

CONSERVATION ELEMENT

INTRODUCTION

As a mandated part of the General Plan, the Conservation Element is intended to serve as the City's official policy guide in public and private development matters related to the preservation and enhancement of natural resources. The basic goal of this element is to outline a comprehensive program to achieve and maintain a healthful natural environment which reflects a balance between human activities and natural processes. The intent of this Conservation Element is to identify, evaluate, and analyze the natural and cultural resources present in the City and establish policies which reflect not only the uniqueness of Redwood City, but also those which are responsive to the need to preserve the City's resources for future generations.

Redwood City's conservation goal is to:

PROMOTE LEAD ROLES IN ENVIRONMENTAL PRESERVATION, AIR AND WATER QUALITY, WILDLIFE PROTECTION, RESOURCE RECOVERY, AND CULTURAL ENRICHMENT IN CONCERT WITH ECONOMIC DEVELOPMENT.

This element should be viewed as a flexible policy guide rather than an exhaustive inventory of all natural and environmental resources. It has been prepared to highlight key conservation issues and recommend implementation strategies.

The place on earth that we know as the San Francisco Peninsula has been blessed with a beautiful landscape, broad open spaces, panoramic views of San Francisco Bay, abundant trees and wildflowers, lazy creeks, vital food-chain wildlife, clear air, fresh water, rural character, and magnificent weather. These are the kinds of qualities that attract people and

habitation. As development proceeds to accommodate this influx, is it inevitably necessary to level the hills, fill in the valleys, use the open space for housing tracts, develop the marshlands, close off more and more of the Bay shoreline, cut down the trees, cover the wildflowers with asphalt and concrete, culvert the creeks, displace the wildlife, foul the air, poison the wells, and urbanize the territory in a way that changes the weather? For if it were, what would there be left of that for which we came?

WATER AND ITS HYDRAULIC FORCE

Water as a resource appears in many forms. San Francisco Bay is a large body of salt water that provides a moderating influence on climate, an environment for aquatic life, and a means of transportation and recreation. Wetlands are lands that are permanently or intermittently covered with water, including mudflats, tidelands, and marshes. Watersheds, creeks, streams, reservoirs, and groundwater basins comprise Redwood City's fresh water resources.

A groundwater basin is an underground area composed of alluvial or porous material infiltrated by water. This area contains aquifers which store, transmit, and yield significant quantities of water to wells and springs. Groundwater is derived from precipitation which penetrates the soil directly to the aquifer or enters surface streams and percolates from these channels to the aquifer. Most of the rainfall replenishing water resources occurs between November and April. It is during this time when over 90 percent of the annual surface runoff also occurs. This seasonal variation is reflected in the monthly stream flows which often run dry by the middle or late summer.

FORESTS AND OTHER VEGETATION

Redwood City has no forests within its sphere of influence. Stulsaft Park and the banks of Cordilleras Creek are the only natural wooded areas within the City limits. Coast live oak and chaparral are found in Redwood City, particularly in the less developed areas of the Emerald Lake Hills. Representative plants occupy soils

REDWOOD CITY STRATEGIC GENERAL PLAN

that are often gravelly, sandy, or shallow and have a low water-holding capacity. The plants are hardy and grow in dense clusters of trees and shrubs three to ten feet high.

Edgewood County Park, most of which is in Redwood City, has large expanses of grassland, chaparral, and pockets of oak woodland. The hiker can experience seasonal wild flower displays, interesting rock outcrops, and several kinds of plant communities supporting a variety of wildlife. Developed residential areas in the lower elevations are characterized by urbanized ornamental landscaping. Marshes and tidelands along the bay and tributary sloughs support salt marsh vegetation such as cord grass and pickleweed which in turn support a variety of wildlife. Rare and unique plants in the Redwood City area include: San Mateo Thornmint, San Francisco Collinsia, Fragrant Fritillary, Marin Dwarf Flax, Dudley's Lousewort, White-Rayed Pentachaeta, and San Francisco Campion.

SOILS

Soil is a mixture of mineral and organic matter that is capable of supporting plant life and is formed from weathered rock by the action of climate and living organisms over time. Vegetation stabilizes and consolidates the soil, protecting it from accelerated erosion and sedimentation.

