# CHAPTER SEVEN LAND USE

## LAND USE OVERVIEW - CITY GROWTH AND EXPANSION

Grass Valley's current land use patterns are rooted in 150 years of settlement, building, and rebuilding. The original Townsite (settled in 1850, surveyed and recorded in 1872), a 361-acre square area centered on what is now downtown, encompassed the area of early development. Two areas were added to the town in the 19<sup>th</sup> Century:

- South Grass Valley, 117 acres added in 1876
- West Grass Valley, 96 acres added in 1893

The first City charter, incorporating the Townsite area, was adopted in January, 1893. In May of the same year, South and West Grass Valley were jointly made part of the new City by virtue of an annexation election.

This 574 acre (9/10 of a square mile) area contained residential, commercial, and cultural land uses needed to sustain the town well into the 20<sup>th</sup> century. In fact, the next annexation following the 1893 addition of South and West Grass Valley was not until 1940, 47 years later (the Memorial Park annexation). City records document a total of 83 "additions" or annexations to the City of Grass Valley, including and starting with the Grass Valley Townsite.

Annexations have occurred in all directions from the very symmetrical original Townsite, creating an unusually irregular City limit line. The majority of annexation activity over the years has been to the north and northeast, extending upstream in the direction of the "valleyhead" of the Wolf Creek watershed (which is east of the Nevada County Airpark).

Of the 81 20<sup>th</sup> Century annexations, the largest have been the nearly 258 acres in 1973 (the Litton property); a nearly 191 acre annexation in 1967 (Hills Flat, northeast of the Townsite); nearly 172 acres in 1966 (Taylorville, southeast of the City); and 163 acres in 1986 (Whispering Pines). Altogether, five of the 81 20<sup>th</sup> Century annexations have exceeded 100 acres.

Conversely, the smallest annexation in City history was a mere 0.098 acre acquisition on Glasson Way in 1981. Thirty four annexations have comprised two acres or less.

The numerous mines in the area were the primary employment centers until the 1930s, complemented by commercial and service functions, most of which were concentrated in downtown Grass Valley. Annexations beginning in the World War II and post-war era facilitated residential development outside the 19<sup>th</sup> Century town boundaries. Small scale neighborhood commercial developments sprouted, especially along major transportation routes, as 1) residential areas became somewhat more attenuated from downtown and 2) the automobile became the common mode for shopping ventures, largely supplanting foot travel.

Commercial dispersion was fostered by three additional, related factors: residential development in unincorporated portions of western Nevada County; Grass Valley's ascendancy as a regional trade and employment hub for an expanding "hinterland"; and the expansion and diversification of the economic base of Grass Valley and vicinity.

The latter factor gave rise to land uses and users of a new type in the area: manufacturing; distribution; research and development; finance and real estate; retirement-oriented services, including medical; and a plethora of small, office-based enterprises. Some have been accommodated in planned complexes specifically designed to meet their needs (Whispering Pines Business Park, Loma Rica Industrial Park in the unincorporated area, etc.), while others have located in buildings or developments designed for single corporations. In any case, the result has been a distribution of employment "nodes" outward from central Grass Valley to locations both within and outside the City boundaries.

Conversely, the need for urban services and public infrastructure has been a centripetal force, or magnet, pulling development inward. As the sole supplier of a full range of services required by business and industry, particularly sewer service, Grass Valley has adhered to a policy of requiring annexation prior to service provision (an exception being the Glenbrook basin). This policy appears to have assured incremental land use change/development as annexation occurred, simultaneously assuring a more compact overall development pattern in the Planning Area than might otherwise have emerged.

## **EXISTING LAND USE**

The current City boundaries encompass 2,430.19 acres, according to measurements made utilizing the Quad Knopf/Grass Valley geographic information system (GIS). This figure varies slightly from the "official" figure of 2,421.786 acres, derived from cumulative annexation survey records maintained for more than a century.

The Sphere of Influence comprises 9,570 acres (including the City's incorporated boundaries) and the Planning Area approximately 9,740 acres. Thus the City of Grass Valley occupies 25 percent of the total Planning Area.

Existing land use data for the City and unincorporated Planning Area is being collected for subsequent compilation and analysis, as of October, 1998. The next version of the *Background Report* will include this data. However, an interim existing land use data base has been developed using a shortcut method. That method, and the resulting land use information, are described below. Only land use within the City limits was estimated using this method. At the end of this Chapter is land use information for the "Grass Valley Community Region", extracted from the *Nevada County General Plan* (1995). Further land use information covering the unincorporated Planning Area requires a more comprehensive land use survey, likely involving field data collection.

