2**
		Ld	48.2			69.8	
		Le	46.1			65.7	
		Ln	43.4			60.0	
5*	312 Marshall	**8/13-14/98**					**68.9**
		Ld	66.8			76.7	
		Le	64.4			72.6	
		Ln	60.6			71.9	
		8/15/98					**68.6**
		Ld	66.5			85.7	
		Le	64.7			78.3	
		Ln	60.1			73.7	
6*	888 Freeman	**8/13-14/98**					**51.4**
		Ld	45.2			63.3	
		Le	45.1			69.0	
		Ln	44.6			53.5	
		8/15/98					**54.9**
		Ld	45.5			65.8	
		Le	45.8			57.1	
		Ln	45.1			59.9	

*= Continuous Monitoring Site
Ld= measured used noise level during daytime hours (7:00a.m.-7:00p.m.)
Le = Measured noise level during the evening hours (7:00p.m.-10:00p.m.)
Ln = Measured noise level during nighttime hours (10:00p.m.-7:00a.m.)
Source: Brown-Buntin Associates, 1998

NOISE GOAL AND OBJECTIVES

1-NG Protect Grass Valley's relatively quiet environment from unnecessary, annoying and potentially damaging noise.

1-NO Coordination of transportation and land use planning to assure acceptable noise levels.
2-NO Determination of the existing noise environment and development of realistic noise standards for different land uses.
3-NO Establishment of a pattern of land uses that minimizes exposure of community residents to excessive noise.

NOISE POLICIES

1-NP Develop a policy framework to function as a guide to planning for appropriate land uses in relation to hazardous and annoying noise.
2-NP Perform adequate acoustical analyses prior to approval of new development projects or transportation facilities, if warranted.
3-NP Utilize noise contour data to determine land uses affected by transportation-related noise sources.
4-NP Adopt appropriate noise level standards for existing and future residential areas.
5-NP Utilize noise contour data to determine appropriate land use patterns in areas affected by stationary noise sources.
6-NP Locate sensitive land uses (residential neighborhoods, medical facilities, senior care facilities and schools) away from high noise areas.

NOISE IMPLEMENTATION ACTIONS AND STRATEGIES

1-NI Prohibit development of new noise-sensitive land uses where the noise level due to fixed noise sources will exceed the noise level standards of Table 6-5 (as measured immediately within the property line or within a designated outdoor activity area of the new development) unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 6-5.

2-NI Require that noise created by new development of fixed noise sources be mitigated so as not to exceed the noise level standards of Table 6-5 as measured immediately within the property line of lands designated for noise-sensitive land uses.

3-NI Require that noise created by existing fixed noise sources which undergo modifications requiring City approval be mitigated so as not to exceed the noise level standards of Table 6-5 (as measured immediately within property line of lands designated for noise-sensitive land use). If the existing noise level due to those sources exceeds the standards, require that the noise level after modifications be mitigated so as not to exceed the existing noise level.

4-NI Require that an acoustical analysis be performed where new development of fixed noise sources, or modification of existing fixed noise sources, is likely to produce noise levels exceeding the performance standards of Table 6-5, and that noise mitigation be included in the project design.

TABLE 6-5
NOISE LEVEL PERFORMANCE STANDARDS
FIXED NOISE SOURCES

Noise level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq}, dB	55	50
Maximum level, dB	75	65

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

5-NI Prohibit new development of noise-sensitive land uses in areas exposed to existing or projected future levels of noise from transportation noise sources which exceed the levels specified in Table 6-6, unless the project design includes effective mitigation measures to reduce exterior noise levels in interior spaces to the levels specified in Table 6-6.

6-NI Require mitigation of noise created by new transportation noise sources so as not to exceed the levels specified in Table 6-6 at designated outdoor activity areas and interior spaces of existing noise-sensitive land uses.

7-NI Adopt the following criteria applicable to roadway improvement projects:

Where the existing traffic noise level at the designated outdoor activity area of the affected noise-sensitive use is 65 dB L_{dn} or less, noise created by a roadway improvement project shall be mitigated so as not to exceed the ambient noise level by more than 3 dB L_{dn}.

Where the existing traffic noise level at the designated outdoor activity area of the affected noise-sensitive use exceeds 65 dB L_{dn}, noise created by roadway improvement project shall be mitigated so as not to exceed the ambient noise level by more than 1.5 dB L_{dn}.

8-NI Require an acoustical analysis and appropriate mitigation measures where new transportation noise sources are likely to produce noise levels exceeding the standards of Table 6-6 at existing or planned noise-sensitive uses.

9-NI Require an acoustical analysis and mitigation measures where noise-sensitive land uses are proposed in areas exposed to existing or projected exterior noise levels exceeding the levels specified in Table 6-5 or Table 6-6.

TABLE 6-6
MAXIMUM ALLOWABLE NOISE EXPOSURE
TRANSPORTATION NOISE SOURCE

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

1 As determined for a typical worst-case hour during periods of use

2 Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

3 In the case of hotel/motel facilities or other transient lodging, there may be no designated outdoor activity areas (e.g. pool areas). In such cases, only the interior noise level criterion will apply.

10-NI Apply the following standards and practices to acoustical analysis:

Where the locations of outdoor activity areas are not known or designated, the exterior noise level standards shall be applied immediately inside the property line of the receiving land use.

In rural areas with large residential lots, the exterior noise level standard shall be applied at a point 100 feet from the residence.

Where it is not practical to mitigate exterior noise levels at patios or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.

Where noise mitigation measures are required to achieve the standards of Table 6-5 and 6-6, the emphasis of such measures shall be placed upon site planning and project design. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

When determining the effectiveness of noise mitigation measures, the noise standards shall be applied on the receptor side of noise barriers or other property line noise mitigation measures.

If dwellings are located and constructed in accordance with the Noise Element, it may be assumed that the exterior and interior noise levels will conform to the noise standards imposed by lending agencies such as HUD, FHA and CalVet. Construction of new single-family dwellings or modification of existing dwellings in developed areas may not be subject to City review with respect to satisfaction of the standards of the Noise Element. As a consequence, such dwelling may be constructed or modified in areas where noise levels exceed the standards of the Noise Element. It is not the responsibility of the City to ensure that such dwellings meet the noise standards of the Noise Element, or the HUD/FHA/CalVet noise standards.

TABLE 6-7
REQUIREMENTS FOR AN ACOUSTICAL ANALYSIS

An acoustical analysis prepared pursuant to the Noise Element shall:

- Be the financial responsibility of the applicant.
- Be prepared by a qualified person in the field of environmental noise assessment and architectural acoustics.
- Include representative noise level measurements with sufficient sampling periods and locations to adequately describe local conditions and the predominant noise sources.
- Estimate existing and projected cumulative (20 years) noise level in terms of L_{dn} or CNEL and the standards of Table 6-5, and compare those levels to the adopted policies and standards of the Noise Element.
- Recommend appropriate mitigation to achieve compliance with the adopted policies and standards of the Noise Element, giving preference to proper site planning and design over mitigation measures which require the construction of noise barriers or structural modification to noise-sensitive buildings.
- Estimate noise exposure after the prescribed mitigation measures has been implemented.
- Describe a post-project assessment program which could be used to evaluate the effectiveness of the proposed mitigation measures.

NOISE METHODOLOGIES AND MODELING TECHNIQUES

A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{dn}), which is the sound level corresponding to a steady-state-A-weighted sound level in decibels (dB) containing the same total energy as a time-varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptors such as L_{dn} and CNEL, and shows very good correlation with community response to noise.

Two composite noise descriptors are in common use today: L_{dn} and CNEL.

The L_{dn} (Day-Night Average Level) is based upon the average hourly L_{eq} over a 24-hour day, with a +10 decibel weighting applied to nighttime (10:00p.m. to 7:00a.m.) L_{eq} values. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were subjectively twice as loud as daytime exposures.

The CNEL (Community Noise Element Level), like L_{dn}, is based upon the weighted average hourly L_{eq} over a 24-hour day, expect that an additional +4.77 decibel penalty to evening (7:00p.m. to 10:00 p.m.) hourly L_{eq} values. The L_{dn} descriptor is a simplification of the CNEL concept, but the two will usually agree, for a given situation, within 1 dB. Like the L_{eq}, these descriptors are also averages and tend to disguise short-term variations in the noise environment. Because they presume increased evening or nighttime sensitivity, these descriptors are best applied as criteria for land uses where nighttime noise exposures are critical to the acceptability of the noise environment, such as residential developments.

Noise modeling techniques use source-specific data including average levels of activities, hours of operation, seasonal fluctuations, and average levels of noise from source operations. Modeling methods have been developed for a number of environmental noise sources including roadways, railroad line operations and industrial plants. Such methods produce reliable results as long as data inputs and assumptions are valid.

The Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used to develop CNEL contours for all highways and major roadways in the City of Grass

Valley Planning Area. The FHWA model is the analytical method presently favored for traffic noise prediction by most state and local agencies, including Caltrans. The current version of the model is based upon the CALVENO noise emission factors for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed. Roadway configuration, distance to the receiver and the acoustical characteristics of the site. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions, and is generally considered to be accurate within 1.5 dB. To predict CNEL values, it is necessary to determine the hourly distribution of traffic for a typical 24-hour day and to adjust the traffic volume impact data to yield an equivalent hourly traffic volume.

The modeling methods used in this chapter closely follow recommendations made by the State Office of Noise Control, and were supplemented where appropriate by field-measured noise level data to account for local conditions. The noise exposure contours are based upon average conditions. Because local topography, vegetation or intervening structures may significantly affect noise exposure at a particular location, the noise contours should not be considered site-specific.

EXISTING REGULATORY FRAMEWORK

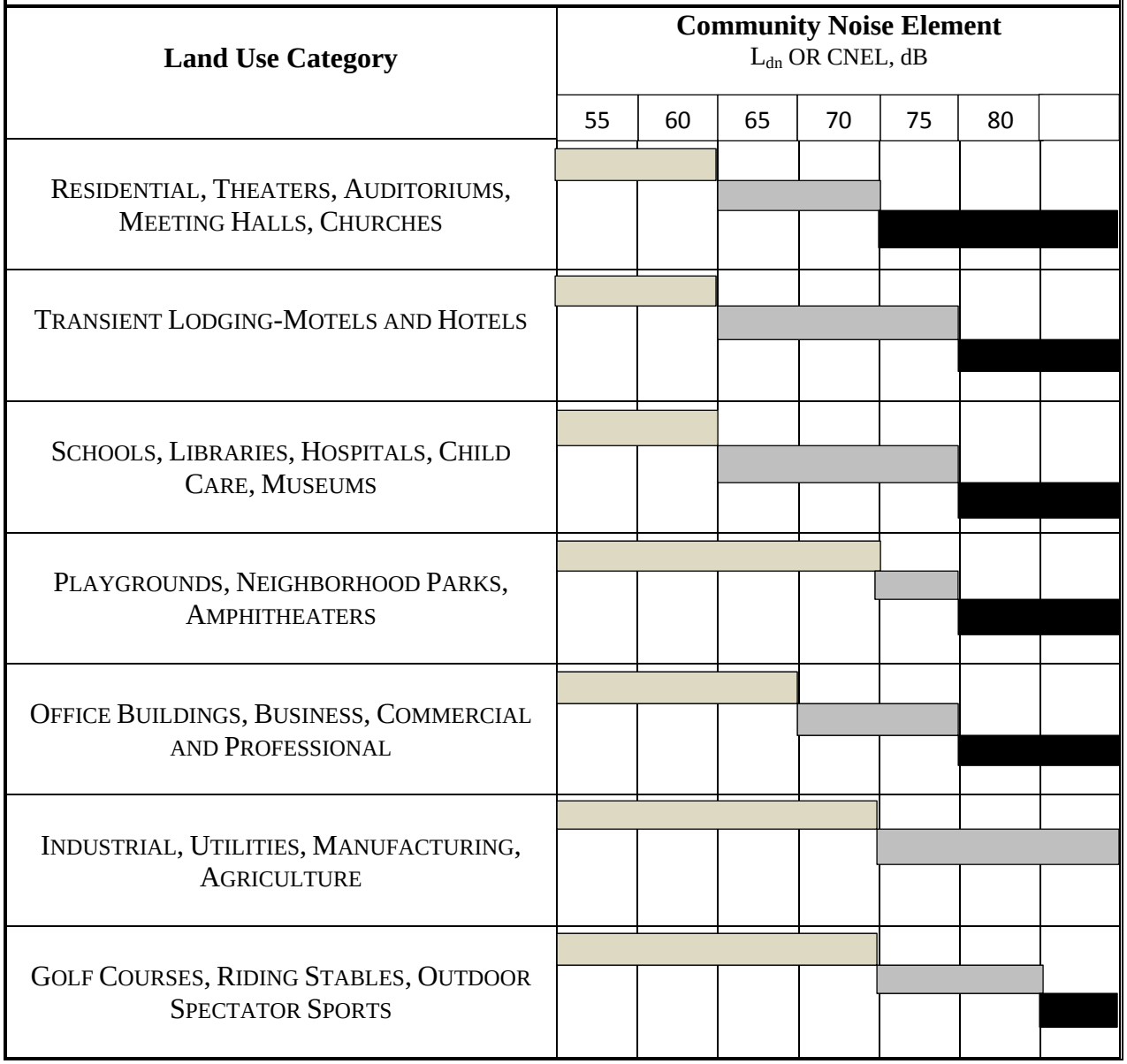
The 1982 General Plan Noise Element is based upon recommendations by the California State Office of Noise Control as contained in the Guidelines for the Preparation and Content of Noise Elements of the General Plan.

The criteria in the Noise Element are established for determining potential noise conflicts between various land uses and noise sources. The standards are based upon the CNEL/L_{dn} descriptor. Table 6-8 provides compatibility guidelines for land uses, in relation to noise levels.

As described above, the CNEL and L_{dn} are 24-hour average noise level descriptors, which apply penalties to noise which occur during the evening and nighttime hours. The CNEL and L_{dn} descriptors have been found to provide good correlation to the potential for annoyance from transportation-related noise sources. However, they do not provide a good correlation to the potential for annoyance from non-transportation or stationary noise sources such as industrial and commercial operations.

This is due to the fact that many times stationary noise sources may operate between 8 and 10 hours per day, or will have noise sources such as loading docks, pressure relief valves or alarms which tend to short duration noise events. When applying an L_{dn} or CNEL criterion, the noise levels associated with these types of short term operations are averaged over a 24-hour period, thus underscoring the potential for annoyance.

TABLE 6-8
LAND USE COMPATIBILITY GUIDELINES FOR DEVELOPMENT



GENERALLY ACCEPTABLE No noise mitigation measures are required

CONDITIONALLY ACCEPTABLE Use should be permitted only after careful study and inclusion of mitigation measures as needed to satisfy the policies of the Noise Element

GENERALLY ACCEPTABLE Development is usually not acceptable

Chapter Seven

Safety

CHAPTER SEVEN
SAFETY

Section 65302(g) of the California Government Code requires that general plans adopted by planning agencies include "A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction and other seismic hazards identified pursuant to Chapter 7.8 (commencing with Section 2690) of the Public Resources Code, and other geologic hazards known to the legislative body; flooding; and wild land and urban fires."

As required by Section 65302(g), the City of Grass Valley consulted with the Department of Conservation, Division of Mines and Geology (DMG) and the Governor's Office of Emergency Services (OES) prior to completing the Safety Element to obtain information known by and available to these agencies.

The Safety Element identifies and describes germane safety-related issues, establishes a goal and objectives related to identified hazards, and establishes policies and implementation measures designed to reduce, eliminate, or avoid risk to persons and property.

SAFETY GOAL AND OBJECTIVES

Goal…

- *Reduce the potential risk of death, injury, property damage, and economic and social dislocation resulting from hazards.*

1-SG Reduce the potential risk of death, injury, property damage, and economic and social dislocation resulting from hazards.

1-SO Assurance of a high level of protection from geologic and seismic hazards for all residents, structures and vital services.
2-SO Reduction of risk from exposure to hazards related to past and present mining, including shafts, tunnels, tailings and toxic materials.
3-SO Reduction of risk from exposure to flood hazards.
4-SO Reduction of risk from exposure to structural and wildlife fires.
5-SO Reduction of risk from exposure to hazardous materials, including contaminated sites.

SAFETY ISSUES

Seismicity

Generally, the degree of earthquake hazard is based on the interrelationships between faults, weak geologic materials, and human activity. Faults within California are divided into three categories; prequaternary (older than two million years), quaternary (younger than two million years), and historic (less than 200 years). Faults in the County's western half are prequaternary. Quaternary and historic active faults are found in the eastern portion of the County near Truckee. The western half of the County, in which Grass Valley is located, is in the low intensity zone for earthquake severity.

Grass Valley is not within an Alquist-Priolo zone as defined in DMG Special Report 42. The closest active fault is the Cleveland Hill fault near Oroville. However, ground movement can be felt in Grass Valley from earthquakes at intermediate distances (i.e., the Truckee quake of 1968) and from distant earthquakes (i.e., the Winters-Vacaville 1892 event).

Subsidence

Subsidence consists of surface land sinking into subsurface holes or fissures. Subsidence may be caused by a variety of natural conditions, some in combination with human activity. The primary cause of actual and potential subsidence in the Grass Valley area is previous underground withdrawal of material from mining. Less hazardous and generally better controlled is improper burial of organic materials during land development.

Subsidence hazards in Grass Valley and vicinity are principally man-made, rather than natural geologic phenomena, and are addressed under Mine-Related Hazards.

Mine-Related Hazards

The collapse of the Old Brunswick shaft of the Idaho-Maryland Mine Complex near Grass Valley during the 1998 storm season dramatized the danger to persons and property presented by abandoned mines. In that May 1998 incident, the sudden subsidence of land above a long-hidden mine entrance claimed property and undercut the foundation of a new home near Grass Valley.

Despite its colorful contribution to local history, mining had, and continues to have, a serious "downside" in terms of safety. Unfortunately, the magnitude of potential mine-related problems in the Sierra foothills is just starting to be recognized. That recognition includes an admission by State Mining and Geology experts that little is known about the locations of mine-related hazards, a factor inhibiting comprehensive solutions.

Mine-related hazards include the presence of open holes at ground surface; inadequately covered / shored up shafts and tunnels below ground level; tailings, and other abandoned mining features. Safety and hazard concerns resulting from old mine operations include the risk of falling into open shafts, surface collapse/subsidence into old shafts, and the presence of residual toxic materials generated in mining processes.

A substantial portion of the Planning Area is underlain by a deep, extensive labyrinth of abandoned mine tunnels. The Empire Mine tunnels alone extend some 365 miles beneath the City of Grass Valley. Literally dozens of mining claims were "worked" in the Grass Valley area during the heyday of gold mining. Some were large, mechanized operations. Most were small and more labor-intensive.

Hard-rock mining, as historically practiced in western Nevada County, was also characterized by 1) one or more angular shafts from surface to underground tunnels for transporting miners, equipment, and ore and 2) vertical air shafts from tunnels up to the surface, whose functions were to admit fresh air to the otherwise depleted atmosphere below. Tailings piles (ore storage) and tailings ponds (used in ore processing) were also typical surface features of deep mines. Figure 7-1 shows locations of mine tailings piles in the Planning Area (U.S. Geological Survey data). Figure 7-2 depicts old mining claims in the Grass Valley area. These maps are potential indicators of mine-related hazards, but are by no means definitive guides to where surface hazards do or do not exist.