There are seven general soil types in Redwood City ranging from the uplands surrounding the Easter Cross to the tidelands of San Francisco Bay. The soils in the uppermost reaches of the City are well drained and somewhat excessively drained moderately deep and shallow upland clay loam and clay soils on ultra basic igneous rock. In the lower hilly areas are found well to excessively drained sandy loam to clay loam upland soils developed in sedimentary rock with some basic igneous rocks intrusions.

Below the Alameda de las Pulgas are found very deep, well and moderately well-drained loamy soils with little or no clay increase in the subsoils on nearly level to gently sloping fans and ter-

aces. Approaching the Bayshore Freeway are found nearly level poorly drained low valley bottom clay soils. The landward portions of the baylands are very poorly drained clay soils influenced by tidal waters. The bayward portions of the baylands are tidal flats. The developed portions of the baylands including Redwood Shores and the Port of Redwood City are on made soils. Redwood City's soils have no special value for agriculture or timber. The biggest threats to the soils here are erosion and contamination.

RIVERS AND OTHER WATERS

Redwood City lies within portions of the watersheds of the Belmont, Cordilleras, Redwood, and San Francisquito Creeks. All of these creeks are primarily storm water runoff channels. They drain into tidewater sloughs and eventually into San Francisco Bay. Much of Redwood Creek is concrete lined or contained in culverts. There are two small recreational lakes in the unincorporated Emerald Lake Hills area and a fresh water storm retention basin in Redwood Shores which is occasionally available for private recreational activities.

HARBORS

The Port of Redwood City along Redwood Creek consists of 182 acres of land, 72 acres of which are developed. It is the only deepwater bay port south of San Francisco. The channel has a low tide mean depth of 32 feet. There are five berths for loading and unloading cargo. The Municipal Marina, established in its present location in 1958, is administered by the Board of Port Commissioners. The marina harbors 211 boats with its northern end opening into the Port's channel. In addition to the Municipal Marina, three private marinas operate on Redwood Creek: Pete's Harbor with 280 berths, Docktown Marina with 155 berths, and Peninsula Marina with 420 berths.

FISH AND WILDLIFE

Fish and wildlife resources help to maintain the delicate ecological balance in the environment. The growth of each species depends on, and is

controlled by other species. Thus, an abundance and diversity of fish and wildlife species are important to preserve the ecological balance which, if upset, could result in the proliferation of certain species in harmful numbers. In addition, the presence and health of fish and wildlife species are important indicators of the overall health of the environment. The presence of fish and wildlife also enhances human activities.

The many miles of shoreline, numerous open space areas, and biological reserves afford many opportunities for recreational, educational, and aesthetic enjoyment of local fish and wildlife species. There is no hunting, commercial fishing, or major sport fishing in Redwood City. Rare and unique wildlife in or near Redwood City include but are not limited to these examples: (mammals) Salt Marsh Harvest Mouse; (birds) Great Blue Heron, Short Eared Owl, Marsh Hawk, White-Tailed Kite, Common Yellowthroat, California Black Rail, California Brown Pelican, California Clapper Rail, and California Least Tern; (reptiles) San Francisco Garter Snake; and (invertebrates) Bay Checkerspot Butterfly.

MINERALS

Redwood City's mineral resources are limited to the saline waters of San Francisco Bay, shell deposits from young upper bay mud, mercury in Stulsaft Park, and magnesium compounds in association with salt evaporation processes. Solar salt has been produced here since 1901. In addition to salt, magnesium compounds have been extracted from bay water near the Port of Redwood City. The dredging of oyster shells and mud from the bay for cement manufacture ceased in late 1970, except for minor amounts used for livestock feed and soil conditioning. Efforts in the mid-1960s to extract mercury from within Stulsaft Park proved uneconomic.

