CHAPTER NINE
OPEN SPACE AND CONSERVATION

INTRODUCTION

The Open Space and Conservation Elements are being combined in the 1998-99 Grass Valley General Plan Update. This Chapter provides background data, including reference to Open Space and Conservation Elements in law and as addressed by previous General Plans.

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 (California Land Use and Planning Law, Fifth Edition, Daniel J. Curtin, Jr., 1995).

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 include natural resource protection, recreation, aesthetics, and may complement development. Open space may be either private or public land, it may or may not allow 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 (see Figure 9-1).

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 (State of California General Plan Guidelines, 1998).

DEFINITIONS

The following definitions are provided as background for the Open Space and Conservation 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, lakeshores, 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, floodplains, 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.

GOALS FOR CONSERVATION OF OPEN LAND AND RESOURCES
CURRENT GRASS VALLEY GENERAL PLAN

- Conserve and enhance Grass Valley’s natural resources
- Minimize impacts of urban development on native vegetation and wildlife
- Ensure public safety from natural hazards such as flooding, seismic events and wildland fires
- Provide a diversity of recreational opportunities for the Grass Valley Community

POLICIES FOR CONSERVATION OF OPEN LAND AND RESOURCES
CURRENT GRASS VALLEY GENERAL PLAN

- Preserve Grass Valley’s natural character by conserving native vegetation and natural topographic features.
- Minimize disturbance of creek ecosystems.
- Preserve unique habitat areas.
- Minimize earthmoving and grading associated with new construction, avoiding steep terrain except where necessary.
- Re-vegetate areas disturbed by construction with native plants.
- Reduce adverse impacts from storm water runoff.
- Protect historical and archaeological resources from destruction, wherever feasible.
ACTIONS FOR CONSERVATION OF OPEN LAND AND RESOURCES

CURRENT GRASS VALLEY GENERAL PLAN

- Require or provide predevelopment planning for larger contiguous areas when subject to annexation to identify and recommend means of preservation for all types of open space, particularly buffer areas, public use areas, and riparian and unique habitat areas.
- Require environmental assessment where proposed projects may create significant impacts on the natural or cultural environment.
- Create a district(s) to regulate and provide standards for future development in sensitive hillside areas.
- Establish open space easements along riparian corridors.
- Reduce the velocity and volume of stormwater runoff by maintaining open spaces, decreasing the amount of impervious surfaces, providing retention or detention basins and utilizing dissipators in new development.
- Require, as a condition of project approval, a records search to determine the presence of or potential for archaeological remains in areas of medium to high archaeological sensitivity. Such areas are generally found along both permanent and seasonal drainages, around springs, and on flat ridges and terraces.
- Subject area containing historic structures to a historic properties survey to establish the age, history, and significance of the structure.
- Review sign regulations and landscaping requirements, upgrade City ordinances as required, and develop an effective enforcement program.
- Establish a Historic Resources Ordinance to implement City policy for historic conservation and enhancement.
- Initiate architectural and site plan review of all new non-residential development prior to the issuance of a development permit.

PARKS AND RECREATION FACILITIES

Parks and recreational facilities are often considered recreational open space. Parks typically constitute a substantial share of open space in “mature” cities and towns (long-established municipalities).

However, some parks are developed so intensively as to disqualify them, in whole or in part, from being categorized as true open space. Buildings, parking areas, and similar developed areas associated with parks and recreation should not be counted in open space inventories. Similarly, school grounds are not considered park and recreation facilities in the conventional sense, but might qualify as open space, assuming they encompass some contiguous, undeveloped acreage.

Chapter Six (Public Facilities and Services) of this Background Report provides an inventory and description of parks and recreation facilities in Grass Valley and vicinity. A summary of that information is presented here, to identify parkland which may be included as open space in Grass Valley and the Planning Area.
Existing City parks listed in Chapter Six comprise 92.5 acres, of which Condon Park represents over 86% of total parkland (80 acres). Four proposed parks within the City limits would add another 42 acres to the parks inventory.

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

- Nevada County Country Club, 58 acres
- Sierra College Park (under development), 7.95 acres

Existing park and recreation facilities outside the Grass Valley City, but within the Planning Area, add another 900 acres to the inventory. They are:

- Nevada County Fairgrounds, 100 acres
- Empire Mine State Park, 800 acres

Final inclusion in the park and recreational facilities with potential as permanent open space are facilities proposed for the currently unincorporated portions of the Planning Area under consideration for annexation to the City of Grass Valley. The sizes and functions of these facilities remain largely undetermined at this time, subject to future planning. However, it is logical to assume that the park and recreational lands listed below have the potential to add significantly to the quantity (acreage) and quality of the Planning Area’s park, recreation, and permanent open space inventory. All have been mentioned in earlier Plans or Capital Improvement Programs.

- Glenbrook Basin Neighborhood Park
- Loma Rica Ranch park and open space lands
- North Star park and open space lands
- Kenny Ranch park and open space lands

**VACANT LAND**

According to a vacant land inventory completed by the City's Planning Department on February 12, 1996, the City of Grass Valley contains 595.4 acres of vacant land. 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. Approximately 300 acres of inventoried vacant land are 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 designation than are more easily developed parcels.

The unincorporated portion of the Planning Area contains significant undeveloped (vacant) acreage, presenting a potential for designating and protecting open space outside of the City limits. Previous General Plans have proposed, in various forms, a greenbelt partially surrounding Grass Valley and buffering the City from external development.
SCENIC HIGHWAYS AND CORRIDORS

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 include land use regulations, sign and outdoor advertising regulations, and grading and earth moving regulations.