Mines and mining, always dangerous while in operation, posed new dangers when abandoned. Air shafts were left exposed or covered by a few boards. They are typically holes of 4 to 10 feet in diameter on the surface, extending hundreds of feet down to the mine tunnels below. Access shafts were often covered hurriedly by closing off the mine mouth (entrance) with logs, then backfilling with rock and earth. In time, the forgotten-but-" reclaimed" site sprouted vegetation, hiding a large hole lurking perhaps as little as 8 to 10 feet below the surface.

The susceptibility of mine shafts to subsidence or cave-ins depends on a number of factors, particularly water content of the soil above and the depth and physical condition of the shaft. The Division of Mines and Geology believes that septic systems contribute to subsidence by keeping otherwise dry soil overburden wet and heavy, thus triggering collapses that might otherwise not occur.

The greatest problem regarding mine-related surface hazards is the absence of information about the locations and physical characteristics of abandoned tunnel entrances and shafts. Without such information, it is difficult to assess the magnitude of the problem or to devise remedial programs.

Slope Instability

Unstable soils and geologic conditions have historically resulted from vegetation removal associated with wildfires, timber harvesting, mining, and grading as part of road and building site development. Depending on local topographic, geologic and hydrogeologic conditions, significant precipitation can exacerbate unstable conditions, resulting in landslides and mudslides. Any area adjacent to a hydraulically mined area is subject to landslide activity due to the removal of supporting rock and soil. Under such conditions, earthquakes or heavy rains can initiate slide activity.

Landslides are events in which surface masses of slope-forming earth move outward and downward from their underlying and stable floors in response to the force of gravity. Unstable or potentially unstable slopes are susceptible to slide, falls, creeps, or mud flows. Although slope movements can occur in any type of rock material, certain bedrock formations exhibit a high susceptibility to such movement. This type is generally not found in the western portion of the County, but could occur on a local basis.

Flooding

As indicated by Federal Emergency Management Agency Flood Insurance Rate Maps (FIRM), the City of Grass Valley and the General Plan Planning Area are relatively well drained. The 100-year flood designations are generally confined to narrow bands along local drainages. Few transportation corridors are susceptible to flooding in a 100-year flood event. Idaho-Maryland Road east of SR 49/20, parts of Colfax Avenue and South Auburn Street south of Whiting Street will be flooded during a 100-year flood. To the extent culverts and storm drains are not maintained, other localized flooding could occur. Structures located in the flood hazard areas would be subject to flooding in a 100-year flood event unless special mitigation is employed.

The 1997 FEMA flood map for Grass Valley and vicinity is shown in Figure 7-3. FEMA updated the Flood Insurance Rate Maps (FIRM) in 2010. The current FIRM maps are available for review at City Hall. Chapter 15.52 of the City Municipal Code, Flood Damage Prevention, implements FEMA and the General Plan flood protection policies and includes comprehensive polices and standards for new development in or near flood plains. Section 9 of the City Improvement Standards provides more specific design criteria to reduce the risk of flooding in a floodplain. All new development within the City must be designed to limit storm water runoff to pre-development conditions for the 10, 25, and 100-year storm events. The City's annual CIP identifies public works 5-year projects which include storm drainage improvements.

Structural and Wildland Fire

Fire protection agencies in the City of Grass Valley General Plan Planning Area include the City of Grass Valley Fire Department, which provides service within the City, the Nevada County Consolidated Fire District, which serves the area generally north, west and south of the City, and the Ophir Hill Fire District, which serves lands east of the City. The City maintains automatic aid agreements with CAL FIRE, Nevada County Consolidated Fire District, Nevada City Fire Department, and Penn Valley Fire Protection District. The City also participates in a Joint Operations Area agreement with Nevada City and Nevada County Consolidated Fire District. This JOA establishes dispatching by a Computer Aided Dispatch System, which allows the closest resources to respond to incidents regardless of agency jurisdictions. Additionally, otherwise, mutual aid from agencies state-wide is provided pursuant to the California Fire Service and Rescue Emergency Mutual Aid System via its Mutual Aid Plan.

The City of Grass Valley maintains fire-fighting facilities, strategically sited throughout the City. The City's current average response time is 4.0 minutes[1] with an ISO rating of 3. The City has two fire stations: Fire Station No. 1 is located off Brighton Street and serves the west portion of the City; and Fire Station No. 2 is located near the Sierra College Campus and serves the east portion of the City. A third station is tentatively planned in the southern portion of the Planning Area near North Star Drive. A future station could be located within the Loma Rica Industrial Park if and when that area is annexed to the City.

The Grass Valley region has a generally high potential for wildland fires of devastating intensity. This is due to the presence, particularly in less urban settings, of heavier timber, woodland and brush, the occurrence of steep slopes, dry weather conditions, and human activity. Generally, vegetative areas of over 20% slope are considered as fire hazardous. The City limits have a distinct urban/wildland interface area. The greatest threat for wildfire hazards are from those that may originate outside the City. Historical data on wildfires in or near Grass Valley is kept on the Firehouse Reporting Data System. Because of the extended urban/wildand interface area, the City has participated in regional efforts to reduce wildfire risks to the City. These efforts include participation in Nevada County's Local Hazard Mitigation Plan and the Fire Safe Council of Nevada County Community Wildfire Protection Plan. Nevada County OES and the Fire Safe Council also maintain historical fire records.

The California Department of Forestry and Fire Protection (CAL FIRE) provides fire protection for wildland areas, and is legally responsible only for wildland fires, not structural fires, during the fire season. The United States Forest Service also provides fire protection in the region.

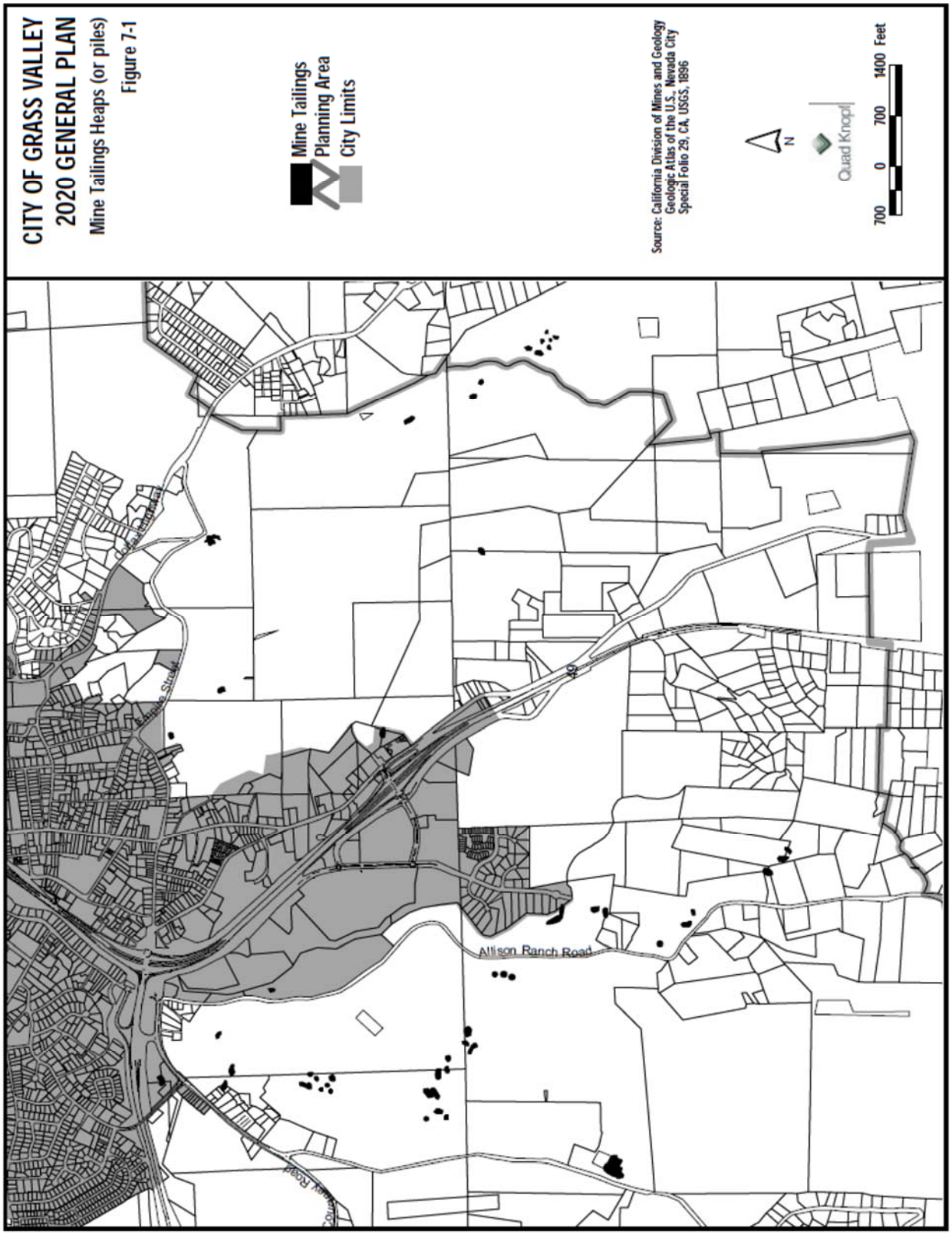
Existing standards for development that are expected to provide adequate access, fire flows, and other facilities to maintain an appropriate level of fire protection. These standards are enforced through the California Building Standards Code, the California Fire Code, the California Mechanical Code, and the City's Development Code and Community Design Guidelines.

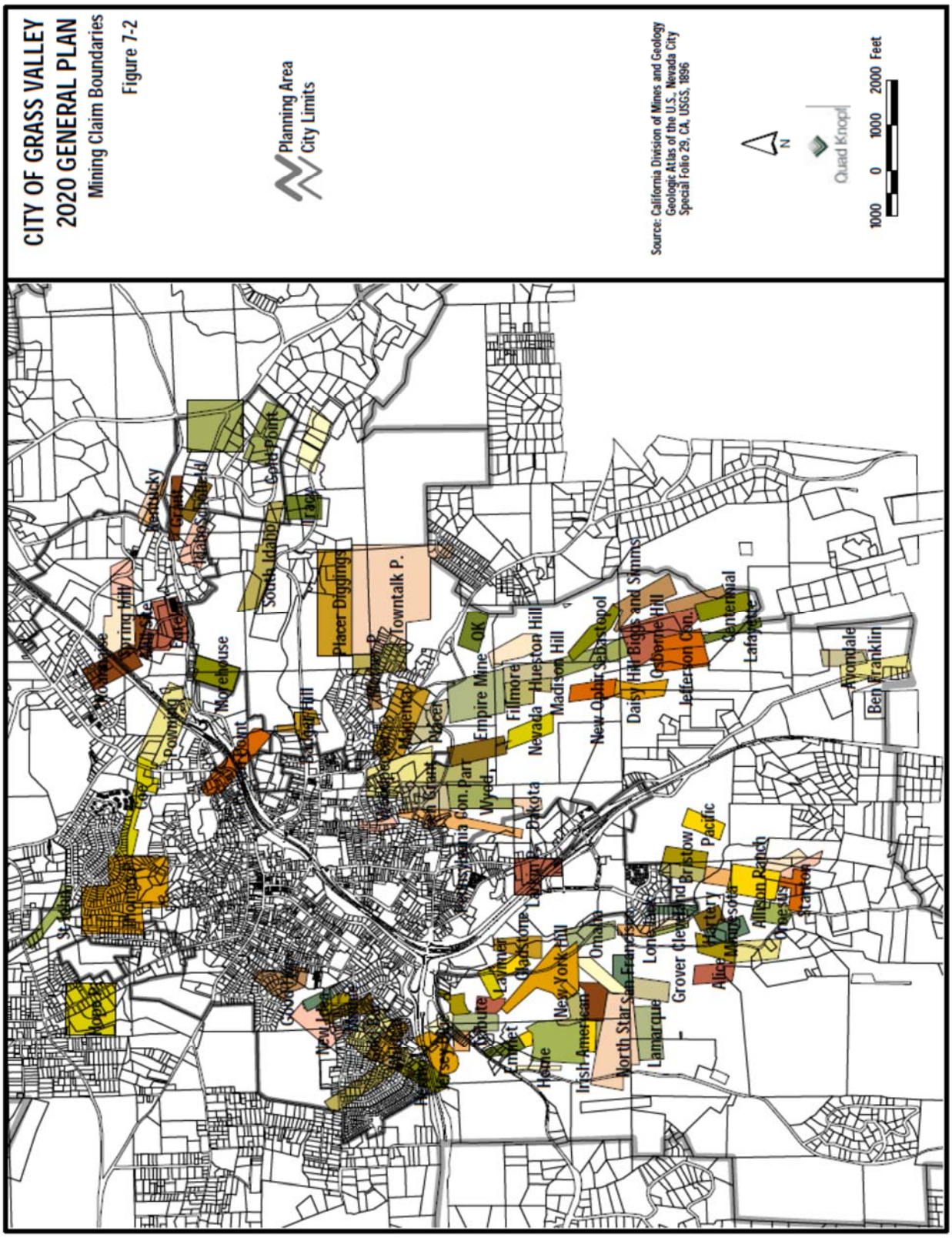
[1] Response time is defined as average response from notification to service provision at incident location.

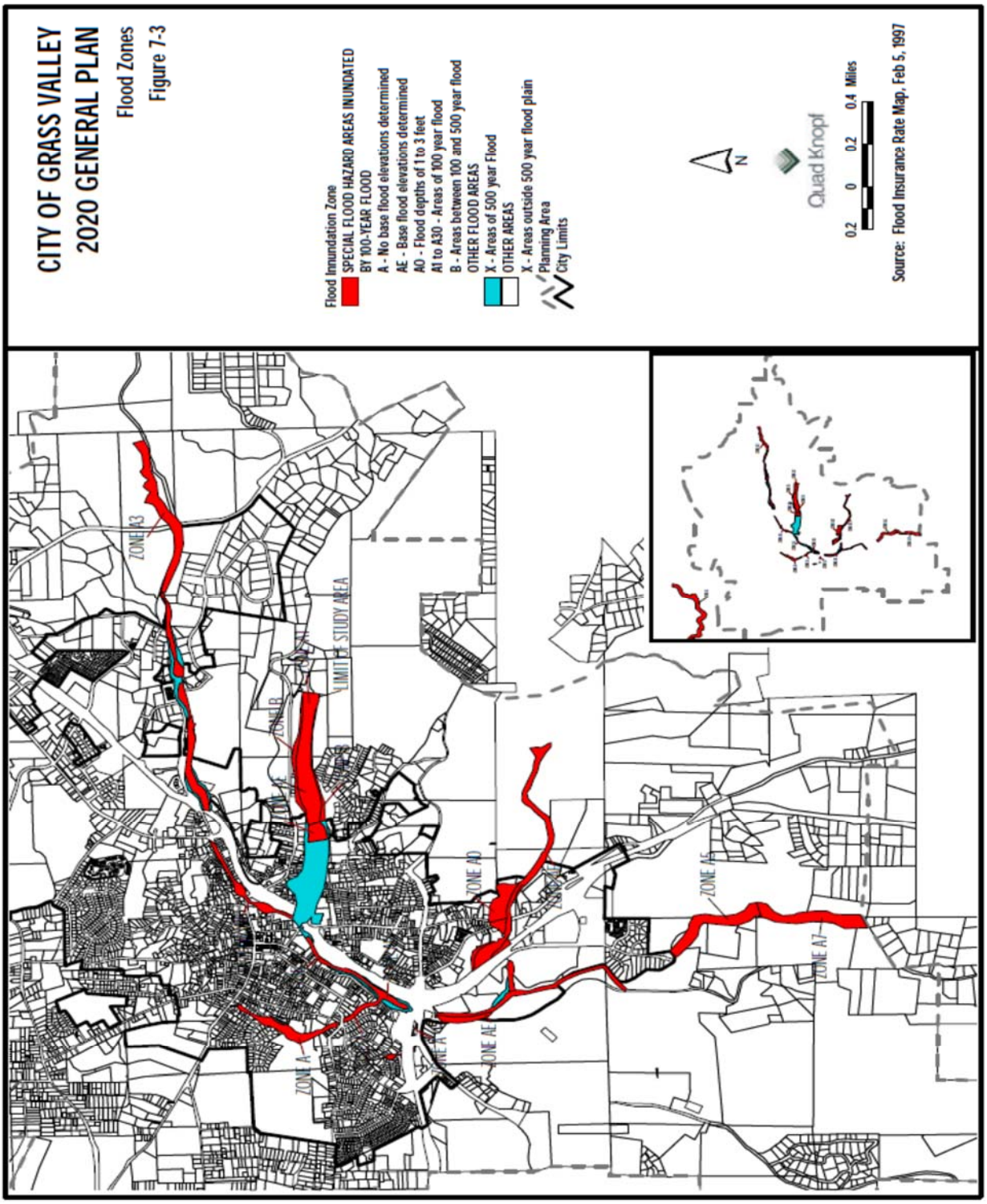
The City's municipal water system serves the majority of the City's incorporated boundaries, or approximately 1,357 acres and approximately 60% of the current incorporated area. A few properties outside the City are served, such as the Nevada County Fairgrounds.

Under a current agreement, the City purchases raw water from NID and then treats and distributes the water. Of the 250,000 acre feet of water available to NID, about 170,000 acre feet are currently used. The City's treatment facility has the capacity to treat five times the amount of water currently processed. Limitations exist on expansion of the City's water service due to topographical constraints and location of the treatment facility.

Due to the location of most reservoirs at 100-200 feet in elevation above the City, the City of Grass Valley water system provides excellent pressure and flows for firefighting purposes. There are isolated areas of inadequate piping and areas that have no hydrants. These areas are being upgraded as the City develops. As the City has expanded its geographic limits, areas served by NID have been incorporated.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Mine Tailings Heaps (or piles)
Figure 7-1
Mine Tailings
Planning Area
City Limits
Source: California Division of Mines and Geology
Geologic Atlas of the U.S., Nevada City
Special Folio 29, CA, USGS, 1896
N
Quad Knopf
700 0 700 1400 Feet
Allison Ranch Road


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Mining Claim Boundaries
Figure 7-2
Planning Area
City Limits
Source: California Division of Mines and Geology
Geologic Atlas of the U.S., Nevada City
Special Folio 29, CA, USGS, 1896
N
Quad Knopf
1000 0 1000 2000 Feet
Kentucky
Idaho-Maryland
Gold Point
South Idaho
Placer Diggings
Towntalk P.
Empire Mine
OK
Fillmore
Hueston Hill
Nevada
Madison Hill
New Ophir
Sabastopol
Daisy Hill
Biggs and Simms
Osborne Hill
Jefferson Con.
Centennial
Lafayette
Avondale
Ben Franklin
Wyed.
Dakota
Lafayette
Clarkstone
New York Hill
Omaha
Irish American
North Star
San Francisco
Lamarque
Grover Cleveland
Bristow
Pacific
Factory
Alice
Minnesota
Allison Ranch
Stanton


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Flood Zones
Figure 7-3
Flood Innundation Zone
SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD
A - No base flood elevations determined
AE - Base flood elevations determined
AO - Flood depths of 1 to 3 feet
A1 to A30 - Areas of 100 year flood
B - Areas between 100 and 500 year flood
OTHER FLOOD AREAS
X - Areas of 500 year Flood
OTHER AREAS
X - Areas outside 500 year flood plain
Planning Area
City Limits
N
Quad Knopf
0.2 0 0.2 0.4 Miles
Source: Flood Insurance Rate Map, Feb 5, 1997
ZONE A3
ZONE B
LIMITS STUDY AREA
ZONE A
ZONE AE
ZONE AO
ZONE A5
ZONE A7

Emergency Access and Evacuation Routes

The City currently maintains approximately 38 miles of roadways, excluding state highways.