OTHER NATURAL RESOURCES

Redwood City encompasses a number of sensitive habitats. Sensitive habitats are areas where the vegetative, water, or fish and wildlife re-

sources provide particularly valuable plant and animal habitats. They can be easily disturbed or degraded by human activities and developments. Some such areas, including Greco Island, Bird Island, and portions of Bair Island and Redwood Peninsula, are protected by the San Francisco Bay National Wildlife Refuge. Other wetlands and salt ponds also are sensitive habitats for rare and unique birds and mammals, while the highest elevations in the City include sensitive habitats for rare and unique plants and invertebrates.

A unique variety of visual resources can be found in Redwood City. Some of the localized areas of scenic beauty include Community Park, Edgewood Park, and City Hall Plaza. Stands of oaks, other native vegetation, and towering redwoods give parts of Redwood City a greenbelt character. Cordilleras Creek with its vegetation on both sides provides a scenic backdrop for attractive homes. Redwood City is rich with history, and many buildings have been designated as historic landmarks. Some notable examples are the old County Courthouse with its stained-glass dome (1906), the Lathrop House (1863), the Sequoia Fox Theatre (1928), Union Cemetery (1859), Sequoia High School (1924), and residential buildings in the Stambaugh-Heller Historic District (1860-1905).

The visual quality of the urban area is heightened by views of the San Francisco Bay and nearby hills. The Easter Cross and Easter Bowl promontory and the Edgewood County Park afford panoramic vistas of urban settlement, rural clusters among abundant vegetation, lakes, rock outcrops, the San Francisco Watershed, the Santa Cruz Mountains, winding roads, the baylands and the Bay, and hills beyond the Bay.

Many other Redwood City assets are worthy of conservation. They include but are not limited to the Sequoia High School campus, the Hetch Hetchy right of ways, residential character, Broadway, industrial estates, neighborhood services, the churches, Sequoia Hospital, the Fair Oaks Community Center, and the local

citizenry.

Areas of outstanding scenic, historic, and cultural value:

Outstanding scenic attractions that can be viewed from and within Redwood City include San Francisco Bay, the baylands with their sloughs, marshes, and wildlife, Edgewood road and cordilleras Creek Canyon, Edgewood County Park with its trails, wildflowers, and wildlife, the Easter Cross and Easter Bowl, the Woodside hills, and the City of San Francisco Crystal Springs Reservoir watershed. Redwood City is the oldest settlement between San Francisco and San Jose, the County Seat of San Mateo County, and a commercial and industrial center. This heritage and evolution endow Redwood City with sundry historic and cultural values, many of which are yet to be fully appreciated. The Old Courthouse dome, as viewed both from outside and from within, is a singular attraction in Redwood City's downtown.

CONSERVATION OBJECTIVES

1. Recognize that human rights, dignity, and man's dependency upon his environment must not be subordinated to economic issues.
2. Preserve and restore the natural characteristics of San Francisco Bay and adjacent lands, and recognize the role of the Bay's vegetation and water area in maintaining a favorable climate and good air and water quality.
3. Preserve historically and architecturally significant structures and archaeological sites, in order to promote a greater sense of historic awareness and community identity and enhance the quality of urban living.

CONSERVATION POLICIES

- C- 1. Promote expansion and improvement of public transportation services and facilities, where appropriate, for their air quality benefits.
- C- 2. Foster development which, by its location and design, reduces the need for nonrenewable energy resources.

C- 3. Environmentally unique open spaces such as San Francisco Bay, its tributaries, sloughs, and marshlands should be protected and enhanced for conservation and recreation purposes.

C- 4. Preserve the forest-like character of the Emerald Lake Hills area by restricting development on slopes which exceed 30 percent.

C- 5. Prime animal habitat areas should be conserved by protecting the natural vegetative growth of the Redwood City area.

C- 6. Conserve existing sources of water supplies by increasing reclamation of waste waters for suitable uses, and protect the water quantity and quality of underground aquifers as an alternate emergency source of fresh water.

C- 7. The visual qualities of the community should be preserved and improved.

C- 8. The City should promote the conservation and revitalization of the Downtown as a major focal point for the identity of Redwood City.

C- 9. Promote and encourage community cultural activities as a major focal point for the identity of Redwood City.

C-10. The City should continue the designation of historic buildings and sites throughout Redwood City and follow the procedures outlined in the Historic Preservation Ordinance for any repairs, additions, or demolition.