The current (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. Current General Plan policies regarding entryways are:

1. Strengthen entryway identity through landscaping
2. Preserve and promote the scenic quality of City streets
3. Preserve and promote visually pleasing arterials and highways
4. Regulate signs and billboards

RIDGELINE PROTECTION

The 1982 General Plan recognized the need to address the aesthetic qualities of steep terrain “viewsheds” in and around Grass Valley. A single policy and corresponding “action” read as follows:

- (Policy) Preserve the scenic resource value of surrounding prominent hills and ridgelines.
- (Action) Establish hillside development standards which will preserve the scenic quality of surrounding prominent hills.
AGRICULTURAL LAND

Agricultural resources of local importance are scattered throughout western Nevada County. There is virtually no agricultural land in the City limits. Agriculture in unincorporated portions of the Planning Area is a mosaic of residential neighborhoods intermingled with small farmsteads. Agricultural land provides marketable products, open space, wildlife habitat, watershed and aesthetic environment. Farms and farmland have the unique ability to provide food and fiber, open space, wildlife habitat, watershed/riparian protection, and aesthetic relief.

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 since 1880 include lode gold, chromite, crushed stone, and placer gold. (Mineral Land Classification of Nevada County, State Division of Mines and Geology, 1990).

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. 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. This requirement will be especially important as Grass Valley prepares for the possible annexation of formerly productive mine properties.

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.

FLOOD PRONE AREAS

The City of Grass Valley and the balance of the Planning Area lie almost entirely within the Wolf Creek drainage basin. The South Fork of Wolf Creek and Little Wolf Creek drain the southeastern portion of the Planning Area and discharge into Wolf Creek in the central Grass Valley area. Alta Hill is located on the divide between the Wolf Creek and Deer Creek watersheds. Drainage north of the divide flows to Deer Creek.

Flooding of lands adjacent to streams and rivers is caused by flows that exceed the capacity of the normal watercourse. This type of flooding involves the spillover of above-normal stream
flows onto lands immediately adjacent to the normal watercourse. Those areas subject to overflow are referred to as the stream or river’s floodplain.

The floodplain comprises two “zones” identifiable in times of heavy precipitation. They are 1) the floodway and 2) the flood fringe. The floodway typically consists of the normal stream course swollen vertically and horizontally, and is characterized by torrents of water and debris rushing downstream at a high rate of speed. Danger to life and property is especially acute within the floodway, due both to water depth and the sheer power of the raging waters. The flood fringe consists of areas which, under normal conditions, are away from the watercourse and its banks and are generally dry. Although the flood fringe is subject to inundation, water depths are less than in the floodway, and water velocity is far slower.

Flooding during a 100-year event is limited to relatively narrow areas along Wolf Creek and its tributaries as they approach and course through Grass Valley. The City’s location near the headwaters of Wolf Creek and its tributaries minimizes the quantity and velocity of storm water flows through town, although future development upstream could exacerbate flooding within the City if not properly mitigated.

Flood prone areas are ready-made for conservation efforts and permanent open space designation. Structural damage and danger to life is reduced, both in terms of development prevented and danger to downstream persons and properties averted. As floodplains are, by definition, “riparian” zones, the natural attributes and habitat values of riverine corridors are preserved.

**FORESTS AND TIMBER RESOURCES**

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 in the Tahoe National Forest (and other National Forests) 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 maintenance
- Logging and transport
- Water quality and watershed protection
- Recreation
- Wildland fire considerations
- Aesthetics
- Wildlife management and protection

Perhaps even more difficult challenges arise in the realm of “urban forestry.” The 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:

- Design Guidelines for street tree selection and placement
- Heritage Tree Ordinance for protection of unique individual trees and groves of trees
- Environmental review of development projects
- General Plan policies

**WATER QUALITY**

Human activities such as agricultural uses, confined animals, municipal uses, industrial uses, recreational uses, mining, and urban runoff can contribute to water quality problems in surface water bodies.

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.

The Federal Clean Water Act designates the State as the entity responsible for preparing water quality standards, which in turn delegates, authority to the regional boards. Through the preparation of a basin plan, the regional board establishes water quality standards, beneficial uses of water and an implementation plan to reach water quality goals within the applicable basin. This plan must be adopted by the regional board and approved by the State board. The water quality standards section is specifically reviewed by the EPA for consistency with the Clean Water Act. If the EPA does not approve the plan, further review by the regional board is required. Local agencies become involved after plan adoption and may be responsible for future implementation of the standards and ensuring that all planning is consistent with the policies and standards of the regional board.

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.

**AIR 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.
According to the Northern Sierra Air Quality Management District (Rodney Hill, Air Pollution Control Officer, Letter to City of Grass Valley, September 10, 1998), Grass Valley currently does not meet state air quality standards for ozone or PM$_{10}$ (particulate matter with an aerodynamic diameter of 10 microns or less). Even more stringent ozone and particulate matter standards are being promulgated by the U.S Environmental Protection Agency.

The District’s 1997 *Northern Sierra Air Quality Management District Annual Air Monitoring Report for 1997* reported the results of air quality monitoring as follows: “Air quality in most areas of the NSAQMD during 1997 was good...Although the summer was not particularly torrid, some very hot and stagnant days contributed to the formation of high ozone levels in Grass Valley”. Regarding PM$_{10}$, the report states: “Long Term Outlook: It is expected that with continued, and possibly increased residential burning, PM$_{10}$ levels will most likely increase during years when weather is less conducive to good smoke dispersion. The anticipated increases in prescribed burning have the potential to wreak havoc on air quality in the foothill region. The prescribed burning program will need to be monitored closely to continue the protection of the public health. The anticipated increases in prescribed burning have the potential to overwhelm all existing particulate mitigation efforts currently in place.”

**WETLANDS**

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.

Chapter Two (Natural Setting) describes and provides a map of identified local wetlands.