As do most foothill towns, the City of Grass Valley has comparatively narrow streets in older developed areas. Improvements to roadways, intersections, and off-street parking facilities help alleviate congestion and improve fire access in these areas. Hilly roads slow response times, particularly in snow conditions, although the Grass Valley Fire Department is equipped to deal with these conditions. Nationally recognized standards are used by the Fire Department in planning for new development to prevent access constraints to fire equipment and improve emergency evacuation capabilities.

The Safety Element is required by California law to address the subject of evacuation routes, in the event of a catastrophe. Figure 7-4 shows evacuation routes out of Grass Valley and the Planning Area. Primary evacuation routes are the two freeways serving Grass Valley: Highway 49 (toward the north and toward the south) and Highway 20 (toward the west). Secondary evacuation routes are Highway 174 (toward the east), Brunswick Road (toward the east/southeast), McCourtney Road (toward the southwest), West Main/Rough and Ready Highway (toward the west from the northwest portion of the City), Idaho-Maryland Road (toward the east, until and unless the road is closed), Nevada City Highway (toward the north paralleling Highway 20/49 toward Nevada City), and LaBarr Meadows Road (toward the south, paralleling Highway 49 south toward Auburn). In the case of evacuation, officials will direct traffic to proper evacuation routes. Quite naturally, the selection of evacuation routes depends upon the magnitude, type, location, and direction of movement of the catastrophic event.

Airports

The Nevada County Airport lies to the east of Grass Valley. The entire airport is within the City's sphere of influence and portions of the City limits are adjacent to the western end of the runway. The Federal Aviation Administration (FAA) defines the most critical areas as those immediately beyond the runway ends the initial climb out and final approach sectors. It is within these approach/departure sectors that the concentration of aircraft accidents occurs. In addition, there are studies indicating that about half of all airport accidents occur on airport property and an additional 15% of accidents occur within one mile outside the airport property. This suggests that areas immediately off the ends of the runway and under the airport traffic pattern be carefully evaluated for developed land use.

The Nevada County Airport Land Use Commission (NCALUC) is responsible for adopting land use compatibility plans for local airports. In 2011, NCALUC adopted a new land use compatibility plan, which created new compatibility zones for the Nevada County Airport. Compatibility zones show areas that are subject to different levels of safety risks from airport operations and impose land use, building height, and density restrictions to each of the different zones. Map 2A of the Nevada County Airport Land Use Compatibility Plan (NCALUCP) illustrates the seven compatibility zones that affect Grass Valley.

The NCALUCP includes policies and criteria that address safety and noise issues and Table 2A of the plan lists maximum residential densities, prohibited uses, and other development conditions for each of the compatibility zones.

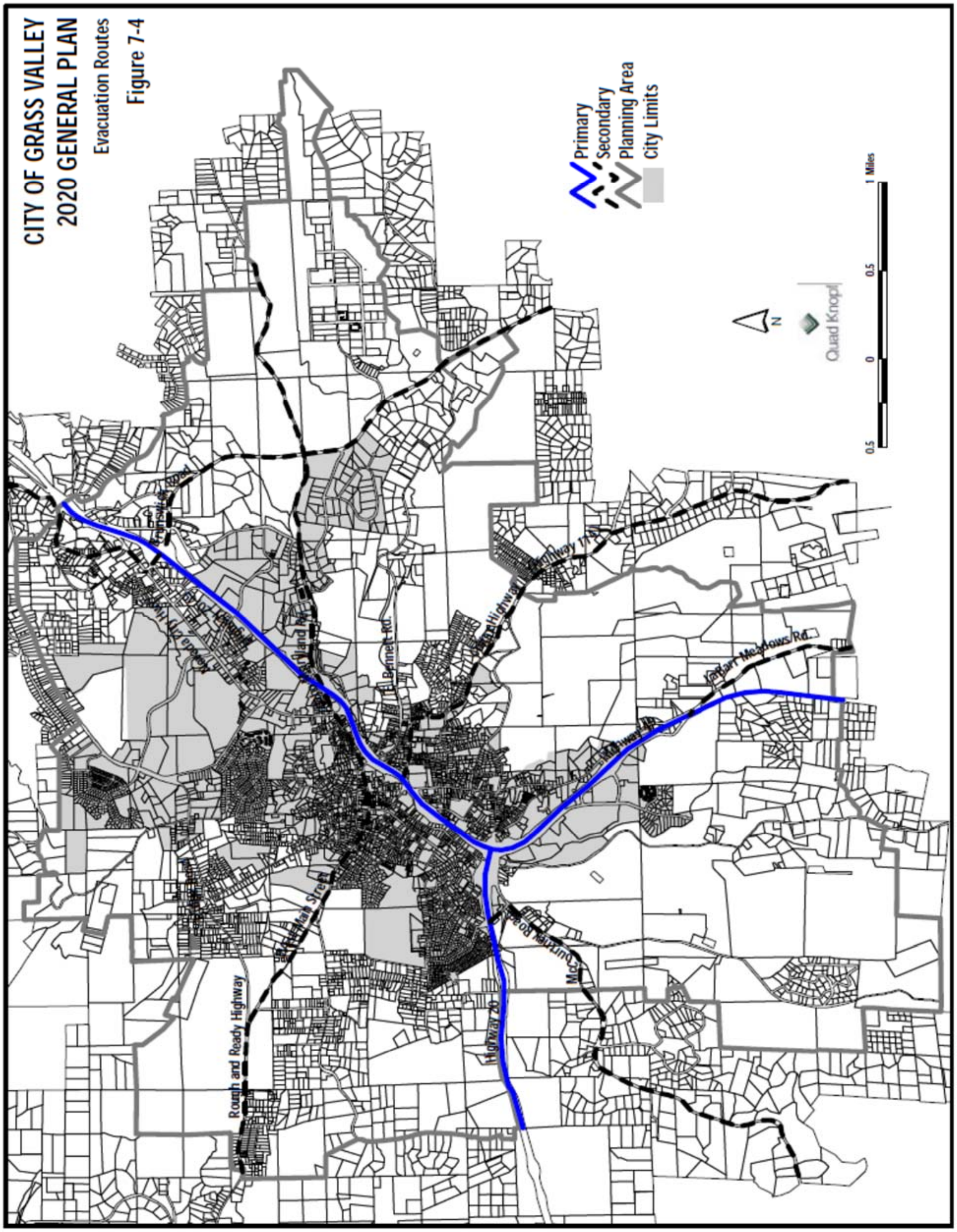
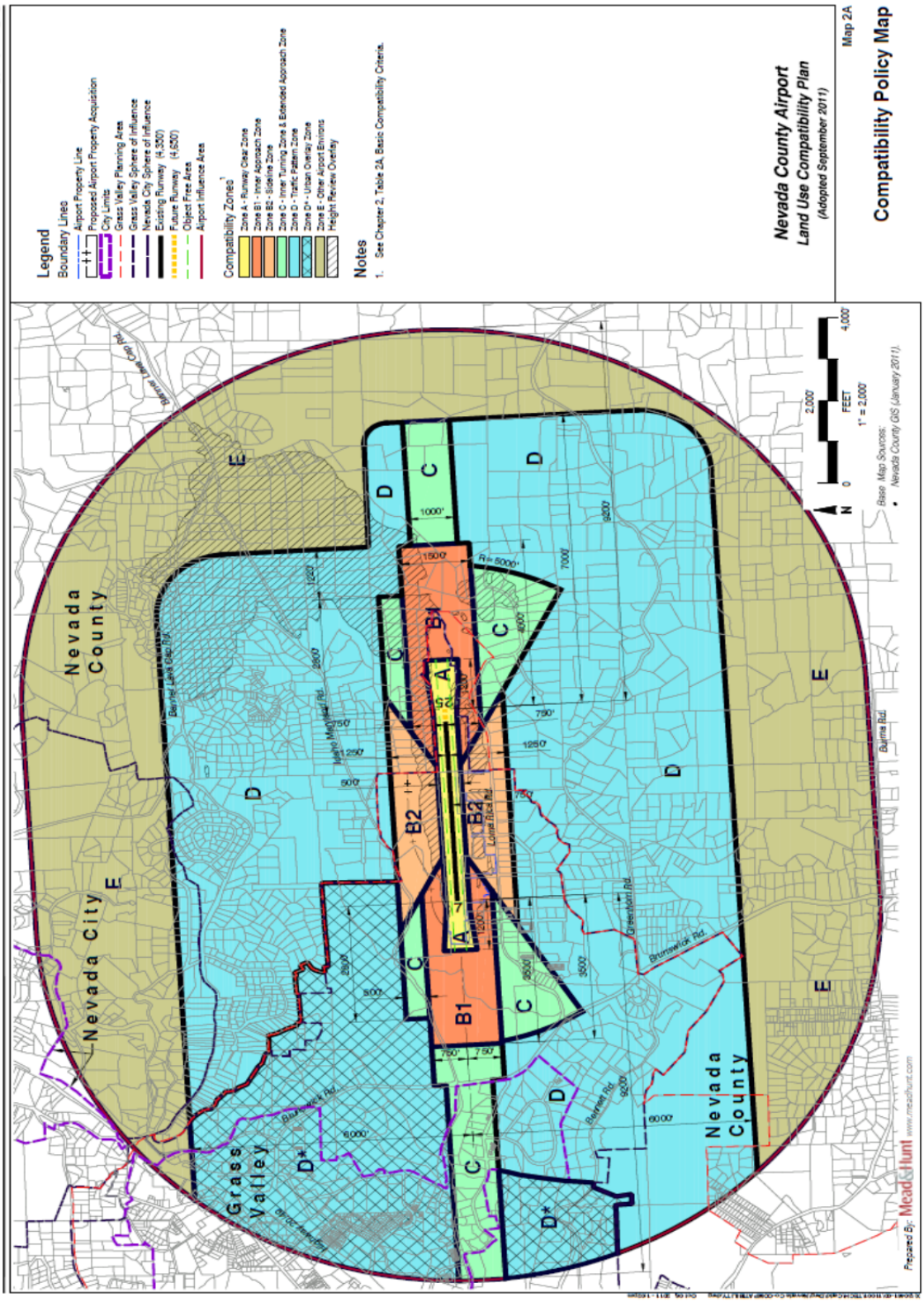

CITY OF GRASS VALLEY
2020 GENERAL PLAN
Evacuation Routes
Figure 7-4
Primary
Secondary
Planning Area
City Limits
Quad Knopf
0.5
0
0.5
1 Miles
Rough and Ready Highway
Bennett Rd

Figure 7-5


CHAPTER 2
POLICIES
Legend
Boundary Lines
Airport Property Line
Proposed Airport Property Acquisition
City Limits
Grass Valley Planning Area
Grass Valley Sphere of Influence
Nevada City Sphere of Influence
Existing Runway (4,350')
Future Runway (4,650')
Object Free Area
Airport Influence Area
Compatibility Zones[1]
Zone A - Runway Clear Zone
Zone B1 - Inner Approach Zone
Zone B2 - Sideline Zone
Zone C - Inner Turning Zone & Extended Approach Zone
Zone D - Traffic Pattern Zone
Zone D* - Urban Overlay Zone
Zone E - Other Airport Environs
Height Review Overlay
Notes
1. See Chapter 2, Table 2A, Basic Compatibility Criteria.
Nevada County Airport
Land Use Compatibility Plan
(Adopted September 2011)
Map 2A
Compatibility Policy Map
Nevada County
Nevada City
Grass Valley
Base Map Sources:
Nevada County GIS (January 2011).
Prepared By: Mead & Hunt
www.meadhunt.com

Hazardous Materials

The significance of environmental or human exposure to hazardous materials depends on the type, location, and quantity of the material released. In the Grass Valley area, hazardous materials may be transported via roadways and airways. Industrial facilities that use, store, or dispose of hazardous materials present the greatest potential to toxic exposure due to accidental release. However, most of the hazardous waste stream in Nevada County, including Grass Valley, is generated by "small quantity generators." Hazardous materials and wastes are regulated by federal and state laws and are required to be recycled or properly disposed. Transport of hazardous materials is also heavily regulated. However, illegal storage and disposal and unintentional releases of hazardous materials from leaks and accidents can still occur.

Where hazardous materials are found to be illegally stored or otherwise accidentally released, the initial response is provided by the local fire agencies. Site assessment and cleanup is conducted by the Marysville Fire Department, which is operated by CDF. When discovered, fuel storage tank leaks, are cleaned up under the jurisdiction of the California Regional Water Quality Control Board, Central Valley Region.

Ten sites are listed in the Solid Waste Facilities, Sites, and Operations Database for the Grass Valley area. These sites include closed, as well as operating solid waste landfills according to an inventory compiled by the California Integrated Waste Management Board. These waste sites are regulated by the State and Nevada County.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in the state. Serpentine rock, which has a grayish-green to bluish-black color and an often shiny appearance, often contains chrysotile asbestos and is abundant in the Sierra foothills.

Asbestos is not found in all serpentine rock, but when it does occur, it is typically present in amounts ranging from less than 1% up to about 25% or more. Asbestos is released from serpentine rock when it is broken or crushed. This can happen when cars drive over unpaved roads or driveways surfaced with serpentine rock, when land is graded for building purposes, or at quarrying operations. It is also released naturally through weathering and erosion. Once released from the rock, asbestos can become airborne and may stay in the air for long periods of time.

Given the proximity of Grass Valley to potential serpentine deposits, it is possible that construction activities and road surfacing could involve asbestos-containing serpentine rock or soils.

All types of asbestos are hazardous and may cause lung disease and cancer. The longer a person is exposed to asbestos and the greater the intensity of exposure, the greater the chances for a health problem. The Air Resources Board (ARB) adopted a statewide control measure which prohibits use of serpentine rock for surfacing applications if it has more than 5% asbestos, and requires testing of serpentine material that is sold.

SAFETY POLICIES

This section contains policies to meet the safety goals and objectives and to address safety issues.

1-SP Adopt current uniform codes for new construction.

2-SP Ensure seismic safety and structural integrity in housing and commercial/industrial facilities through code enforcement.

3-SP Develop and implement appropriate flood hazard regulations through the City's Flood Damage Prevention Ordinance and Improvement Standards.

4-SP Based on location or probable need, require development plans in mined areas to include in-depth assessments of potential safety, including mining-related excavations, and health hazards and accompanying mitigation measures.

5-SP Maintain or return to open space lands subject to flooding.

6-SP Incorporate fire hazard reduction considerations into land use plans/patterns, both public and private.

7-SP Identify, maintain, and mark evacuation routes for use in case of disasters or emergencies.

8-SP Assure public awareness of fire-safety measures, including those addressing property maintenance and evacuation.

9-SP Develop and implement fire-safe community design and landscaping standards, construction codes, and property maintenance regulations.

10-SP Adopt and implement appropriate standards for access roads, on-site driveway standards, fuel reduction and emergency water supply.

11-SP Maintain appropriate standards for water supply, pressure and distribution for fire suppression purposes.

12-SP Maintain a high level of inter-jurisdictional cooperation and coordination, including appropriate automatic aid agreements with fire protection/suppression agencies automatic aid agreements with fire protection/ suppression agencies in western Nevada County.

13-SP Continue to implement provisions of the Nevada County Airport Land Use Compatibility Plan, and to coordinate as appropriate with Nevada County, Airport management, and the Nevada County Airport Land Use Commission regarding Airport land use compatibility and safety considerations of major land use actions as listed in Nevada County Airport Land Use Compatibility Plan Policy 1.4.3.

SAFETY IMPLEMENTATION ACTION AND STRATEGIES

This section contains implementation actions and strategies designed to carry out the safety goals, objectives, and policies.

1-SI Adhere to the Land Use Plan's compact overall development pattern, including infill (Land Use Element). A compact development pattern reduces total land area needed to accommodate projected development (thus reducing exposure to potential hazards); facilitates quick response to emergencies from established locations, such as fire stations; and allows cost- effective extension of safety-related infrastructure, such as streets, water and storm-water drainage systems.

2-SI Utilize open space/conservation reserves and easements to restrict development in high-risk areas, such as flood-prone areas, airport safety zones, and areas identified as subject to geologic risk.

3-SI Amend land use regulations to allow clustering and density averaging in conjunction with restricted development of potentially hazardous areas.

4-SI Encourage continuity and linkages within the circulation system. Require future developments to provide multiple ingress/egress points, to facilitate emergency vehicle access and mobility, and to facilitate emergency evacuation movements.

5-SI Maintain high standards of fire preparedness, capacity, and response. Assure the City's capability to maintain such standards as areas are annexed.

6-SI Establish a mine-related hazards program, to include the following specific actions. Initiate and maintain a mine hazard data base, incorporating maps, technical studies, and other germane information. To the extent practical and possible, map and describe identified hazards. Coordinate with Nevada County and the State Division of Mines and Geology in mine hazard research and information collection and dissemination. Provide technical assistance and advice to property owners in identifying and mitigating mine-related hazards on their properties. Determine the appropriate extent of geo-technical field investigations and other research required to determine the presence or absence of potentially hazardous mine-related features. Require appropriate field investigations and other research as part of the approval process for new developments, including individual new structures.

7-SI Continue to regulate development within flood prone areas to reduce the risks of flood hazards to life and property. Avoid stream channel modifications.

8-SI Continue to require new developments to utilize on-site storm water detention techniques.

9-SI Continue to utilize site development standards designed to minimize the resulting area and percentage of impervious surface.

10-SI Revise flood hazard maps at appropriate intervals, to reflect the effects of land use changes subsequent to previous flood hazard studies.

11-SI Incorporate into City construction codes appropriate provisions and revisions of the Uniform Building Code regarding seismic safety.

12-SI Maintain an active code enforcement program to assure the safety of residential and commercial structures.

13-SI Require new developments located on officially identified hazardous waste sites to conduct appropriate investigations, submit results to the City, and prepare a mitigation plan as part of the project review process.

14-SI Enforce provisions of the Nevada County Airport Land Use Compatibility Plan, regarding development in designated Airport Compatibility Zones.

15-SI Mark evacuation routes with visible signage.

16-SI Establish and maintain public information and awareness programs regarding public safety and hazards, in cooperation with appropriate emergency agencies and organizations.

17-SI Consider the location and characteristics of documented hazardous waste sites as part of the environmental assessment process for proposed developments.

18-SI Continue to participate in regional efforts with local fire agencies and implement appropriate strategies to reduce the risk of wildfires.

Chapter Eight

Recreation Element

CHAPTER EIGHT
RECREATION ELEMENT

Recreation is an optional General Plan element under California law.

The Recreation Element is closely linked both to the Land Use Element and to the Conservation/Open Space Element.

The Recreation Element address parks and recreation facilities throughout Grass Valley Planning Area, including both those owned and maintained by the City of Grass Valley and those under the purview of other agencies or, selectively, private entities. The Recreation Element is closely linked both to the Land Use Element and to the Conservation/Open Space Element.

Figure 8-1 shows park and recreational facilities within the City of Grass Valley and the unincorporated portion of the Grass Valley Planning Area.

Historically, land for park and recreation facilities has been donated to the City by public-spirited individuals.

The Grass Valley Subdivision Ordinance provides for land dedication for parks and recreation, and for in lieu fees through which residential developments might facilitate park land acquisition. The standard for park and recreation dedications or in lieu fees, established under provisions of the "Quimby Act" (Section 66477 of the State Government Code), is a maximum of 5 acres per 1,000 population.

The City owns and maintains eight park/recreation facilities. These include two parks currently classified as "community parks": Condon Park and Memorial Park.

Two of the eight parks, Morgan Ranch and Mulcahy Field, are in the process of being developed. In addition, the City contracts with Nevada County Historical Society to operate the Pelton Wheel Mining Museum/Glen Jones Park.