#### METHODOLOGY FOR ESTIMATING EXISTING LAND USE

To develop an estimate of existing land use, prior to a more accurate land use survey and mapping effort, the following methodology was employed:

- Using the current General Plan map and land use designations, assume initially that General Plan land use and actual land use are the same. Utilizing the Quad Knopf/Grass Valley geographic information system (GIS), map and measure the acreages of the General Plan land use designations (17 categories, plus "streets").
- Using the City of Grass Valley's most recent version of the Vacant Land Inventory (conducted February 12, 1996, report last updated May 20, 1998), identify the General Plan designations of vacant parcels, quantify acreages by General Plan designation. The Vacant Land Inventory used zoning classifications, which were translated into General Plan categories.
- Consolidate the 17 General Plan categories into 12 modified categories (public and semipublic land uses combined into one category; the four commercial land use categories combined into one; Urban Estate Density was omitted – no areas so designated in the General Plan).
- For each modified land use category, subtract vacant acreage (step 2, above) from total acreage (step 1, above).

#### **GRASS VALLEY GENERAL PLAN LAND USE DESIGNATIONS**

The City's General Plan designates property within the City and the Planning Area for a variety of land uses. These include several residential categories, commercial, manufacturing/industrial, office/professional, open space and institutional land uses. The City's existing General Plan Map, adopted September 14, 1982, contains the following land use designations:

UED, Urban Estate Density = 0 - 1 dwelling units/acre (no land so designated)

ULD, Urban Low Density = 1.1 - 6 dwelling units per acre

UMD, Urban Medium Density = 6.1 - 12 dwelling units per acre

UHD, Urban High Density = 12.1 - 20 dwelling units per acre

TC, Town Center Commercial

SC, Shopping Center Commercial

LC, Local Commercial

OC, Other Commercial

OP, Office and Professional

PEC, Planned Employment Center

M, Manufacturing-Industrial

P. Public Facilities

SP, Semi-Public Facilities

U, Utilities

PR, Parks and Recreation S, Schools OS, Open Space Opportunity

Figure 7-1 on the following page provides a multi-color display of land use designations in the current (1982) *Grass Valley General Plan*. The land uses as shown on this map were quantified to provide a basis for the land use estimation methodology described above.

### **RESULTS OF EXISTING LAND USE ESTIMATION**

This section describes existing land use in the City of Grass Valley, the result of application of the land use estimation methodology. Table 7-1 contains estimated land uses, including total acreage, vacant acreage (from the *Vacant Land Inventory*), developed acreage (derived by subtracting vacant from total acreage), and percent developed.

The "Developed Acreage" column is the estimated existing land use. The "Total Acreage" column is the area designated for a particular purpose by the General Plan, though not necessarily developed.

Acreages are quantified in hundredths of acres to match the level of detail used in the City's *Vacant Land Inventory*. Although such detail is not normally required for land use estimation, it is being used here so as not to alter or distort data taken directly from the *Vacant Land Inventory*.

The City of Grass Valley is about three quarters "built out," with the remaining 572 acres vacant of the 2,430+ acres (3.8 square miles) within the City limits

Urban Low Density residential is the dominant single category, accounting for 567 acres of developed land. Urban Medium Density, including mobile home parks and lots, accounts for 120+ acres, while Urban High Density totals 106 acres. It is worth noting that areas designated Urban High Density in the General Plan are fully developed, while Urban Medium Density areas are just 58 percent developed.

Table 7-1 indicates that 175 acres are devoted to commercial land uses of all types combined (downtown, neighborhood commercial, shopping centers, highway service commercial). Still, just two-thirds of land designated for commercial development by the General Plan is developed, leaving 87 acres for additional commercial use.

Manufacturing/Industrial land use accounts for about 17 acres. With over 91 acres designated for this purpose in the General Plan, available manufacturing/industrial land for future expansion appears to be in abundant supply.

Land uses expected to accommodate a large share of future employment-related developments are Planned Employment Center (PEC) and Office & Professional (OP). PEC land uses presently occupy 177 acres, while an additional 134 acres are vacant but designated for use.

Office & Professional land uses occupy 75+ acres. Areas designated OP in the General Plan are close to "build out", with less than 2 acres designated but vacant.