An inventory of City owned/operated park and recreation facilities follows:

- Memorial Park, 8.4 acres
- Condon Park, 80 acres
- Pelton Wheel Mining Museum/Glen Jones Park, 1.7 acres.
- Brighton Street Park (Minnie Street), 1.6 acres
- Elizabeth Daniels Park, 0.3 acres
- Dow Alexander Park, 0.5 acres
- Morgan Ranch Park, 4.08 acres (future development)
- Mulcahy Field, 12.5 acres (future development)

Additional park/recreational facilities within the City of Grass Valley, but owned and maintained by entities other than the City, are as follows:

- Nevada County Country Club, 58 acres (privately owned and operated)
- Sierra College Park, 7.95 acres (Sierra College campus)
- Hennessy School, 3 acres (school district owned and operated)

Acreage and per capita acreage figures within the City of Grass Valley are shown in Table 8-1.

TABLE 8-1
ACREAGE AND PER CAPITA ACREAGE
CITY OWNED PARKS AND RECREATION FACILITIES

	Acreage (rounded)	Acreage/1,000 Pop
Existing Park/Recreation Facilities	161.5	17.0
City-Owned	92.5	9.8
Other Entities-Owned	69.0	7.3

Per capita figures are based on the California Department of Finance January 1, 1998 population estimate of 9,475 for the City of Grass Valley

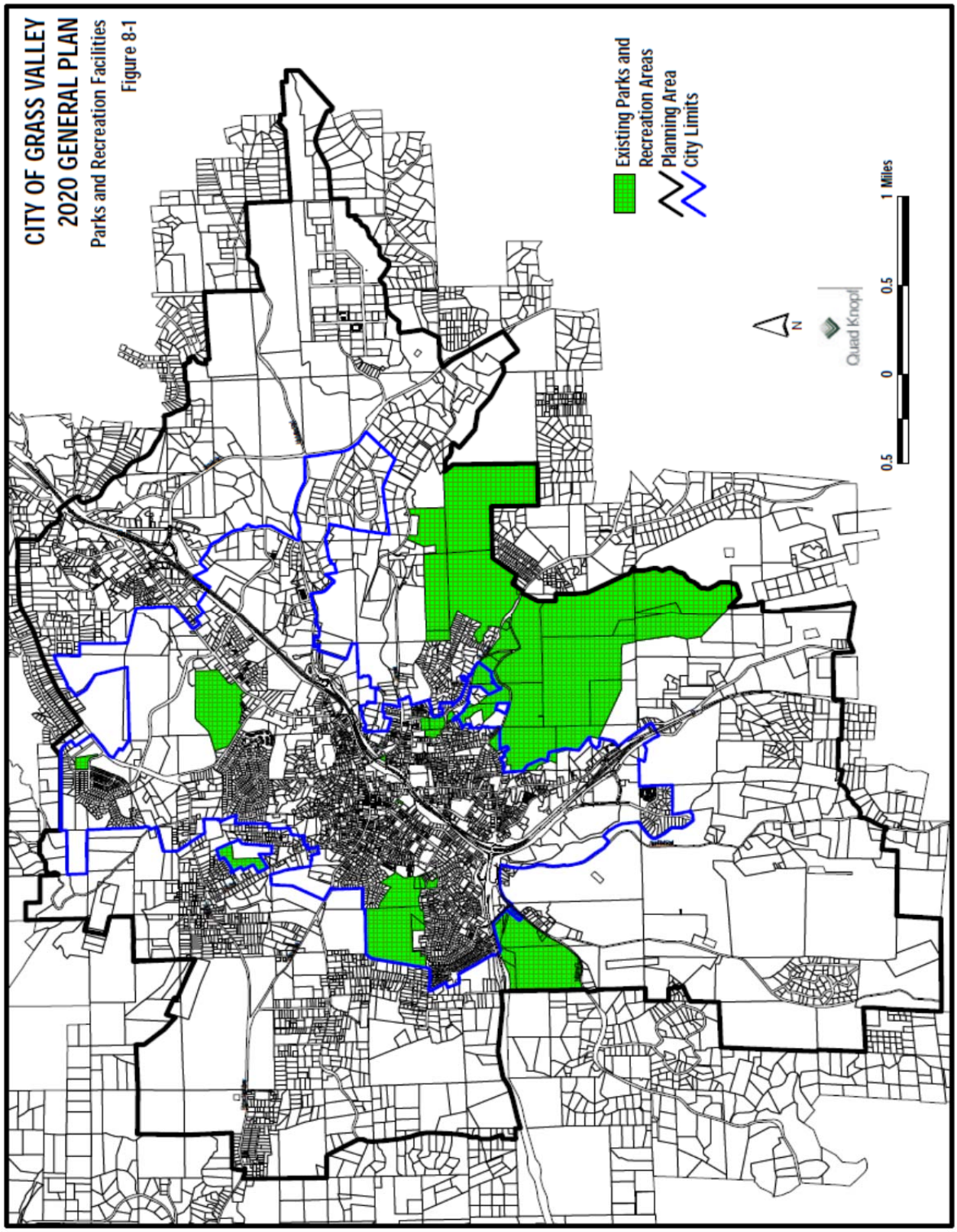
The Nevada County Country Club on East Main Street is a 58 acre, 9-hole public golf course owned and operated by a private company. It is only public-access golf course located within the Planning Area.

The Sierra College Park, developed in 1998-99, is a soccer and baseball facility slightly less than eight acres, located on the Sierra College campus near Nevada Union High School. As part of the College campus, the park remains under the auspices of the Sierra Community College District Board of Trustees.

The Hennessy School, located just east of Highway 49 near downtown Grass Valley, is owned by the Grass Valley Elementary School District. The school grounds and attendant facilities are classified as a park as they are accessible to the public.

Existing park and recreation facilities outside the Grass Valley City limits, but within the Planning Area, follow. The three listed facilities total 963+ acres.

- Nevada County Fairgrounds, 100 acres
- Nevada union High School, 63+ acres (includes entire campus)
- Empire Mine State Park, 800 acres
- Scotten and Gilmore School properties
- Sierra Mountain High School


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Parks and Recreation Facilities
Figure 8-1
Existing Parks and Recreation Areas
Planning Area
City Limits
N
Quad Knopf
0.5
0
0.5
1 Miles

The Nevada County Fairgrounds is a 100 acre parcel owned and maintained by the State Fairgrounds Authority. The facility is classified as a regional park. The Fairgrounds house several community facilities, including the Senior Citizens Building. The annual Nevada County Fair and other recreational activities take place at the Fairgrounds, which are used year-round.

Nevada Union High School, operated by the Nevada Joint Union High School district, includes substantial recreational and sports facilities on a 63+ acre campus located on Ridge Road. The campus is adjacent to, though not currently within, the Grass Valley City limits.

It should be pointed out that inclusion of the entirety of acreage devoted to the Hennessy School and Nevada Union High School tends to exaggerate the actual, useable recreation acreage in the inventory of recreation lands. A more definitive identification of useable recreation space on these properties, and other school properties in the unincorporated Planning Area is needed but currently unavailable.

Empire Mine State Park is part of the State of California Park system. The Park, over 800 acres, includes the old mine, historic and interpretive buildings and exhibits, and over one square mile of forested open space with trails and natural areas. The Park maintains over ten miles of hiking trails open to the public.

The total acreage of existing park and recreation facilities in the entire Planning Area (City limits plus unincorporated area) is 1,124. The Planning Area encompasses 9,894 acres. Thus, existing parks and recreation areas, as defined to include school grounds with public-access recreational areas, comprise 11.4 percent of the Planning Area.

RECREATION GOALS AND OBJECTIVES

Goals….

- *Allow for expanded and diverse recreational programs, areas and opportunities.*
- *Facilitate community cultural opportunities.*

1-RG Allow for expanded and diverse recreational programs, areas and opportunities.

1-RO Development and continuation of park and open space programs.
2-RO Promote City-sponsored recreation programs.
3-RO Establishment of a mechanism for inter-jurisdictional cooperation in the Grass Valley area.
4-RO Assurance that an adequate amount of parklands are set aside proportionate to needs and growth.

2-RG Facilitate community cultural opportunities.

5-RO Establishment of cultural venues and programs.
6-RO Establishment of general-purpose community gathering places and facilities.

RECREATION ISSUES

Park and Recreation Organization and Administration

Park and recreation organization and administration is critical to the provision of municipal recreation facilities and services. The City of Grass Valley recognized this need when it created the Parks and Recreation Commission in January, 1999 and authorized a Park and Recreation System Master Plan to be completed during 1999 and early 2000. In a period of rising public expectations and expanding definitions of the recreation function, professional management and administration is a prerequisite to any public-sector recreation program.

Expanding Scope of the Park and Recreation Function

In decades past, the park/recreation function consisted of little more than acquiring, developing, and maintaining traditional parks. Little changed from year to year: park facilities stayed the same; new parks were rarely added to the "system". Public recreation today has changed so dramatically, based on public expectations, needs, and demands. Among the major changes, all pertinent to Grass Valley and the recreation function are:

- Emphasis on recreation "programs", organized activities, and events, with implications for both recreation facilities and administration. Related is the utilization of recreation programs/activities in conjunction with education, health, day care, senior care, and other pursuits outside the realm of traditional park facilities management.

- Demand for non-traditional recreation facilities. Public trails, pathways, linear parkways (see Recreation Policies), and natural open space are very different from conventional parks. Cultural facilities represent of new and different recreational responsibilities represents a challenge to the City's recreation providers.

- Community demographics and development patterns, whose shifts and changes inevitably cause public demand for changes in facilities and services. Population growth and changes in land use patterns are powerful contributing forces – an existing park may pass through several generations of primary users in a short time, from active tots to teens to senior care.

- Determining needs, standards, and levels of service. The dynamics of community demographics and recreational preferences require constant re-evaluation of pre-conceived service standards.

- Private recreation opportunities and facilities may compete with or supplant those offered by the public sector, raising questions of what to offer, to whom, where, and in what quantities.

Inter-organizational Coordination

As Grass Valley enhances its parks/recreation facilities and services over the next 20 years, substantial coordination with outside organizations, governmental and private, is imperative. Involvement with Nevada County is essential to assure that the needs of citizens in the entire Community Region (Sphere of Influence, Planning Area) are addressed in a coordinated manner. Implementation of a Trails Network will require close coordination with Nevada County, the Nevada Irrigation District, the California Department of Parks and Recreation, Sierra College and other agencies, if for no other reason than to assure access to public and quasi-public easements and right-of-ways. Similarly, private organizations

(Nevada County Land Trust, for example) have much to offer. Broader responsibilities and expanded "scope of services" will necessitate cooperation with outside entities.

RECREATION POLICIES

1-RP Provide parks and open space of different sizes and types to respond to the needs of a diverse population, including trails for pedestrian and equestrian use, bicycle pathways, linear parkways and park-like natural areas.
2-RP Increase the standard of park acreage to population.
3-RP Distinguish neighborhood park needs from community and regional park needs.
4-RP Establish a City-sponsored open space district to operate and manage existing and future open space resources.
5-RP Formalize and enhance walking trails in existing City parks.
6-RP Provide non-motorized linkages between parks and open spaces.
7-RP Include a map in the General Plan designating a trails network for the Planning Area.
8-RP Cooperate with other jurisdictions to address regional park and recreation needs.
9-RP Develop performing arts in various venues, including a performing arts center.
10-RP Expand the existing library as a cultural venue.
11-RP Create a public plaza in downtown for community events and activities.
12-RP Support efforts to establish a community center for mixed and a variety of uses.

PARK AND RECREATION PLANNING

Grass Valley will prepare a Park and Recreation System Master Plan in 1999 and 2000. The Master Plan will establish policy, set standards, identify and prioritize capital investments (land, facilities), and address operational and fiscal matters. The Master Plan will be reviewed and updated periodically.

The basic role of the General Plan, particularly the Recreation Element, is to provide an overall policy framework within which more specific "functional" plans and actions occur. This Recreation Element, however, both establishes a policy framework and dictates some specifics (standards, park needs, creation and description of the Trails Network). The Master Plan process must have flexibility, but any departure from the General Plan shall require a General Plan amendment at the time of Master Plan adoption.

PARK CLASSIFICATION AND STANDARDS

The following classification system and standards are established, pending revision by the Park and Recreation System Master Plan and appropriate amendment to this General Plan.

- Community Parks
  Service area: City-wide and unincorporated Planning Area
  Acreage standard: 5 acres/1,000 population
  Minimum size: 40 acres
- Neighborhood Parks
  Service area: ½ mile radius (based on walking distance)
  Acreage standard: 5 acres/1,000 population
  Minimum size: 1 acre
- Regional Parks
  Service area: Larger than Planning Area
  Acreage standard: None
  Minimum size: No standard

- Specialized Areas and Special Purpose Parks
  Service area: Variable
  Acreage standard: No standard
  Minimum size: No standard

ADDITIONAL PARK NEEDS

The following are identified as high priority park needs, subject to further analysis during the Parks and Recreation System Master Plan process:

- Glenbrook Basin neighborhood park
- Infill areas neighborhood parks, as determined by radius standard
- Loma Rica Community Park
- Neighborhood parks in all Special Development Areas, when needed
- East Bennett Street neighborhood park, in conjunction with annexation and development of residential area designated on Land Use Plan map.
- Downtown Plaza (special purpose park).
- Provision for existing and future parks to serve as "community gathering places."

Recreational Trails Network Diagram and Description

Creation of a pedestrian network serving Grass Valley and the Planning Area is a high priority of this General Plan. Figure 8-2, the Trails-Sidewalks Network Concept Plan map, shows the conceptual "multi-purpose" trail-sidewalk system directed by policies in the Recreation Element, Circulation Element, and Conservation/Open Space Element.

Versions of the trails concept have been part of Grass Valley's General Plans since the first General Plan was adopted in August, 1966. Little progress had been made in thirty-three years.

The Trails-Sidewalks Network is multi-purpose in that it serves both the utilitarian and recreational needs. It is for the use of pedestrians, bicyclists, and equestrians, though not all segments are intended for use by all. The concept plan provides for a comprehensive system, not just isolated segments, for non-motorized vehicular use.

Following is a summary of features of the trails portion of the Trails-Sidewalks Network:

- An integrated pedestrian/bicycle/equestrian "greenway" system for recreation and non-motorized vehicular transportation uses.

- Combines natural trails, where appropriate, with sidewalks set back from roadways in areas where trails are impractical.

- Utilizes public lands and right-of-way to the minimum extent.

- Utilizes donations, easement dedications, development rights concessions, and "friendly acquisition" of private land.

- Uses siting and design techniques to reduce public access intrusion and visual impacts on private land.

- Courses through designated open space and natural areas, providing access to Grass Valley's natural amenities.

- Provides linkages between neighborhoods, recreation areas and parks, commercial, employment, and cultural centers.

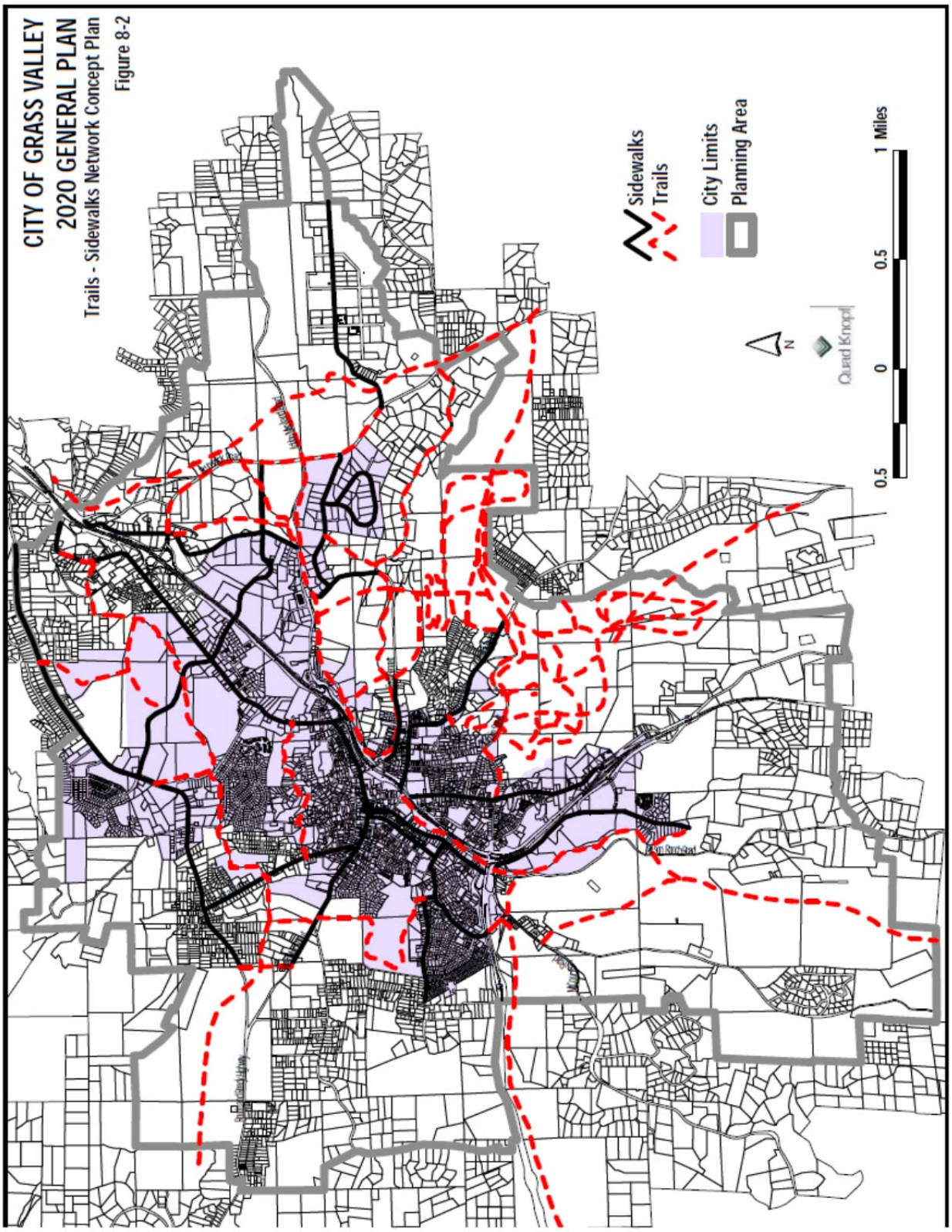
- Ties into external networks, including the Empire Mine State trails and the Nevada County Trail System.

- Sidewalk segments: to be constructed along at least one side of all existing arterials (principle and minor) and collectors; to be constructed on both sides of all new streets and roads other than freeways and expressways; to be separated by a minimum of 8' from the edge of paved roadways, except in prohibitive circumstances.

- Trails segments: to occupy easements of 10'-20', unless exceptional circumstances dictate narrower widths; all segments available to pedestrians, wider segments provide for separate bicycle routes, equestrian routes determined selectively.

- Trail segments as shown in Trails-Sidewalks Network Concept Plan Include Litton Trail, Sierra College, Wolf Creek corridor, South Fork Wolf Creek corridor, the Nevada County Narrow Gauge Railroad right-of-way, and Nevada Irrigation District canals.

- Network extensions and dedications to be required in future annexation areas. Nevada County cooperation and co-development of the Network in unincorporated areas prior to annexation is invited.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Trails - Sidewalks Network Concept Plan
Figure 8-2
Sidewalks
Trails
City Limits
Planning Area
N
Quad Knopf
0.5
0
0.5
1 Miles

RECREATION IMPLEMENTATION ACTION AND STRATEGIES

1-RI Prepare Parks and Recreation System Master Plan, incorporating appropriate provisions of the General Plan (including the Trails-Sidewalks Network concept Plan) into the Master Plan. Establish clear priorities and phasing plans as part of the Master Plan process.

2-RI Establish a formal mechanism for ongoing coordination with Nevada County, to include but not be limited to joint facility funding; agreement on plans, programs, services, and activities.

3-RI Establish and utilize neighborhood planning and participation to determine localized needs and desires for facilities and services.

4-RI Pursue alternatives to city acquisition and maintenance of recreation areas via homeowners associations, assessment districts, and private organizations.

5-RI Provide a focal point and coordinating mechanism for the efforts of non-governmental entities involved in the acquisition of property or property rights related to City park and recreational facilities.

6-RI Reserve land or entitlements in advance of need. Accept dedications and donations if potentially useful for future facilities.

7-RI Inform the general public of recreation-related facilities, services, and future plans, and actively solicit public opinion in return.

8-RI Assign full responsibility to the Parks and Recreation Commission for recreation and related planning, programming, and administration.

Chapter Nine

Historical Element

CHAPTER NINE
HISTORICAL ELEMENT

The Historical Element is an optional General Plan Element. Previous Grass Valley General Plans have placed historic considerations into the Urban Design Element, thus emphasizing solely the architectural and structural aspects of the City's history. Creation of a separate Historical Element in the General Plan acknowledges a broader role for historical appreciation in the life of Grass Valley, a community highly conscious of its colorful past.

Historic appreciation is the key to historic preservation. The Historical Element first presents a brief overview of historical resources, and community activities to preserve and protect those resources. Following are historical goals and objectives adopted as part of this General Plan. Next are adopted policies and implementation actions and strategies.

Preparation of this Historical Element included in-depth historical and cultural research and records survey. Documented historical and cultural features, lore, and historical appearance all contribute to the historical and cultural environment. Research methodology, text, and lists of historic features are available in City files and in the General Plan Background Report (Quad Knopf, November, 1998), a copy of which is available for inspection at the Grass Valley Community Development Department.

GRASS VALLEY'S HISTORIC RESOURCES AND PROGRAMS

Grass Valley has a rich historical heritage from the California gold rush of 1849, through the tumultuous mining period which followed. The last active gold mine (until the 1990's) closed in 1956, ending 107 years of continuous production. Many valuable historical resources still remain as a reminder of the City's legacy.

Rather than setting aside historic structures and districts as quaint relics or museum pieces, Grass Valley prides itself on the continued use and enjoyment of old homes, hotels, saloons, and other structures as part of the community "fabric".

Grass Valley's historical mining town atmosphere is an important economic generator, luring tourists and local residents. Improvements at the Empire Mine State Park will heighten Grass Valley's attractiveness to the growing historical tourism industry.

Above and beyond economic considerations, a strong sense of history is a true community attribute. Many residents of Grass Valley and vicinity equate the town's historic character with the area's quality of life. There exists growing interest within the community in protecting and restoring continuity with early Grass Valley and its lore, through preservation of historical landmarks and resources. Age and environment have taken their toll on the old buildings of Grass Valley. Many are maintained in excellent condition, but others need major maintenance, restoration, or rehabilitation for protection of their historical features, for health and safety, and to improve their convenience and function in a modern economy.

A Façade Improvement Program and the Community Development Block Grant Program have been implemented by the City to assist owners in structural restoration and rehabilitation. The City of Grass Valley Historical Commission was established by the City Council in 1994, with a goal of identifying and

inventorying historical landmarks and resources. The Commission has initiated a Heritage Home Awards Program, involving annual awards to owners who have restored or rehabilitated historically and architecturally significant homes within the original 1872 Townsite.

The "Grass Valley Style" of architecture is distinctive. It is characterized by covered sidewalks or porches, narrowly proportioned windows and doors, iron shutters, and materials of brick, wood, natural stone, and cast iron. The style is characterized by a human scale relationship between the old buildings and the narrow streets. Covered sidewalks in commercial areas and wide porches around residences provide shade during summer and shelter from rain and snow in winter.

Buildings in Grass Valley today are eclectic mix of architectural styles constructed over a period of years from 1850 to the present. The old "Grass Valley Style" may be replicated in new buildings by using the old proportions and details of windows and doors, but using modern methods and materials reproduced to resemble original materials. Examples of recent restorations are buildings in the Downtown Historical District at 146 and 126 Mill Street (Figure 9-1).

Some residential neighborhoods in Grass Valley have retained their original character and reflect the cultural backgrounds of the original residents. Included are:

- Mill Street in the area of Echo Hill and Gold Hill, where many miner's cottage remain.
- Between South Church Street and South School Street and the West main area of Nob Hill, occupied by stately Victorian homes once owned by mine owners, lawyers, and doctors.
- South Auburn Street, between Winchester Hill and Kate Hayes Hill, a mixture of Victorians, cottages, Tudor style homes and craftsman style bungalows once were home to merchants, carpenters, and teamsters.
- Along Bennett Street in the Pike Flat area east of Highway 20/49, where there is a mixture of homes from stately Victorians to miner's cottages built in the 1870's and 1880's by or for miners and employees and teamsters (freight haulers and wagon drivers) working on the Nevada County Narrow Gauge Railroad.
- Eureka Heights area north of Main Street between North Auburn, Eureka, and Murphy Streets where the topography is quite steep and the lots are small with small Victorian cottages formerly inhabited by miners, merchants, masons, and carpenters.

Figure 3-7 (in Land Use Element) depicts Grass Valley's neighborhoods, many of which have historically significant origins. Figure 9-2 shows the original 1872 Townsite.

HISTORICAL GOAL AND OBJECTIVES

Goal…

- *Conserve and enhance the historical identity of Grass Valley.*

1-HG Conserve and enhance the historical identity of Grass Valley.

1-HO Development and continuation of civic historic protection efforts.
2-HO Preservation of buildings of historic and/or architectural merit.

HISTORICAL POLICIES

1-HP Delineate and describe Grass Valley's neighborhoods.

2-HP Identify and record historic neighborhoods and their characteristics in order to protect and preserve those characteristics.

3-HP Establish appropriate design standards and elements that complement Grass Valley's historic heritage in newly developing areas.

4-HP Enhance the appearance of City entryways, commercial areas, and streetscapes, in part through the use of elements in the design standards that complement Grass Valley's historic heritage.

5-HP Place emphasis on preservation and restoration within the 1872 Townsite and 1893 and 1894 annexation areas.

6-HP Encourage maintenance, rehabilitation, renovation, and restoration of older homes utilizing the Heritage Home Awards and other programs.

7-HP Rehabilitate older commercial areas utilizing Façade Improvements Program and other programs.

8-HP Investigate and implement procedures to protect historic structures from demolition.

9-HP Inform developers, builders and design professionals of Grass Valley's community design standards and preferences, using brochures, photographic displays and other illustrative techniques.

10-HP Where historic and prehistoric cultural resources have been identified, the City shall require that development be designed to protect such resources from damage, destruction, or defacement.

11-HP If previously undiscovered cultural resources or human remains are encountered during construction or excavation, the procedures identified in Section 15064.5 of the CEQA Guidelines shall be followed.

HISTORICAL IMPLEMENTATION ACTIONS AND STRATEGIES

1-HI Maintain a Historic Resource Ordinance and active programs to implement City policy for historic conservation and enhancement.

2-HI Continue to encourage the Grass Valley Historical Commission's inventory of historical landmarks and sites within the 1872 Townsite.

3-HI Utilize the results of the Grass Valley Historical Commission's inventory of historical landmarks and sites to preserve and enhance resources within the 1872 Townsite.

4-HI Expand the "historical district" to include both sides of West Main Street between Church Street and Auburn Street and the north side of East Main Street between North Auburn Street and Washington Street.

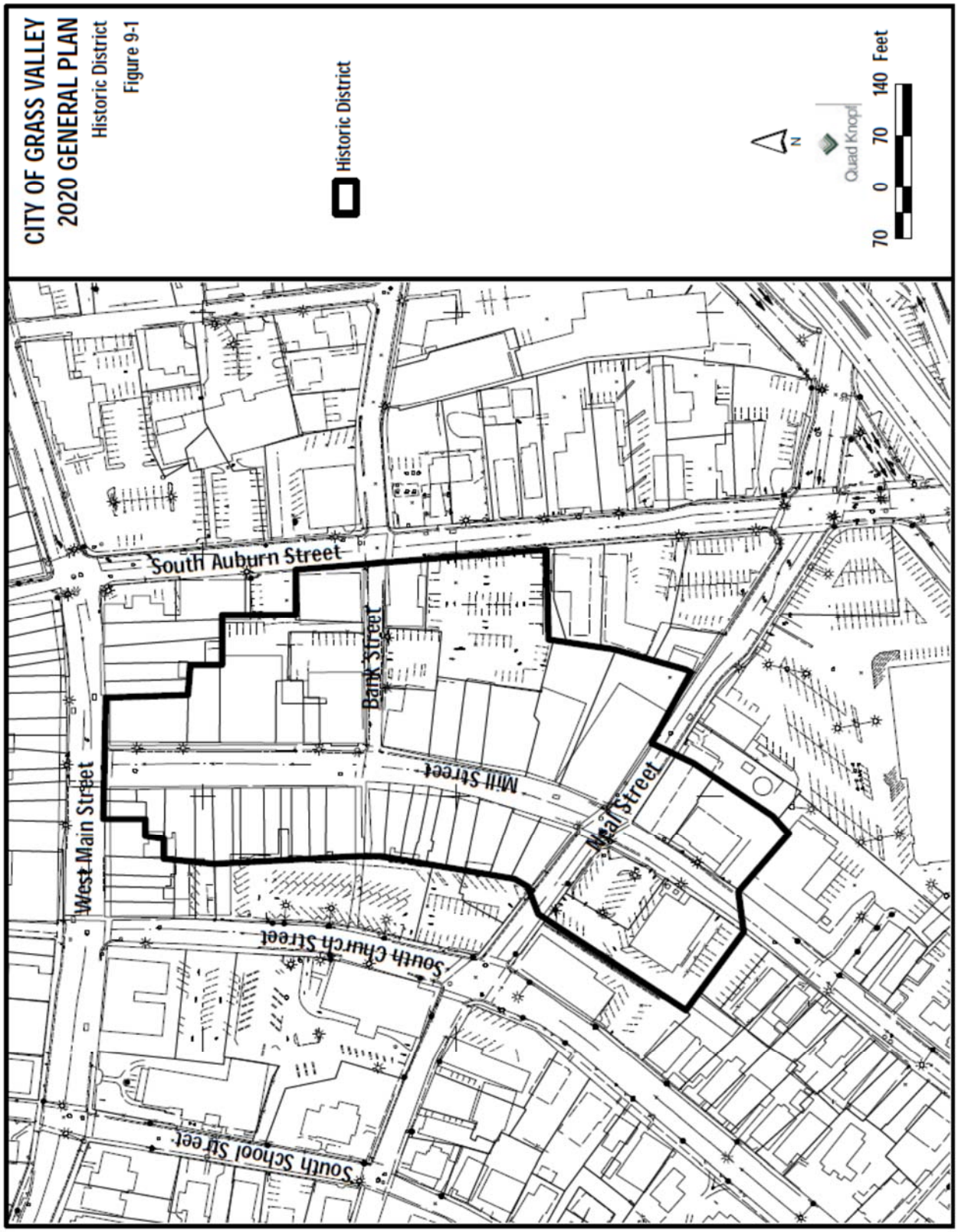
5-HI Require new and restored/rehabilitated buildings in the historical district to adhere to design standards reflecting the city core's palette, building materials, and architectural elements.

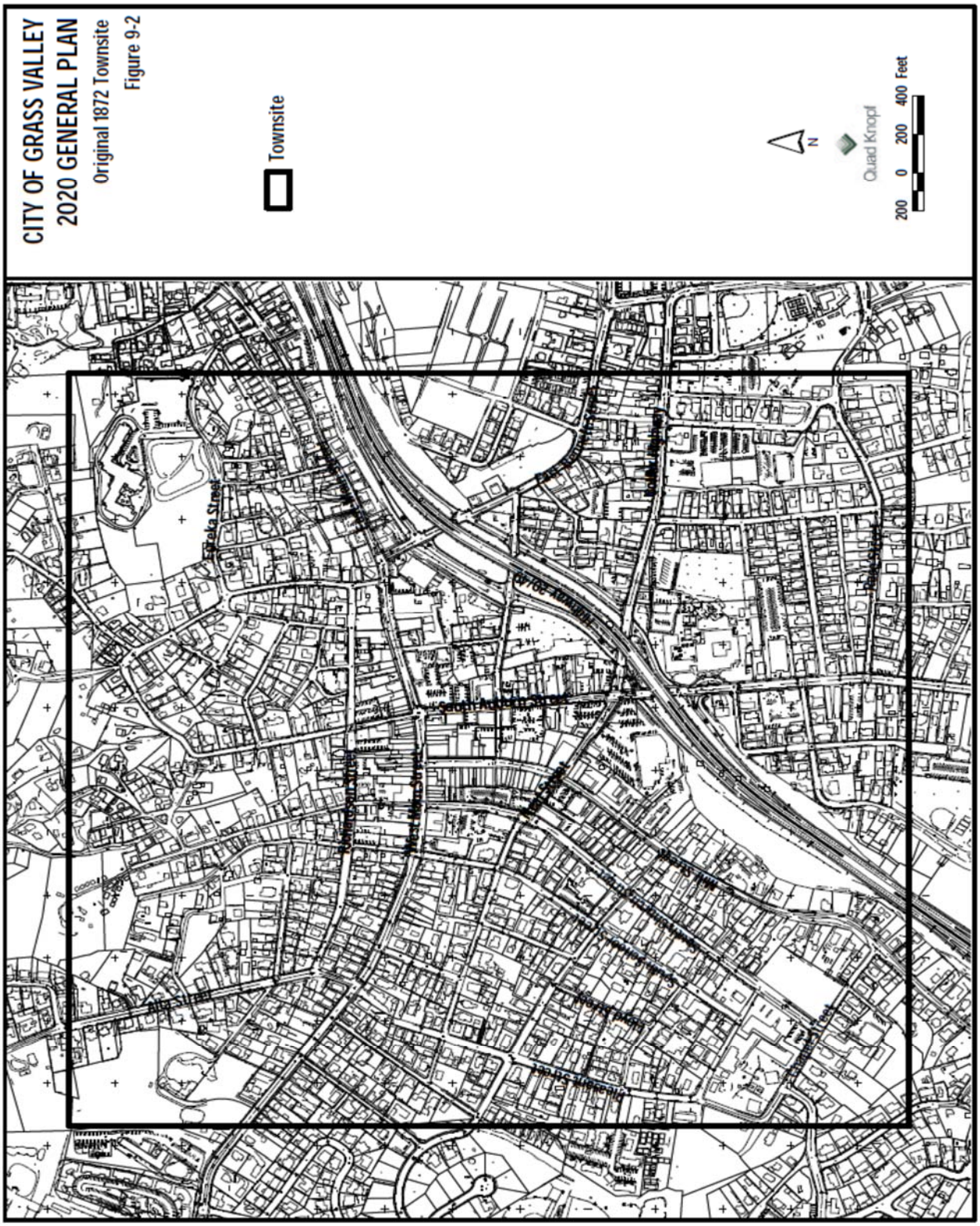
6-HI Use the Neighborhood map to assist private developers and the City in preserving and enhancing neighborhood identity related to historic/cultural features. Define and describe the distinctive features and characteristics to be preserved and enhanced in specific neighborhoods.

7-HI Continue to support the Historical Commission's Heritage Home Award Program.

8-HI Initiate and support events and activities designed to give residents and visitors an appreciation of Grass Valley's historical and cultural heritage.

9-HI Continue to support the Façade Improvement Program and Community Development Block Grant Program to assist in restoration and preservation of historical features.


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Historic District
Figure 9-1
Historic District
N
Quad Knopf
70 0 70 140 Feet
South Auburn Street
Bank Street
Mill Street
Neal Street
West Main Street
South Church Street
South School Street


CITY OF GRASS VALLEY
2020 GENERAL PLAN
Original 1872 Townsite
Figure 9-2
Townsite
N
Quad Knopf
200 0 200 400 Feet
Neka Street

Chapter Ten

Community Design Element

CHAPTER TEN
COMMUNITY DESIGN ELEMENT

THE PURPOSE OF COMMUNITY DESIGN AND THE COMMUNITY DESIGN ELEMENT

Community Design is about community building. It concerns the built character, order, and psyche of the City. It is the interrelationship of various components (buildings, the transportation system, open space, vistas, human interaction between each other and the natural environment, heritage, and economics) that when put together make up a total community.

Community Design concerns range from how to build neighborhoods to planning pedestrian ways safe for children to walk to school or for the elderly to cross the street. Design addresses key issues as how to maintain the downtown area as a place where local people as well as visitors want to go. Good Community Design respects the natural environment as well as economic gain, and strives to create places for people to feel comfortable with each other and with the built environment.

The relationships between Grass Valley's natural setting and community development are fragile. The Community Design Element is concerned with the preservation of the City's historical heritage while accommodating growth and revitalization. It is a concerted effort to realize the positive attributes of the City, to enhance those attributes, and to assure that they influence the new growth and infill areas in a positive way.

COMMUNITY DESIGN GOALS AND OBJECTIVES

Goals…

- *Preserve and enhance the existing community*
- *Conserve community attributes that provide a sense of the natural setting and continuity with the past*
- *Assure that new development is sensitive to and strengthens the existing built and natural environment.*
- *Create, maintain and enhance civic places.*

1-CDG Preserve and enhance the existing community.

1-CDO Maintenance of Downtown as the heart of the planning area.
2-CDO Preservation of notable landmarks, streetscape and other areas of architectural or aesthetic value providing continuity with the past.
3-CDO Recognition and protection of major views in the planning area, with particular attention to notable buildings, open space, hillsides, valleys, ridgelines, and forested views.
4-CDO Recognition, protection and reinforcement of the existing street pattern, which represents and conforms to the existing natural terrain rather than intruding into the natural topography.
5-CDO Improvement of automobile circulation and/or circulation for pedestrian and bicycles.
6-CDO Improvement of the appearance of entrances to the community, Downtown, other neighborhoods and commercial districts.

2-CDG Conserve community attributes that provide a sense of the natural setting and continuity with the past.

- **7-CDO** Preservation of remaining unbuildable spaces in a state that complements the community.
- **8-CDO** Recognition and reinforcement of natural boundaries of neighborhoods and commercial districts.

3-CDG Assure that new development is sensitive to and strengthens the existing built and natural environment.

- **9-CDO** Provision of a variety of housing types and designs in new residential developments.
- **10-CDO** New development containing higher densities in clustered development patterns that minimize infrastructure requirements and maximize open space.
- **11-CDO** Infill development that is consistent with historic development patterns in terms of scale, design and material.
- **12-CDO** Creation of new development areas that is unique and interesting.
- **13-CDO** High quality streetscape and building design in all new development.
- **14-CDO** Development patterns that promote and protect functional open spaces.

4-CDG Create, maintain and enhance civic places.

- **15-CDO** Maintenance and enhancement of Downtown as the region's civic and cultural hub.
- **16-CDO** Creation of special places for social interaction.
- **17-CDO** Design of new development and infill projects that create a safe and visually interesting environment for the residents and visitors of Grass Valley.
- **18-CDO** Improvements of existing streetscape design.