TABLE 7-I
ESTIMATED EXISTING LAND USE
CITY OF GRASS VALLEY

General Plan	Total Acreage	Vacant Acreage	Developed (non-	Percent
Category			vacant) Acreage	Developed
Residential ULD	755.87	188.28	567.59	75.1%
Residential UMD	207.73	86.78	120.95	58.2
Residential UHD	106.14	0	106.14	100.0
Commercial – All	262.18	87.00	175.18	66.8
Mfg/Industrial	91.50	74.16	17.34	19.0
Planned	311.16	134.07	177.09	56.9
Employment Center				
Office/ Professional	77.77	1.86	75.91	97.6
Public/Semi-public	91.13	0	91.13	100.0
Utilities	19.76	0	19.76	100.0
Schools	15.48	0	15.48	100.0
Parks & Recreation	87.53	0	87.53	100.0
Open Space	46.10	0	46.10	100.0
Opportunity				
Streets	357.84	0	357.84	100.0
CITY TOTAL	2,430.19	572.15	1,858.04	76.5

For a different perspective on current land use, the land use designations utilized by the General Plan and shown in Table 7-1 were consolidated into four major categories. The four are:

- Residential
- Commercial
- MOPEC (Mfg., Office/Professional, and Planned Employment Center)
- All Other

Table 7-2 contains acreage estimates for the consolidated categories. As with the previous table, Developed Acreage is equivalent to existing land use.

TABLE 7-2
ESTIMATED LAND USE ACREAGE BY CONSOLIDATED LAND USE CATEGORY
CITY OF GRASS VALLEY

Land Use Category	Total Acreage	Vacant Acreage	Developed Acreage
Residential – All	1,069.74	275.06	794.68
Commercial – All	262.18	87.00	175.18
MOPEC	480.43	210.09	270.34
All Other	617.84	0	617.84
City Total	2,430.19	572.15	1,858.04

Table 7-3 provides percentages of City total, based on the raw numbers in Table 7-2. Notable information in Table 7-3:

- Residential development occupies nearly 43% of all developed land.
- Of all the vacant land in Grass Valley, about 48% is designated for residential development.
- Commercial land use

TABLE 7-3
ESTIMATED PERCENTAGE LAND USE BY CONSOLIDATED LAND USE CATEGORY
CITY OF GRASS VALLEY

Land Use Category	Percentage of Total Acreage	Percentage of Vacant Acreage	Percentage of Developed Acreage	Developed Acreage as Percentage of City Total (2,430 acres)
Residential – All	44.0%	48.1%	42.8%	32.7%
Commercial – All	10.8	15.2	9.4	7.2
Mfg/Office/Planned	19.8	36.7	14.5	11.1
Employment				
All Other	25.4	0	33.3	25.5
City Total	100.0%	100.0%	100.0%	76.5% (23.5% is vacant)

#### **VACANT LAND**

A *Vacant Land Inventory* was completed by the City's Planning Department on February 12, 1996 (updated May 12, 1998). This study resulted in vacant land acreage figures for the City limits and several city-service areas. Results were reported as vacant land by zoning classification. (Previous sections of this Chapter translated zoning classifications into General Plan designations).

An important use of the *Vacant Land Inventory* is to provide buildout projections. *The Vacant Land Inventory* is a useful tool for projecting the ultimate development of the area under study (City limits, sewer service area, water service area, etc.). Using the following criteria for projecting development based upon zoning district, the Grass Valley Planning staff projected the City "buildout" data shown in Table 7-4.

## Land Use Assumptions by City Zoning Classification

- R-1, Single family residential = 3.36 dwellings/acre
- R-2A, Medium density residential district = 6 dwellings/acre
- R-2, Two family residential = 6 dwellings/acre
- R-2AMH, Mobile home residential = 6 dwellings/acre
- R-3, Multiple family residential = 8 dwelling units/acre
- Commercial/Industrial Zoning Districts = 8000 sq-ft of gross building area/acre

The results of Grass Valley's *Vacant Land Inventory* update (May 12, 1998) as they pertain to the City limits are shown in Table 7-4.

TABLE 7-4 VACANT LAND INVENTORY — CITY LIMITS						
Zoning	# Vacant Lots	Acres	Potential Units	Maximum Buildout Population	Maximum Buildout Com/Indust Sq-ft.	
R-1	124	136.95	458	937	NA	
R-2/R-2A R-2MH	14	52.59	316	646	NA	
R-3	19	34.19	275	562	NA	
Morgan Ranch	198	51.33	198	405	NA	
Comm./Industrial	113	297.09	NA	NA	2,376,720 sqft	
Total	468	572.15	1,247	2,550	2,376,720 sq-ft	

Source: Grass Valley Planning Department, Vacant Land Inventory, Updated May 12, 1998.