ASPECTS OF COMMUNITY DESIGN IN THE BUILT ENVIRONMENT

Downtown and Vicinity

The downtown area and adjoining residential and commercial areas have a unique urban feeling and sense of history. As new development, redevelopment or rehabilitation occurs it is important to reflect on and respect that heritage through sensitive design. Downtown needs to be the community's gathering place where people can mingle and where culture can be easily found.

Historic Areas

Historic areas and individual sites are scattered throughout Grass Valley. They provide a sense of continuity with the past and are a valuable resource that attracts commerce to the community.

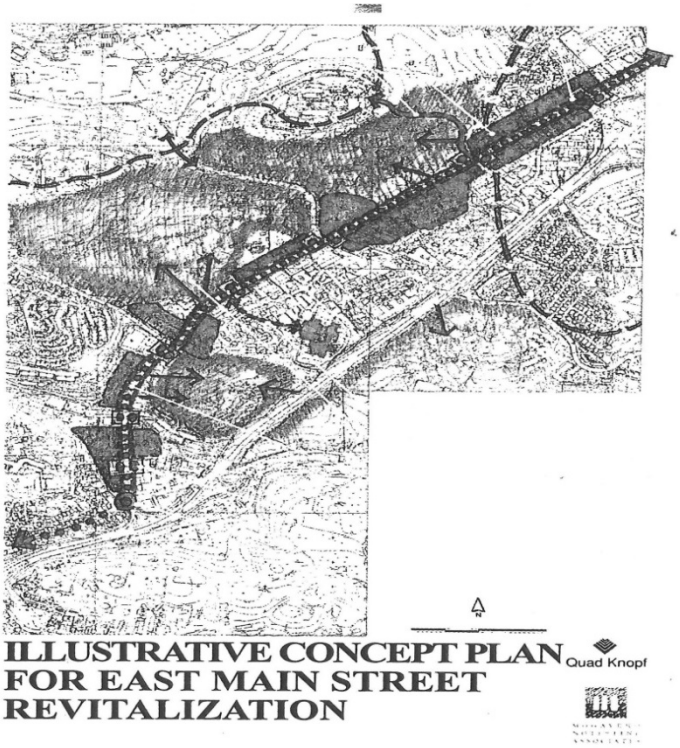
Interface Between Older and New Developments

New development must respect the scale and intensity of adjacent older development. New developments should provide physical connections through streets, lanes and/or trails wherever possible so that pedestrians, bicycles, automobiles and transit can move safely and easily between local destinations, and between home and work.

Infill, Redevelopment, and Older Area Revitalization

Infill and reuse opportunities will become increasingly important as Grass Valley's new phase of compact development begins. This compact development maximizes the efficient use of land and infrastructure and avoids the intrusion of urban uses on the natural landscape. Infill and reuse strategies must be major components of economic development and redevelopment planning.

Infill uses, by definition, are additions to the existing community and must respect the pre-existing uses, patterns, and community aesthetics. Wherever possible, infill strategies should create areas which contain mixtures of complementary uses that are within safe, easy and convenient walking distance of each other.



Higher Density Residential Developments

An approach to achieving compact development is to provide for higher density residential developments. This type of development pattern does not refer to multi-family housing, even single family projects can be provided at higher density. Multi-family developments should be scattered throughout the community, not concentrated in any one area, with decreasing intensity as distance from commercial core areas increases. Multi-family projects should respect the development pattern, scale, and design prevalent in neighborhoods in which they are located.

Mixed Use Projects and Areas

All neighborhoods should provide for a full complement of uses such as civic facilities, housing, parks, schools, shops, and work places to support the daily lives of residents. Careful consideration of potential conflicts between uses must be taken in the development of the zoning ordinance, consolidation of the design guidelines and in the design of individual projects.

Streets, Sidewalks, Paths, and Trails

Active street environments promote positive behavior and safety. Residents and visitors alike should be able to walk, ride a bicycle or drive a car in safety and comfort. Streets should be designed to ensure appropriate behavior by drivers and to accommodate other modes of transportation. A finer network of lanes and streets is preferred over collector and arterial streets. Sidewalks, trails and paths should be frequent and well shaded and provide accommodations for the young and old alike.

Public Gathering Places

Many areas of the City have an identifiable and unique sense of place. These characteristics should be preserved and enhanced in established areas and provided for in areas lacking them and in new growth areas. In designing our streets, the community's primary gathering places, the comfort of people is the highest priority. This can be done by providing signs at eye level, human scaled street lighting, creation of plazas and mini-parks, wide sidewalks protected from the flow of traffic, benches, shade, pedestrian-controlled crosswalks, and buildings that do not dwarf the pedestrian.

Parks and Open Spaces

A full range of usable open space choices, from neighborhood and regional parks to trails and creeks, should be available and easily accessible to every resident in the community. Existing natural features should be maintained and enhanced, not only for aesthetic reasons, but also because they enhance property values and encourage congregation outdoors. New development should include preservation of the natural environment and the establishment of new outdoor spaces.

Community Design Issues

The following discussions of subareas describe areas in the community and their community design issues.

The **Historic Downtown** core is a combination of commercial, civic and residential users. The commercial district is abundant with buildings constructed over the past 150 years. The eastern section of Downtown (bounded by South Auburn, East Main and Highway 20/49) is a mixture of the old and the new, newer buildings and styles including City Hall, Police Station, Post Office, the Free Flight building and Union 76 gas station. Brockington Manor is an example of more contemporary architecture (quasi-southwest) not compatible with the Downtown. One newer building that is very sympathetic to the historic character of Downtown is the Wells Fargo Bank building.

The entrances to Downtown via South Auburn Street and Colfax Avenue are not at all compatible with the historic nature of the remainder of Downtown. This area should be the subject of a major beautification effort to lure the visitor into Downtown.

To the north, south and west of the commercial core are the historic residential neighborhoods. These neighborhoods are best characterized by Victorian era homes on small lots along narrow streets. The historic quality of these neighborhoods needs to be protected through the development of historic districts and the establishment of design criteria.

East Main Street from Idaho-Maryland Road northeastward is a strip commercial area developed since 1950. Other commercial areas were developed earlier along major transportation corridors. The areas have a combination of older highway commercial developments and more contemporary neighborhoods shopping centers. Most developments have parking lots between the building and the public right-of-way. The buildings do not reflect the historic character of the core area. The roadway right-of-ways are only partially improved and not particularly "pedestrian friendly". Revised development standards and design criteria should be developed specifically addressing such areas.

There are essentially two eras of **residential neighborhoods**, those built prior to 1950 and those built after 1950. Older neighborhoods were built closer to the core. Those built after 1950 were dispersed, some adjacent to the established areas and others with varying degrees of connection to the historic core.

The closer-in homes were built along streets that followed a terrain driven street grid pattern, were smaller in size, and had porches and less dominant garages (if any). A few were developed with alleys servicing the rear of the properties. Homes built further from the core are more traditional suburban type housing on curvilinear streets, with two car garages. Design standards which foster more traditional design and development patterns would make newer developments more compatible with the historic quality of Grass Valley.

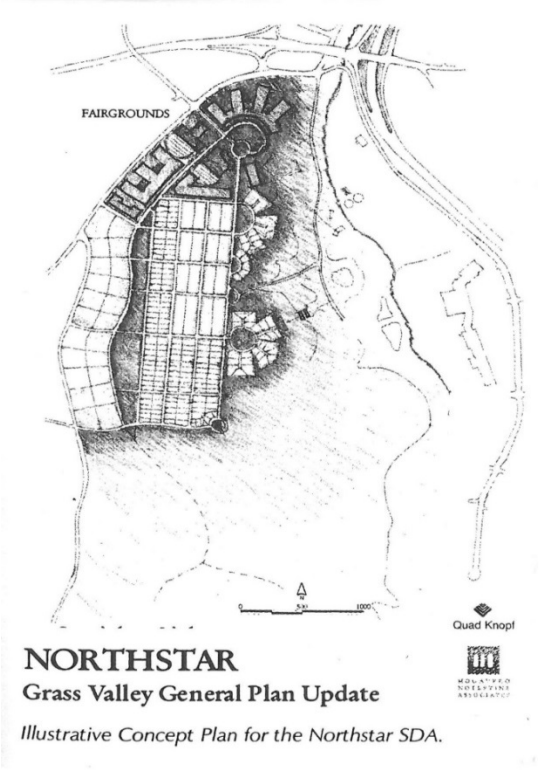
With the exception of mining, **industrial areas and business parks** are relatively new to Grass Valley. They are located in three general locations: South Auburn Street, Idaho-Maryland Road (including Whispering Pines) and Sierra College Drive. All three areas are relatively unconnected to the historic core.

Some of the business park and industrial areas have been developed as planned "park" subdivisions with development guidelines. Others are independent individual projects.

The "park" subdivisions have large setbacks and off-street parking requirements. Because of setback standards and sloping terrain, many buildings and parking areas are not evident from surrounding streets. The buildings are generally typical of late 20th Century suburban commercial buildings except there are more frequency of unpainted wood siding and metal roofing than is typical of the Sierra Foothills.

These areas provide an excellent opportunity for infill development allowing for the accommodation of new employment opportunities while conserving precious lands.

The 2020 General Plan designates four Special Development Areas (SDAs) for detailed planning and annexation: North Star, Loma Rica Ranch, Kenny Ranch, and the Bear River Mill Site. Planning for SDAs presents an opportunity to approach new growth in Grass Valley in a manner that comprehensively addresses issues that result from new development.



Illustrative Concept Plan for the Northstar SDA.

If the SDAs are planned properly, there can be a substantial reduction in development costs, long-term maintenance costs, and environmental impacts as well as a substantial enhancement in the quality of life within the annexed areas and within Grass Valley as a whole.

For the three SDAs with current annexation agreements with the City of Grass Valley, the following suggestions are made:

Use of Clustering and grouping: SDAs could be developed with the same quantity of proposed uses but in a substantially more compact form, perhaps allowing for more open space than presently contemplated.

Reduced infrastructure development costs: Utilizing more compact development forms would result in a reduction in the amount of development infrastructure cost by thirty to sixty percent.

Village Centers: With a more compact development form and greater open space buffers, the annexations could be developed as villages that would support a more

pleasant community ambience, enhance quality of life, and a dramatic reduction in automobile trips (and other environmental impacts). A village form would greatly reduce the quantity of trips internal to the SDAs, and enhance the potential for transit links to other parts of the community.

Buildings and infrastructure guidelines: Guidelines should be developed for the SDAs to promote higher quality building design and enhanced accessibility for pedestrians within the village.

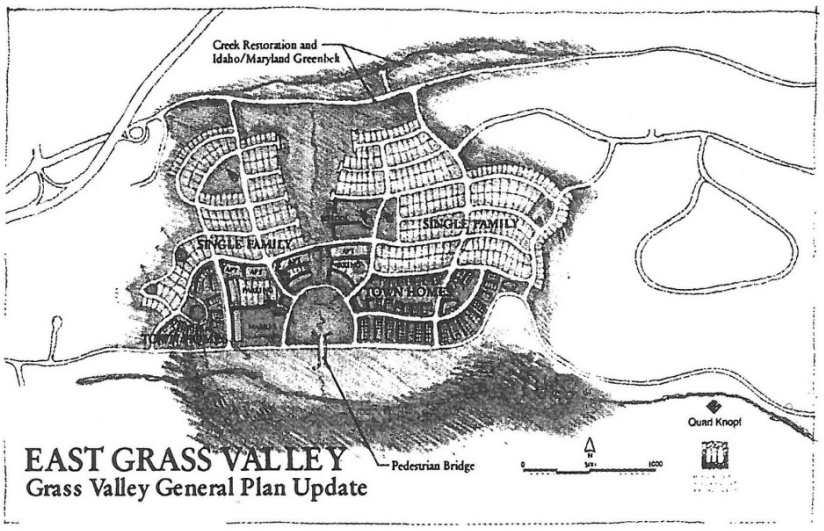
The Community Design Environment in 2020

A magnificent environment, a proud history and a citizenry committed to providing the future with a quality of life second to none – these are a few of the many assets Grass Valley possesses. These same assets provide a strong foundation for the City to realize its vision for the future.

Grass Valley's small town, rural character and its sense of community create an invisible bond between its historic past and its vibrant future that is realized in the 2020 General Plan. The current residents of Grass Valley are the caretakers of the future and are creating a bridge connecting the dreams of their parent's generation to the hopes they have for their children and their children's children.

Many changes can be anticipated in the next twenty years – an increase in population, changing demographics and economics. It is the responsibility, as well as the privilege, of current residents to launch Grass Valley into the 21st century by protecting the environment, strengthening the community structure and nourishing the spirit of its citizens.

This will be accomplished, as stated in the goals of the 2020 General Plan, through infill development, neighborhood integrity, sensitive community design, the creation of community and neighborhood gathering places, and the fostering of economic development.



Illustrative Concept Plan for East Grass Valley development site.

The hills, streams, trees and meadows of Grass Valley provide a perfect backdrop as well as the foundation for the City's vision of the future. This fragile environment is the basis of the superior quality of life in the area and must be protected through wise land use planning.

To achieve this, one of the key elements in Grass Valley's General Plan focuses on infill development and increased residential densities in selected locations. By increasing density, open space will be maximized and the cost of new infrastructure minimized.

To accommodate an increasing population, a variety of new housing types and designs will be encouraged. Forty-five percent of new housing will be affordable, multi-family units. These multi-family developments will be scattered throughout the city, not concentrated in areas or neighborhoods. Infill

development will respond to the higher percentage of seniors in the population. Senior housing and care facilities will multiply.

Residential areas of historic character surrounding Downtown will have design standards to maintain the integrity of the existing neighborhoods. On-going renovation and the implementation of code enforcement will keep these residential areas vital and attractive.

New infill development within established areas will be consistent with historical patterns in terms of scale, design and materials and follow a terrain-driven street grid pattern.

North Star, Loma Rica Ranch, Kenny Ranch, and the Bear River Mill site will be annexed. High density housing will create vibrant villages which foster a community ambiance and enhance quality of life. Infill development and new planning principles will create a higher percentage of open space which will be complemented by high quality streetscape and building design.

As part of the infill process, mixed-use development will become more common. This will allow neighborhoods easier access to civic facilities, parks, school, shopping and services. Neighborhoods will not be isolated residential islands, but will be connected to commercial areas by a network of streets, lanes, trails, sidewalks and paths.

Alternative transportation will increase in popularity. Travel-ways will conform to the terrain. Traffic will be slower, calmer and less dangerous to pedestrians. Residents and visitors can walk, ride a bike or drive a car in safety and comfort. Sidewalks, trails and paths are frequent, well shaded and provide areas for rest relaxation.

A primary destination for residents will be the Downtown. The heart of Grass Valley, the Downtown continues to be the community's principal gathering place where people can mingle and socialize. Entertainment and new retail facilities as well as cultural attractions will be found here.

The entire area will be designated as a historic district giving the area a unique urban feeling and sense of history. Interesting turn of the century buildings will provide the aesthetic foundation and combine commercial, civic and residential uses. All city and public facilities will be located here.

The entrances to the Downtown via South Auburn Street and Colfax Avenue will be attractive to visitors as well as residents through façade improvement programs and design and redevelopment. Streetscapes will visually enhance the area and improve pedestrian access. The comfort of citizens will be the highest priority and public gathering places will be accented by wide sidewalks, benches, shaded areas, pedestrian controlled crosswalks, eye level signs and human scaled street lighting.

All public and private development projects will have areas for public gatherings and interaction. There will be a full range of usable open spaces and recreational choices ranging from neighborhood and regional parks to trails and creeks. The City parks will be expanded to include more natural areas, open space and passive parks as well as active parks and playing fields.

Natural features will be maintained and enhanced for aesthetics and to protect property values. Views, open spaces, hillsides, valleys, ridgelines, forested views, and notable buildings will have their views protected. Land that is not buildable will be preserved in its natural state.

The natural environment will be protected by setting aside environmentally sensitive areas, preserving open spaces, developing parks and nature trails, and reclaiming abused areas. Public and private support will assist in the creation of the protected riparian corridors. The Trails-Sidewalks Network will connect

outlying area with Downtown Grass Valley providing both recreation and transportation while assuring protection of wildlife habitats.

Grass Valley's beautiful natural environment and quality of life will be supported by its vibrant economy. The City will continue to be a regional economic and cultural hub for Western Nevada County, and its influence reach far beyond its physical boundaries. The growth of technology and high-tech businesses will make Grass Valley a preferred choice for companies wanting a higher quality of life for their employees. Small offices and in-home businesses have increased and provide important services both locally and throughout the area. Sierra College, the medical/health care sector, tourism and a growing senior population has sparked commercial growth in the area.

With the aging population the demand for medical and support services will be stimulated and many new medical related offices will be developed in the vicinity of the hospital.

In addition to increased commercial activity in established commercial areas, older commercial areas of the City will undergo redevelopment. Excellent opportunities for infill development will conserve precious land.

By linking Grass Valley's tradition-rich past with its vibrant future, the 2020 General Plan will provide residents with an incomparable quality of life that maintains its small town rural character and sense of community while also fulfilling its density as a cultural and economic hub of western Nevada County.

COMMUNITY DESIGN POLICIES

1-CDP Continue to implement programs, such as the façade improvement program and design review that maintain and enhance Downtown's historic character and commercial vitality.

2**-CDP** Establish a program to identify and protect viewsheds/view corridors, open space, including hillsides, valleys, ridgelines, forested views, and notable buildings.

3-CDP Modify city development standards to minimize alteration of existing terrain.

4-CDP Provide connections for automobiles, bicycles and/or pedestrians between neighborhoods and commercial districts when neighborhood safety and character are not compromised.

5-CDP Design and construct streetscape improvements along South Auburn Street and Colfax Avenue as they enter Downtown to enhance the area visually and to improve pedestrian access.

6-CDP Design and construct streetscape improvements at the south entrance to the community at Highway 49 to enhance the area visually.

7-CDP Inventory potentially unbuildable properties in an effort to determine highest and best use for such sites.

8-CDP Provide opportunities for attached housing units in single family residential areas, when attached housing will be consistent with established densities and neighborhood appearance.

9-CDP Continue to allow second units on lots in single family residential areas, subject to appropriate development standards and design criteria.

10-CDP Identify and place a map of neighborhoods in the General Plan.

11-CDP Provide connections for automobiles, bicycles and/or pedestrians in new development wherever needed to facilitate convenient access and connections with the larger community.

12-CDP Provide a mixture of residential unit designs in all major new residential development.

13-CDP Revise City street standards to minimize paved surface area, encourage slower vehicle speeds, and enhance pedestrian access and safety.

14-CDP Integrate natural areas for runoff detention in all major new development.

15-CDP Provide internal pedestrian and bicycle connections and connections to the broader planning area in all major new developments.

16-CDP Provide a mix of uses within walking distance in all major new development to promote pedestrian access and to provide definition of the area as a place.
17-CDP Assure adequate City design review of all new development.
18-CDP Endeavor to locate new entertainment and retail facilities in the Downtown area through redevelopment, public/private partnerships and other development tools.
19-CDP Retain existing public offices and facilities Downtown, including the Library, Post Office, Veterans Hall and City Hall.
20-CDP Design all future major public and private development projects to include areas for public gathering and interaction.
21-CDP Update and consolidate existing design guidelines providing specific criteria focusing on creating gathering places and safe areas for public interaction.
22-CDP Discourage gated communities and encourage open access through projects.

COMMUNITY DESIGN IMPLEMENTATION ACTION AND STRATEGIES

1-CDI Expand and refine Façade Improvement Program and City design review. Revise and consolidate the Design Review Guidelines.
2-CDI Amend the Downtown Historic District boundaries to coincide with the present boundaries of the Downtown Parking and Business Improvement District.
3-CDI Systematically inventory and map forested views. Establish a program to identify and protect viewsheds/view corridors, general open space, including hillsides, valleys and ridgelines, and notable buildings.
4-CDI Develop clear standards to minimize excessive grading and terrain modification on steep slopes and within environmentally sensitive areas.
5-CDI Identify and map areas where connections for autos, bicycles and/or pedestrians between neighborhoods and commercial districts are needed. Develop a capital improvement program to establish missing connections.
6-CDI Design and construct streetscape improvements along South Auburn Street and Colfax Avenue as they enter Downtown, and along 49 at the southern entrance to the City.
7-CDI Amend the zoning ordinance and other development codes to facilitate clustering, consistent with allowable densities and intensities.
8-CDI Revise City infrastructure development standards to minimize paved surface area, encourage slower vehicle speeds, enhance pedestrian access and safety, and integrate natural runoff detention and purification.
9-CDI Encourage the siting of new entertainment and retail facilities Downtown.
10-CDI Require shielding or downward direction of lighting and require that illumination be so arranged as to reflect away from adjoining properties.
11-CDI Develop and implement design guidelines for four-lane roadways, to ensure that aesthetic considerations are fully incorporated into any plans for widening streets and roads.

Chapter Eleven

Glossary

CHAPTER ELEVEN
GLOSSARY

The glossary of terms contains abbreviations and terms commonly used in urban planning and development parlance. Many of these abbreviations and terms are used in the 2020 General Plan document, the General Plan Background Report (1998) prepared as part of the General Plan update process, the Draft and Final Environmental Reports accompanying the General Plan, and development ordinances, regulations, and guidelines administered by Grass Valley.

ABBREVIATIONS

- **Caltrans** California Department of Transportation
- **CDBG** Community Development Block Grant
- **CEQA** California Environmental Quality Act
- **COE** United States Army Corps of Engineers
- **EIR** Environmental Impact Report
- **HCD** Housing and Community Development (state)
- **HUD** United States Department of Housing and Urban Development
- **ISO** Insurance Services Office
- **LAFCo** Local Agency Action Formation Commission
- **LOS** Level of Service (traffic)
- **NCTC** Nevada County Transportation Commission
- **NID** Nevada Irrigation District
- **NSAQMD** Northern Sierra Air Quality Management District
- **PUD** Planned Unit Development
- **SMARA** Surface Mining and Reclamation Act
- **TDR** Transfer of Development Rights
- **TPZ** Timberland Preserve Zone
- **TSM** Transportation System Management
- **UBC** Uniform Building Code
- **UFC** Uniform Fire Code

DEFINITIONS

Access/Egress: The ability to enter a site from a roadway (access) and exit a site onto a roadway (egress) by motorized vehicle.

Acres, gross: The entire acreage of a site, used for density calculations.

Acres, net: The portion of a site remaining after public or private rights-of-way or other unbuildable areas is subtracted from the total acreage.

Airport Safety Areas: Zones delineated in Airport Comprehensive Land Use Plans (CLUPs) adjacent to airport runways, within which compatible and incompatible land uses are identified, based upon safety considerations.

Annexation: The extension of the city limits into unincorporated territory.

Appropriate: An act, condition, or state which is considered suitable.

Aquifer: Underground water-bearing strata that supplies well water.

Area Plan: General or Comprehensive type plan, though usually more detailed, for a defined portion of a jurisdiction (neighborhood, unincorporated community and surroundings, etc.).

Arterial: A major street carrying the traffic of local and collector streets to and from freeways and other major streets, with controlled intersections and generally providing direct access to properties.

Assessment District: An area within public agency's boundaries which received a special benefit from the construction of a public facility. An assessment district has no legal life and cannot act on its own. It enables property owners in a specific area to cause the construction of public facilities to maintain them by contributing their fair share of the construction and/or installation and operating costs.

Awning: A fixed frame fabric shelter supported entirely from the exterior wall of a building and capable of being cantilevered, retracted, folded, or collapsed against the face of a supporting building.

Bicycle Lane: A corridor expressly reserved for bicycles, existing on a street or roadway in addition to any lanes for use by motorized vehicles. Identified by the State of California as a Class II facility.

Bicycle Route: A paved route not on a street or roadway and expressly reserved for bicycles traversing an otherwise unpaved area. Bicycle routes may parallel roads but typically are separated from them by landscaping. Identified by the state as a Class I facility.

Bikeways: A term that encompasses bicycle lanes, bicycle routes and unpaved bicycle paths.

Big Box: Term with negative connotations describing relatively large, self-standing retail establishments characterized by a bland, warehouse-like architectural style and expansive parking lots for the exclusive use of store customers. Big Box establishments typically offer wide variety at low prices. However, they are criticized for their looks, relative size (scale), impacts on competitors, inability to "fit in" the fabric of nearby communities, and impacts on public facilities.

Buffer Zone: An area of land separating two distinct land uses which acts to soften or mitigate the effects of one land use on another.

Building: Any structure used or intended for supporting or sheltering any use or occupancy.

Business Park: The combination of a variety of businesses, from office to research and development to light industry to warehousing, located in structures built with open floor plans, so as to leave most interior improvements to the tenants to design to their needs.

California Environment Quality Act (CEQA): A state law requiring state and local agencies to regulate activities with consideration for environmental protection. If a proposed activity has the potential for an adverse significant environmental impact, an Environmental Impact Report (EIR) must be prepared.

California Land Conservation Act (Williamson Act): Provides for the creation of agricultural preserves to protect agricultural lands. Includes procedures for preferential tax assessment in exchange for release of development rights. (Government Code Sections 51200-51295).

Capital Improvement Program: A program administered by city government and reviewed by the Planning Commission, which schedules permanent improvements five or more years into the future. The program is generally reviewed annually, and the first year of the program is adopted in the city's annual budget.

Carrying Capacity: The level of land use, human activity or development for a specific area that can be accommodated permanently without an irreversible change in the quality of air, water, land or plant habitats. It may also refer to the upper limits beyond which the quality of human life, welfare, safety or community character within an area will be impaired. Carrying capacity is usually used to determine the potential of an area to absorb development.

Circulation: Refers to the overall movement of automobiles, pedestrians, bicyclists, equestrians, etc.

Cluster Development: Development in which a number of dwelling units are placed in closer proximity than usual, or are attached, with the purpose of retaining an abutting open space area.

Cogeneration: The harnessing of heat energy that is normally a waste byproduct of electricity generation. It has become more common in institutional and industrial applications and electric power plants, but may also be possible for large residential complexes.

Collector: A street for traffic moving between arterial and local streets, generally providing direct access to properties.

Community Development Block Grant (CDBG): A grant program administrated by the U.S. Department of Housing and Urban Development (HUD) and the State Department of Housing and Community Development (HCD). This grant provides money to cities and counties for housing and community development. Jurisdictions set their own program priorities within specified criteria. Smaller jurisdictions, such as Grass Valley, must compete for funds.

Community Park: Land with full public access intended to provide recreation opportunities beyond those supplied by neighborhood parks. Community parks are larger in scale than neighborhood parks but smaller than regional parks.

Compatible: Capable of existing together without conflict or ill effects.

Comprehensive Land Use Plan (CLUP): Airport and environs plans prepared by Airport Land Use Commissions and adopted by local governments, pursuant to State Law. Plan address airport expansion, noise/land use compatibility, and safety.

Comprehensive Plan: Counterpart of California's General Plan in many states. Regardless of terminology, such Plans enjoy the highest position in the hierarchy of plans and land use regulations, are long term in nature, and must address full range of "functional" considerations (land use, transportation, etc.).

Conservation: The management of natural resources to prevent waste, destruction or neglect.

Conservation Easement: Instrument of land ownership in which the rights to property development are separated from property ownership. Typically purchased under contract to limit or prevent development.

Consistent: Free from variation or contradiction. Programs in a General Plan are to be consistent, not contradictory or preferential. State law requires consistency between a general plan and implementation measures such as the zoning ordinance.

Constraint: Something that restricts limits or regulates a given course of action. It is used in a General Plan to describe "constraints" to development. Environmental constraints include, but are not limited to, steep slopes, poor soils and rare and endangered plant and animal species. Infrastructure constraints can include poor roads, antiquated water distribution system, a lack of service capacity of the local school district and a lack of a community sewer system.

Cut and Fill: The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the government agency having jurisdiction over the public function for which it will be used. Dedication for roads, parks, school sites or other public uses are often made conditions for approval of a development.

Dedication, in lieu of: Cash payments which may be required of an owner or developer as a substitute for a dedication of land, usually calculated in dollars per lot or square foot of land or building area, and referred to as in lieu contributions.

Density: the degree of grouping together of people or buildings. For housing, density is the number of permanent residential dwelling units per acre of land. Density can be managed through zoning in the following ways: minimum lot size requirements, floor area ratio, building coverage limits, setback and yard requirements, minimum house size requirements, ratio comparing number and types of housing units to land area, limits on units per acre, and other means. Maximum allowable density often serves as the major distinction between residential districts.

Density Bonus: The allocation of development rights that allows a parcel to accommodate additional square footage or additional residential units beyond the maximum for which the parcel is zoned, usually in exchange for the provision or preservation of an amenity at the same site or at another location (See "Development Rights, Transfer of").

Design Guidelines: Guidelines established by a local municipality intended to advise and direct the design of buildings, roads, parking facilities, etc.

Developable Acres, Net: The portion of a site remaining after removing or deducting public or private road rights-of-way and land not developable (see "Developable Land"), and which can then be built upon. Net acreage includes required yards or setback areas.

Developable Land: Land which is suitable as a location for structure and which can be developed free of or with minimal development constraints, and without disruption of, or significant impact on, natural resource areas.

Development: The physical extension and/or construction of urban land uses. Development activities include: subdivision of land; construction or alteration of structures, roads, utilities and other facilities.; grading,; deposit of refuse, debris or fill materials; and clearing of natural vegetation cover (with the exception of agricultural activities).

Development Rights: The selling of rights to develop land by a landowner who maintains fee-simple ownership of the land. The owner keeps the title but agrees to continue using the land as it has been used, and the holder of the development rights maintains the right to develop. Such rights usually are expressed in terms of density allowed under existing zoning.

Development Rights, Transfer of (TDR): Also known as "Transfer of Development Credits," a program which can relocate potential development from areas where proposed land use or environmental impacts are considered undesirable (the "donor" site) to another ("receiver") site chosen on the basis of its ability to accommodate additional units of development beyond that for which it was zoned, with minimal environmental, social, and aesthetic impacts (See "Development Rights").

Detention Dam or Basin: Dams may be classified according to the broad function they serve, such as storage, diversion or detention. Detention dams are constructed to retard flood runoff and minimize the effect of sudden floods. Detention dams fall into two main types: in one type, the water is temporarily stored and released through an outlet structure at a rate which will not exceed the carrying capacity of the channel downstream; in the other type, the water is held as long as possible and allowed to seep into the permeable banks of gravel strata in the foundation. This type is also called a "retention" dam or basin. The latter type is sometimes also called a water-spreading dam or dike when its main purpose is to recharge the underground water supply. Detention dams are also constructed to trap sediment.

Discourage: To advise or persuade to refrain from.

Diversion: The direction of water in a stream away from its natural course (i.e., as in a diversion that removes water from a stream for human use).

Dwelling Unit: A room or group of rooms (including sleeping, eating, cooking and sanitation facilities, but not more than one kitchen) which constitutes an independent housekeeping unit occupied or intended for occupancy by one family on a long-term basis.

Easement: Usually the right to use property owned by another for specific purposes. Easements are either for the benefit of land, such as the right to cross "A" to get to "B", or "in gross," such a public utility easement. For example, "rear" lots without street frontage may be accessed via an easement over the "front" lots. Utility companies use easements over the private property of individuals to be able to install and maintain utility facilities.

Easement, Scenic: A tool that allows a public agency to use, at a nominal cost, private land for scenic enhancement, such as roadside landscaping or vista preservation.

Economic Base: Economic base theory essentially holds that the structure of the economy is made up of two broad classes of productive effort-basic activities which produce and distribute goods and services for export to firms and individuals outside a defined localized economic area, and nonbasic activities whose goods and services are consumed within the boundaries of the local economic area. The theory holds that the reason for the growth of a particular region is its capacity to also support the nonbasic activities which are principally local in productive scope and market area.

Economic Development: The implementation of strategies to consciously and purposefully influence the local economy in order to provide jobs for residents, increase per capita income and strengthen the local tax base.

Ecosystem: An interacting system formed by a biotic community and its physical environment.

Elderly Housing: Typically one and two-bedroom apartments designed to meet the needs of persons sixty-two years of age and older, and restricted to occupancy by them.

Encourage: To stimulate or foster a particular condition through direct action by the private sector or government agencies.

Enhance: To improve existing conditions by increasing the quantity or quality of beneficial uses.

Entitlement: A permit or other instrument typically granted by local governments entitling the holder to develop or improve land and/or existing structures and facilities, consistent with the terms of the permit granted.

Environment: CEQA defines environment as "the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise and objects of historic or aesthetic significance.

Environmental Impact Report (EIR): A report that assesses all the environmental characteristics of an area determines what a significant effects or impacts will result if the area is altered or disturbed by a proposed action (See "California Environmental Quality Act").

Erosion: The loosening and transportation of rock and soil debris by wind, rain or running water.

Exaction: A contribution or payment required as a precondition for receiving a development permit; usually refers to mandatory dedication (or fee in lieu of dedication) requirements found in many subdivision regulations.

Façade: The front exterior surface of a building.

Feasible: Capable of being done, executed or managed successfully from the standpoint of the physical and/or financial abilities of the implementor(s).

Finding(s): The result(s) of an investigation and the basis upon which decisions are made. Findings are made by government agencies and bodies prior to taking action, and are a record of the justifications for such action(s).

Fire Break: A natural or artificial barrier where plants have been removed for fire-control purposes.

Fire Hazard: Any condition or action which increases or may cause an increase of the hazard or menace of fire or explosion to a degree greater than that customarily recognized as normal by persons in the public service of suppressing or extinguishing fires; or which may obstruct, delay or hinder, or may become the cause of an obstruction, delay or hindrance to the prevention suppression or extinguishment of the fire.

Fire Hazard Zone: An area where, due to slope, fuel, weather, or other fire-related conditions, the potential loss of life and property from a fire necessitates special fire protection measures and planning before development occurs.

Flood, 100-year: The magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has a once one-hundredth, or one percent, chance of occurring in any given year.

Flood Plain: All land between a natural or manmade waterway and the upper elevation of the one hundred year flood.

Freeway: A road serving high-speed traffic with no crossing interrupting the flow of traffic (i.e., no crossing at grade).

Fuel Break: A wide strip of land on which plants have been thinned, trimmed, pruned, or changed to types which burn with lower intensity so that fires can be more readily put out.

Gateway: A point along a roadway entering a city at which a motorist gains a sense of leaving the surrounding environs and of having entered the city. A gateway may be a publicly owned place having an area for motorists to pull off or park and view maps, gather information, and generally become oriented; or it may be a privately owned place which through special development standards or guidelines (e.g., for landscaping and signs), marks entry to the city; or a combination of both.

General Plan: A compendium of the city's policies regarding its long-term development, and designed in the form of official diagrams and accompanying text. The General Plan is a legal document required of each local agency by the State of California Government Code Section 65301 and is adopted by the city council. The General Plan is sometimes called a "comprehensive plan" or "master plan".

General Plan Update Steering Committee: A committee comprised of two members of the City of Grass Valley City Council, two members of the Planning Commission and at large members. The purpose of the committee is to oversee the General Plan update program.

Geotechnical Evaluation: A professional evaluation using scientific methods and engineering principles of geology, geophysics, hydrology, and related sciences.

Goal: A general, overall and ultimate purpose, aim or end toward which the city will direct effort.

Greenbelt: A strategically located, landscaped zone of variable width maintained in a "green" or "live" condition throughout the year, designed to slow or stop the spread of fire, to prevent soil erosion (e.g., golf courses, parks) and to buffer land uses.

Groundwater: Water under the earth's surface, often confined to aquifers capable of supplying wells and springs.

Groundwater Recharge: The natural process of infiltration and percolation of rainwater from land areas or streams through permeable soils into water holding rocks which provide underground storage (See "Aquifer").

Growth Management: The use by a community of a combined variety of techniques to establish the amount, type, and rate of growth desired by the community and to channel that growth into designated areas. Growth management policies can be implemented through control of growth rates, zoning, capital improvements programs, public facilities ordinances, urban limit lines, constraints analysis systems and other programs.

Guidelines: General statements of policy direction around which specific details may later be established.

Habitat: The physical location or type of environment in which an organism or biological population lives or occurs.

Hazardous Building: A building that may be hazardous to life in the event of an earthquake because it:

(1) Was constructed prior to the adoption and enforcement of local codes requiring earthquakes resistant design of buildings:

(2) Is constructed of unreinforced masonry; or

(3) Exhibits any one of the following characteristics:

- Exterior parapets and ornamentation that may fall on passer-by;
- Exterior walls that are not anchored to the floors, roof, or foundation
- Sheeting on roofs or floors incapable of withstanding lateral loads;
- Large openings in walls that may cause damage from torsional forces; or,
- Lack of an effective system to resist lateral forces.

Hazardous Material: An injurious substance, including (among others) pesticides, herbicides, poisons, toxic metals and chemicals, liquefied natural gas, explosives, volatile chemicals and nuclear fuels.

Heritage Tree or Grove: A tree or group of trees designated by the City Council to be of historical or cultural value, outstanding specimens, unusual species, or of significant community benefit due to size, age, or other unique characteristic, and which is considered to be in good health.

Historic Preservation: The preservation of historically significant and neighborhoods until such time as restoration or rehabilitation of the building(s) to a former condition can be accomplished.

Historic Resources: "includes, but is not limited to any object, building, structure, site, area, or place which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, education, social, political, military, or cultural annals of California" (Public Resources Code Section 5020.1).

Home Occupation: A commercial activity conducted solely by the occupants of a particular dwelling unit in a manner incidental to residential occupancy.

Household: All persons residing in a single dwelling unit.

Housing and Community Development Department of the State of California (HCD): The state agency principally charged with assessing whether, and planning to ensure that, communities meet the housing needs of very low, low and moderate income households.

Housing and Urban Development, U.S, Department of: A cabinet department of the federal government (HUD) which administers housing and community development programs.

Housing Unit: The place of permanent or customary abode of a person or household. A housing unit may be a single-family dwelling, a condominium, a modular home, a mobile home, a cooperative, or located in a multi-family dwelling or any other residential unit considered real property under state law. A housing unit has at least cooking facilities, a bathroom and a place to sleep.

Impact Fess: Fees levied on the developer of a project by the city as compensation for unmitigated impacts the project will provide.

Impervious Surface: Surface through which water cannot penetrate, such as a roof, road, sidewalk and paved parking lot. The amount of impervious surface increases with development and establishes the need for drainage facilities to carry the increased runoff.

Implementation Program: A coordinated set of measures to carry out the policies of the General Plan.

Implementation Measure: An action, procedure, program, or technique that carries out General Plan policy. Example: "Develop a geologic hazard overlay zoning classification and apply it to all geologic hazard areas identified in the General Plan.

Infill: Development of vacant land (usually individual lots or leftover properties) within areas which are already largely developed.

Infrastructure: The physical systems and services which support development and people, such as streets and highways, transit services, airports, water and sewer systems, and the like.

Interagency: Indicated cooperative actions between or among two or more discrete agencies in regard to a specific program.

Interest, Fee: A share or right in property that entitles a landowner to exercise complete control over disposition and use of land, subject only to governmental land use regulations. "Fee" is generally synonymous with "fee simple" or ownership.