Note: Commercial/Industrial square footage projections shown here are based on more recent data than shown in a comparable table in the *Vacant Land Inventory* report, and thus differ from figures presented in the Inventory.

According to the *Vacant Land Inventory* report, much vacant land has not been developed due to difficult topography, limited access, and/or environmental and/or economic site constraints.

## FUTURE LAND USE – GRASS VALLEY COMMUNITY REGION

Data from the 1995 *Nevada County General Plan* was extracted, in order to have information equivalent to the *Vacant Land Inventory* for unincorporated portions of the Planning Area. Data in this section was taken from *Volume 2: Background Data and Analysis* of the County General Plan (Harland Bartholomew & Associates 1995).

Understanding the underlying policies of the County General Plan is essential to an understanding of the land use designations for the unincorporated Grass Valley Community Region. A goal of the *Nevada County General Plan* is to "direct urban growth into Community Regions that can effectively and economically provide urban types of services. Eventually, urban and suburban residents demand such amenities as paved streets, water and sewer services and related facilities – urban services that cannot be extended to widely scattered homes and subdivisions."

Land use designations used by Nevada County differ somewhat from Grass Valley's General Plan Designations. Below is a list of Nevada County's General Plan Land Use designations and the development assumptions contained in the 1995 County General Plan.

- Urban High Density = 20 dwelling units per acre maximum within City Sphere of Influence, 15 units per acre elsewhere
- Urban Medium Density Residential = 6 dwelling units per acre maximum
- Urban Single Family Residential = 10,000 square foot minimum parcel size
- Residential = 1.5 acre minimum parcel size

- Estate = 3 acre minimum parcel size
- Rural-5 = 5 acre minimum parcel size
- Rural-10 = 10 acre minimum parcel size
- Rural-20 = 20 acre minimum parcel size
- Rural-30 = 30 acre minimum parcel size
- Rural-40 = 40 acre minimum parcel size
- Rural-160 = 160 acre minimum parcel size
- Neighborhood Commercial
- Community Commercial
- Highway Commercial
- Service Commercial
- Rural Commercial
- Office-Professional
- Business Park
- Industrial
- Recreation
- Forest–40 = 40 acre minimum parcel size
- Forest-80 = 80 acre minimum parcel size
- Forest-160 = 160 acre minimum parcel size
- Forest-640 = 640 acre minimum parcel size
- Public
- Open Space

Water Area

Special Development Area

Planned Development

Planned Residential Community

The Grass Valley General Plan Planning Area covers an area similar to the Grass Valley Community Region as defined in the 1995 *Nevada County General Plan*. An inconsistency needing reconciliation is the difference in acreages estimated for the Community Region (10,580) in the *Nevada County General Plan* and the Planning Area (9,740) as measured by the Quad Knopf/Grass Valley GIS. This discrepancy will be addressed as the Grass Valley General Plan Update continues.

The *Nevada County General Plan* projects buildout for the Grass Valley Community Region using Nevada County land use designations through the year 2015, as shown in Table 7-5. The projections are based on maximum development for each land use designation. These projections are for the unincorporated area only, not for any portion of the City of Grass Valley.

TABLE 7-5
LAND USE CHARACTERISTICS
GRASS VALLEY COMMUNITY REGION

Land Use Designation	Acres	Potential Dwelling Units	Potential Population at Buildout	Potential Employment at Buildout
Urban High Density Residential	250	4,860	11,665	
Urban Medium Density Residential	415	2,230	5,360	
Urban Single Family Residential	355	755	1,815	
Planned Residential Community	0	0	0	
Residential	4435	2,495	5,990	
Estate	275	80	190	
Rural-5	0	0	0	
Rural-10	0	0	0	
Rural-20	0	0	0	
Rural-30	0	0	0	
Rural-40	0	0	0	
Rural-160	0	0	0	
Total Residential	5,730	10,420	25,020	
Neighborhood Commercial	20			270
Community Commercial				
Downtown	55			2245
Other	565			7690
Highway Commercial	0			0
Service Commercial	0			0
Rural Commercial	0			0
Total Commercial	640			10,205
Office-Professional	160			3440
Business Park	1320			28750
Industrial	805			8770
Forest	0	0	0	0
Public	545			
Recreation	100			
Open Space	1280			
Water Area	0			
TOTAL	10,580	10,420	25,020	51,165

Source: Nevada County General Plan, Volume 2, Harland Bartholomew & Associates, Inc., December 1995.