Interest, Lees-than-Fee: An interest in land other than outright ownership: includes the purchase of development rights via conservation, open space or scenic easements (See "Development Rights," and "Easement, Scenic").

Interim Uses: Land uses which require temporary structures, land improvements, and landscaping and which, from an economic and political standpoint, can be converted at the end of that limited life.

Intermittent Stream: A stream that normally flows for at least thirty days after the last major rain of the season and is dry a large part of the year.

Land Banking: When a local government buys land and holds it for resale at a later date, usually for development of affordable housing (See "Affordable") or redevelopment.

Landmark: Refers to a building or site (including a specific tree or tree spices) having historic, architectural, social or cultural significance and designated for preservation by the local, state and federal government.

Landscaping: Planting-including trees, shrubs, and ground covers-suitably designed, selected, installed and maintained so as to permanently enhance a site, the surroundings of a structure, or the sides or medians of a roadway.

Land Trust: Nonprofit organization formed to engender resource stewardship through selective acquisition, conservation, protection, and public education. Acquisition includes purchase and donation, and may be either total or partial (i.e. conservation element).

Land Use: The occupation or utilization of land or water area for any human activity or any purpose defined in the General Plan.

Land Use Designations: A classification system for the designation of appropriate use of properties. The land use designations include the various residential, commercial/industrial, recreational and public service land uses assigned to property.

Land Use Element: A basic element of the General Plan, it combines text and maps to designate the future use or reuse of land within a given jurisdiction's planning area. A land use element services as a guide to the structuring of zoning and subdivision controls, urban renewal and capital improvements programs, and to official decisions regarding the distribution, density and intensity of development and the location of public facilities and open space.

Land Use Regulation: A term encompassing the regulation of land in general and often used to mean those regulations incorporated in the General Plan, as distinct from zoning regulations (which more specific).

Level of Service (LOS): Qualitatively describes the operating conditions encountered on roadways. LOS ranks roadway operations based on the amount of traffic and the quality of traffic operations on a scale of A through F. Level A represents free flow conditions and Level F represents "at capacity" conditions.

Local Agency Formation Commission (LAFCo): A county commission that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts and merger of districts within cities, Each county's LAFCo is empowered to approve, disapprove or conditionally approve these proposals.

Local Street: A Street providing direct access to properties and designed to discourage through-traffic.

Lot: (See "Site.")

Lot Area: The total horizontal area included within the legal boundaries of a land parcel.

Lot Coverage: The amount of a lot covered by buildings or the combination of buildings and other impervious surfaces if so defined.

Manufactured Housing: Houses which are constructed entirely in the factory, and which since 1976 have been regulated by the federal Manufactured Home Construction and Safety Standards under the administration of the U.S. Department of Housing and Urban Development (HUD).

Master Environmental Assessment: An assessment and documentation of the existing physical and environmental conditions of a given area.

May: That which is permissible.

Minerals: Inorganic substances such as gold, iron, and nickel, and compounds formed from such organic substances as natural gas and petroleum.

Minimize: To reduce or lessen, but not necessarily to eliminate.

Minimum Fire Flow: A rate of water flow that should be maintained to halt and reverse the spread of a fire.

Mining: The act or process of extracting resources, such as coal, aggregate or minerals from the earth.

Mitigate: To ameliorate, alleviate or avoid to the extent reasonably feasible. According to CEQA, mitigations include: (a) avoiding an impact by not taking a certain action or parts of an action; (b) minimizing an impact by limiting the degree or magnitude of the action and its implementation; (c) rectifying an impact by repairing rehabilitation or restoring the environment affected; (d) reducing or eliminating an impact by preserving and maintaining operations during the life of the action; (e) compensating for an impact by replacing or providing substitute resources or environments.

Mixed-Use Zoning: Under specified conditions, allows the combing of two or more uses on a single parcel or in a single structure.

Mobilehome: A structure, transportable in one or more sections, built on a permanent chassis and designed for use as a single-family dwelling unit when connected to required utilities.

Modular Unit: A factory fabricated, transportable building or major component designed for use by itself or for incorporation with similar units onsite into a structure for residential, commercial, educational, or industrial use, A modular unit does not have any chassis for future movement. (SEE "Mobile-home.")

Multi-Family Dwelling: A building legally accommodating more than one family.

Must: That which is mandatory.

Natural State: The condition existing prior to development.

Necessary: Essential or required.

Need: A condition requiring supply or relief. The city may act upon findings of need within or on behalf of the community.

Neighborhood Park: Publicly owned land intended to serve the recreation of people living or working within a one-half mile radius of the park and also intended to contribute to a distinct neighborhood identify.

Noise Attenuation: Reduction of the level of a noise source using a substance, material surface, such as earth berms, fencing, walls, etc.

Nonattainment: The act of not achieving a desired or requires level of performance. Frequently used in reference to air quality.

Non-Renewable Natural Resources: Inanimate resources that do not increase significantly with time and whose use diminishes the total stock (e.g., minerals and fossil fuels).

Objective: A specific statement of desired future conditions towards which the city will expend effort in the context of striving to achieve a broader goal. Objectives are usually quantifiable.

Overlay: A land use designation on the Land Use Diagram, or zoning designation on the zoning map, which modifies the basic underlying designation in some specific manner.

Parcel: A lot, or contiguous group of lots, in single ownership or under single control, usually considered a unit for purposes of development.

Parking Area, Common: A public or private parking area used jointly by two or more land uses.

Parking Area, Public: An open area, excluding a street or other public way, used for the parking of automobiles and available to the public, whether for free or for compensation.

Planned Unit Development (PUD) Zoning: A floating zone allowing innovative land use within a plan for the development of an area (e.g., cluster development, mixture of housing types and other uses, commonly owned open space, and recreational facilities).

Planning Area: The area for which a plan is prepared, including both the city limits and unincorporated areas with whose development the planning jurisdiction is particularly concerned.

Policy: A specific statement that guides the decision making; it indicates a clear commitment of the local legislative body (City Council). A policy is based on a General Plan's goals and objectives as well as an analysis of data. For policy to be useful as a guide to action it must be clear and unambiguous.

Pollution, Nonpoint: Sources of pollution that are difficult to define and which usually cover broad areas of land, such as the carrying of fertilizers from agricultural land by runoff.

Pollution, Point: A discrete source from which pollution is generated before it enters receiving waters or air, such as sewer outfall, industrial waste pipe, or smoke stacks.

Pre-planning: The practice of preparing plans for areas being considered for annexation by a municipality, but not yet within the municipal boundaries.

Prorata: Refers to the proportionate distribution of the cost of infrastructure improvements associated with new development to the users of the infrastructure on the basis of projected use.

Protect: To maintain and preserve beneficial uses in their present conditions as nearly as possible.

Rare or Endangered Species: A species of animal or plant listed in Sections 670.2 or 670.5, Title 14, of the California Administrative Code; or Title 50, Code of Federal Regulations, Section 17.11 or Section 17.2, pursuant to the Federal Endangered Species Act designating species as rare, threatened or endangered.

Recognize: To officially (or by official action) identify or perceive a given situation.

Recreational Trails: Public areas that include pedestrian trails, bikeways, equestrian trails, boating routes, trails and areas suitable for use by physically handicapped people, trails and areas for off-highway recreational vehicles, and cross-country skiing trails.

Recycle: The process of extraction and reuse of materials from waste products.

Regional Park: A park typically 150-500 acres in size focusing on activities and natural features not included in most other types of parks and often based on a specific scenic or recreational opportunity.

Regulation: A rule or order prescribed by government.

Rehabilitation: Used in the context of housing, the term rehabilitation means to restore housing units to their former state or to a safe and pleasing condition.

Renewable Energy Resources: Energy sources whose natural supplies are not depleted in producing work, including solar energy, wind flow, tidal action, and terrestrial heat.

Resource, Nonrenewable: Refers to natural resources, such as fossil fuels and natural gas, which, once used, cannot be replaced and used again.

Restore: To renew, rebuild or reconstruct to a former state.

Restrict: To check, bound or decrease the range, scope or incidence of a particular condition.

Retrofit: The addition of materials and/or devices to an existing building or system to improve its operation or efficiency.

Ridgeline: A line connecting the highest points along hilltops and separating drainage basins from one another.

Right-of-Way: The strip of land over which certain transportation and public use facilities are built, such as roadways, railroads and utility lines.

Riparian Habitat: The land and plants bordering a watercourse or lake.

Risk: The danger or degree of hazard or potential loss.

Scenic Highway Corridor: The visible area outside the highway's right-of-way, generally described as "view from the road."

Shall: That which is obligatory or necessary.

Should: Signifies a directive to be honored if at all possible.

Sign: Any representation (written or pictorial) used to identify, announce or otherwise direct attention to a business, profession, commodity, service, or entertainment.

Siltation:(a) The accumulating deposition of eroded material; (b) The gradual filling in of streams and other bodies of water with sand, silt and clay.

Single-Family Dwelling, Attached: A dwelling unit occupied or intended for occupation by only one family that is structurally connected with other such dwelling units.

Single-Family Dwelling, Detached: A dwelling unit occupied or intended for occupation by only one family that is structurally independent from any other such dwelling unit or structure intended for residential or other use.

Site: A parcel of land used or intended for use or a group of uses and having frontage on a public or an approved private street.

Slope: Land gradient described as 100 times the vertical rise divided by the horizontal run. For example, a hill or road which rises in elevation fifteen feet in a horizontal length of 100 feet has a slope of fifteen percent.

Solar Access: The provision of direct sunlight to a specified for solar energy collection when the sun's azimuth is within forty-five degrees of true south.

Solid Waste: General category that includes organic wastes, paper products, metals, glass, plastics, cloth, brick , rock, soil, leather, rubber, yard wastes, and wood.

Special Studies Zones Act (Alquist-Priolo): Provides for preparation of geologic and seismic studies by the State Geologist for specified fault zones. Requires cities and counties to adopt procedures for review of development proposals within designated zones. (Public resources Code Sections 2621-2526).

Specific Plan: A tool for detailed design and implementation of a defined portion of the area covered by a General plan. A specific plan may include all detailed regulations, conditions, programs, and/or proposed legislation which may be necessary or convenient for the systematic implementation of any general plan element(s) or portion thereof.

Sphere of Influence: A planned area for the probable physical boundaries and service area of a local government agency, as determined by the Local Agency Formation Commission.

Stakeholders: Individuals and organizations affected by the actions and outcomes (e.g., plans) in a jurisdiction, and who should have a right to participate in decision-making process.

Standards: Usually refers to "site design regulations," such as lot area, height limit, frontage, landscaping, and floor area ratio as distinguished from "use restrictions" which loosely refer to all requirements in a zoning ordinance.

Storm Runoff: Surplus surface water generated by rainfall that does not steep into the earth but flows overland to flowing or other bodies of water.

Structure: Anything constructed or erected which requires location on the ground (excluding swimming pools, fences, and walls used for fences).

Study Area: The area(s) included for study within the General Plan update. Portions of the study area(s) may be excluded from the final general Plan.

Subdivision Map Act: Establishes procedures for the filing and approval of tentative, final, and parcel maps. (Governmental Code Sections 66410-66499.37).

Substantial: Considerable in importance, value, degree or amount.

Surface Mining and Reclamation Act (SMARA): Provides for the local regulation of mining operations and the designation, classification, and protection of areas with minerals of state-wide or regional significance. (Public resources Code Sections 2710-2793).

Target Businesses: Those businesses or industries, which after careful analysis appear to be most compatible with the surrounding area.

Timber: "Trees of any species maintained for eventual harvest for forest products purposes, whether planted or natural growth, standing or down, on privately or publicly owned land, including Christmas trees, but…not…nursery stock." (Governmental Code Section 51100(e)).

Timberland Preserve Zone: "An area which has been zoned pursuant to Section 51112 or 51113 (of the Government Code) and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses…" (Government Code Section 51100 (g)).

Tourism: The business of providing services for persons traveling for pleasure. Tourism contributes to the vitality of the community by providing revenue to local business. Tourism can be measured through changes in the transient occupancy tax or restaurant sales.

Transfer of Development Rights (TDR): The practice of shifting development entitlements from one property to another, enabling the receiving property to develop more intensively than would otherwise be allowed by land use regulations. Conversely, the donor property gives up development rights previously enjoyed.

Transit: Urban and suburban rail and bus systems, dial-a-ride, shuttle, organized van pools and limousine services.

Transportation System Management (TSM): A cooperative process involving all transportation agencies in an urban area attempting to increase the efficiency of a transportation system through low-cost and relatively short-term actions. TSM typically includes traffic controls, improved public transportation, regulatory and pricing measures, and improvements to the management of the existing transportation system.

Trees, Street: Trees strategically planted- usually in parkway strips or medians- to enhance the visual quality of a street.

Trip: A one-way journey that proceeds from an origin to a destination via a single type of vehicular transportation. Trip generation is the basis for estimating the level of use for a transportation system and the impact of additional development or transportation facilities on an existing, local transportation system.

Truck Route: A path of circulation required for all vehicles exceeding set weight or axle limits, a truck route follows major arterials through commercial or industrial areas and avoids sensitive residential areas.

Unbuildable: See Undevelopable.

Undevelopable: Specific areas where topographic, geologic and/or soil conditions indicate a significant danger to future occupants.

Urban Sprawl: Haphazard growth or outward expansion of a community resulting from uncontrolled or poorly managed development.

Use: The purpose for which a lot or structure is or may be leased, occupied, maintained, arranged, designed, intended, constructed, erected, moved, altered and/or enlarged pursuant to the city's zoning ordinance and General Plan land use diagram.

View Corridor: The line of sight identified as a height, width, and distance of an observer looking toward an object or significance to the community (e.g., ridgeline, river, historic building, etc.).

Viewshed: The area within view from a defined observation point.

Wastewater Irrigation: The process by which wastewater that has undergone treatment is used to irrigate agricultural or landscaped land.

Watershed: The total area above a given point on a waterway that contributes water to its flow; the entire region drained by a waterway or watercourse which drains into a lake or reservoir.

Waterway: Natural or once natural (perennially or intermittently) water including rivers, streams and creeks. Includes natural waterways that have been channelized, but does not include man made channels, ditches and underground drainage and sewage systems.

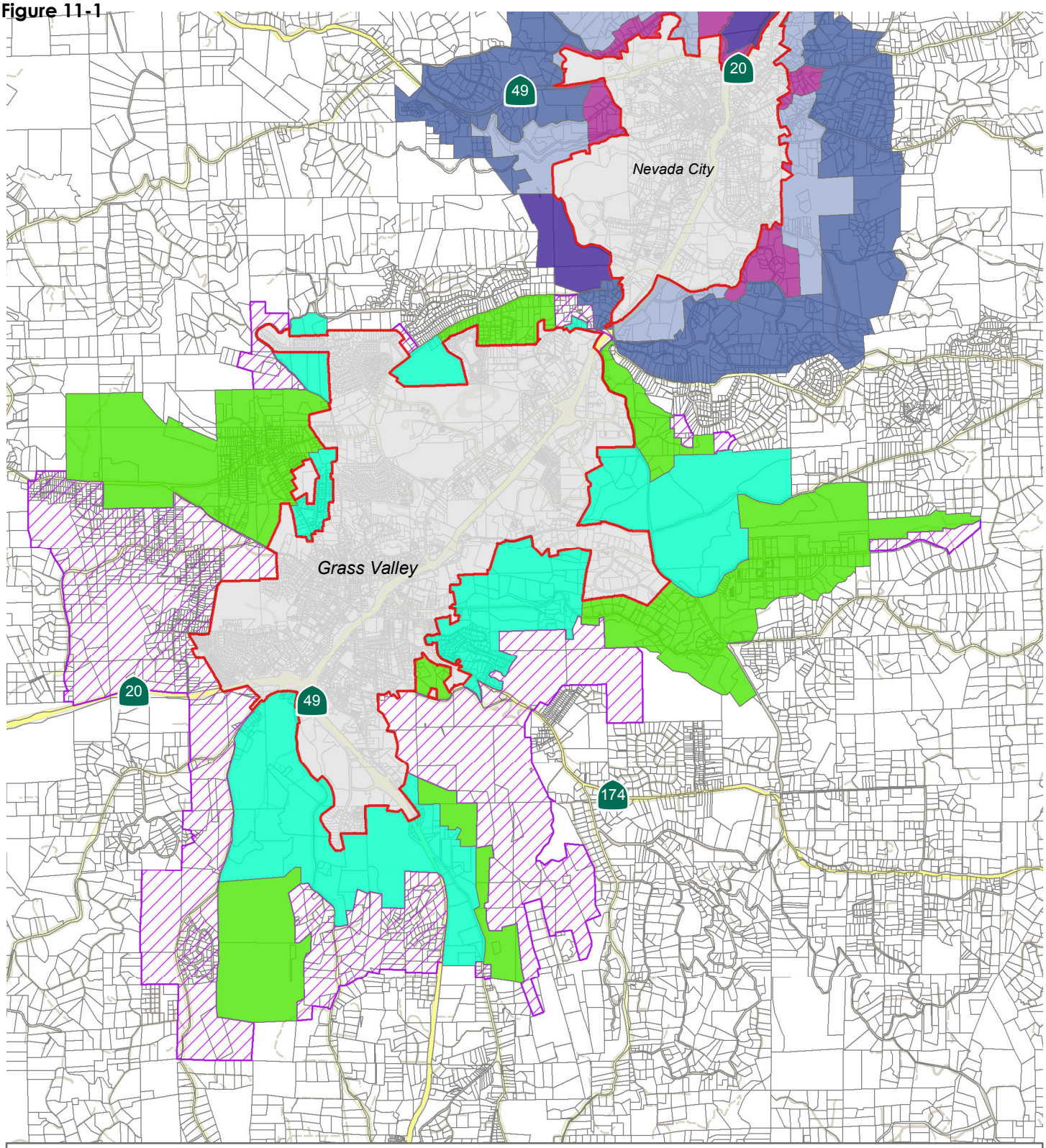
Wetlands: Areas that are permanently wet or periodically covered with shallow water, such as saltwater and freshwater marshes, open or closed brackish marshes, swamps, mudflats, and fens. Areas determined to be "waters of the United States" in accordance with U.S. Army Corps of Engineers protocol and/or formally identified and delineated according to law.

Williamson Act: Known formally as the California Land Conservation Act of 1965, it was designed as an incentive to retain prime agricultural land and open space in agricultural use, thereby slowing its conversion to urban and suburban development. Landowners were offered reduced property tax assessments if they agreed not to develop their land for ten years. The lowered assessments were based on the agricultural use of the land- "use value," instead of "market value."

Zoning: The division of the city by legislative regulations into areas, or zones, which specify allowable uses for real property and size restrictions for building and lots within these areas; a program that carries out policies of the General Plan.

Zoning District: A designated section of the city for which prescribed land use requirements and building and development standards are uniform.

Figure 11-1



City Boundaries & Sphere of Influence

- GRASS VALLEY, NEAR-TERM
- GRASS VALLEY, LONG-TERM
- GRASS VALLEY, AREA OF CONCERN
- NEVADA CITY, CURRENT
- NEVADA CITY, 2013
- NEVADA CITY, 2018
- NEVADA CITY, 2023

GIS Data Courtesy of Nevada County. Every reasonable effort has been made to assure the accuracy of the maps and data provided; nevertheless, some information may not be accurate. The County of Nevada assumes no responsibility arising from use of this information.

Grass Valley Sphere of Influence
Approved by
Local Agency Formation Commission
~~~~~~~~~
Resolution 11-02
February 23, 2011
~~~~~~~~~