PUBLIC UTILITIES ELEMENT

"Electricity is really just organized lightning"

—George Carlin

PUBLIC UTILITIES ELEMENT

INTRODUCTION

The purpose of this Element is to provide guidance for the provision of needed and desirable public utilities to the residents of the Town. Woodside's public utilities are designed to provide needed services while preserving the natural character of the community. Toward this objective, the Town utilizes minimal infrastructure utilities when feasible.

CHANGES SINCE 1988

Since the last Woodside General Plan, technical advances have provided the community with new technologies such as digital cable, internet, and cellular phones. Along with these new technologies has come the need to install and maintain new infrastructure, such as underground cable and cellular antennas.

Through contracts and permits, Woodside regulates the implementation of new technology utilities within the Town limits. Similar to all utilities within Woodside, these new technology utilities are regulated with the goal of ensuring that the natural environment and community character are preserved. Some new technologies, such as satellite television, do not require new, physical infrastructure in Town and are not regulated at the municipal level.

Reference the Natural Hazards and Safety Element for a discussion of the San Bruno PG&E Gas Fire.

DEFINITIONS

Blackwater: Water contaminated with animal, human, or food waste.

Fuel cell: An electrochemical cell that converts a source fuel into an electric current. It generates electricity inside a cell through reactions between a fuel and an oxidant, triggered in the presence of an electrolyte. Many combinations of fuels and oxidants are possible. A hydrogen fuel cell uses hydrogen as its fuel and oxygen (usually from air) as its oxidant. Other fuels include hydrocarbons and alcohols. Other oxidants include chlorine and chlorine dioxide.

Graywater: Domestic waste water from sinks, baths, and kitchen and laundry appliances.

Sanitary sewer: An underground piping system for transporting sewage from structures to a treatment facility. Sanitary sewers are operated separately and independently of storm drains, which carry the runoff of rain and other water which wash into streets.

Septic system: A small scale, on-site sewage treatment system used in areas without a connection to a public or private sanitary sewage system. A traditional system includes a septic tank for collection and a leachfield which disperses and percolates the excess liquid in a relatively clear condition into the soil via a perforated piping system. The term "septic" refers to the anaerobic bacterial environment that develops in the tank and which decomposes or mineralizes the waste discharged into the tank. Periodic preventive maintenance is required to remove the irreducible solids which settle and gradually fill the tank, reducing its efficiency. A properly maintained system can last for decades and possibly longer.

GAS AND ELECTRIC, AND ALTERNATIVE POWER SOURCES

Gas and electric service in the Town is supplied by Pacific Gas and Electric (PG&E). PG&E owns, operates and maintains both gas and electric transmission and distribution facilities in the Town of Woodside. These facilities include two gas transmission pipelines along Interstate 280 (I-280), 230 KV electric transmission lines near the western boundary of Woodside, and an electric substation at Highway 84 (Woodside Rd). and I-280. These 'transmission' facilities are used to provide gas and electric service to PG&E's commercial and residential customers in Woodside via PG&E's gas and electric 'distribution' facilities which are located in virtually every street in Woodside.

The Woodside Municipal Code requires that all new utility services, relocated/extended utility services, and public utilities on new lots created from land divisions shall be undergrounded. Additionally, Chapter 53 of the Woodside Municipal Code, Underground Utilities, allows the Town Council to designate Underground Utility Districts, and to order the removal of overhead utilities and the installation of underground utilities. The Town does not currently have any Underground Utility Districts.

A community could also elect to establish an Underground Utility District which is funded by an assessment paid by the individual property owners within the District. Electrical Underground Utility Districts are generally funded by either Rule 20A, 20B or 20C monies. "Rule 20" refers to PG&E's rule governing the conversion of electrical distribution lines from above ground (overhead) to underground. Rule 20A funds are ratepayer allocations to underground existing distribution lines in areas of "public benefit". Rule 20B funds are partial ratepayer subsidies for undergrounding projects in residential neighborhoods which are not covered by Rule 20A. Rule 20C funds are almost entirely from the property owner.

Alternative power systems permitted in Woodside to date include solar and fuel cells. Solar is encouraged by the Town through below-cost permits. In fiscal years 2009/2010 and 2010/2011, 47 solar permits were issued in Woodside, with valuations totaling approximately $2,700,000.

COMMUNICATIONS

CABLE TELEVISION

In 1989 and 1990, the Town issued a Request for Proposals for cable service. Four small cable companies submitted proposals. Western Cabled Systems, a local company, was the most responsive. None of the proposals provided 100 percent service coverage, but Western Cabled Systems proposed the highest percentage of coverage. Their proposal included service specifications, performance testing standards, specification for either overhead and underground lines by area, and a "density policy". The density policy proposed by Western Cabled Systems was:

1. A minimum of 15 services for every mile of "cable plant" for overhead lines; and,

A minimum of 25 services for every mile of "cable plant" for underground lines.

"Cable plant" is the cable along the road and shared cable off the main line, but not the "cable drop". "Cable drop" is the cable for an individual service. Service was not provided to many areas, including Whiskey Hill Road, and most of the Western Hills which do not meet the density policy.

In November 1990, the Town entered into a 15 year franchise agreement with Western Cabled Systems. A cable franchise allows the purveyor to install utility infrastructure within public right-of-way and on public land. In exchange for the use of public right-of-way and land, the franchisee pays a franchise fee to the Town (5% of gross receipts, which is approximately $36,000 per year). The purveyor builds the franchise fee into the service rate structure. Upon completion of the cable lines in 1991, approximately

60 percent of the Town was wired/served in compliance with the terms of the density policy.

Since the original franchise agreement date, the cable system has changed ownership several times and is currently held by Comcast of California.

In 2006, the State of California enacted the "Digital Infrastructure and Cable Competition Act" which allowed cable providers to negotiate franchises with the State instead of local municipalities. Comcast successfully obtained a State franchise for the Woodside Service Area and, effective January 1, 2008, the Town no longer had a franchise agreement with Comcast. The implications of this change are several fold. Programming and rates continue to be regulated by the Federal Communications Commission, but local service specifications are regulated by the State. The locality continues to regulate and permit physical utility improvements within public rights-of-way and on public land, and also continues to collect the franchise fee.

Currently, approximately 68 percent of the Town is wired and served by cable. The 8 percent service increase from 1991 results from either increases to densities (thereby meeting the density policy criteria), or from the line extension policy which allows an individual property owner to pay the cost of a line extension which does not meet the density policy criteria.

Television coverage is also available from a number of commercial providers, such as Direct TV, but these systems are not effective in all parts of the Town, given the terrain and dense tree cover.

PHONE

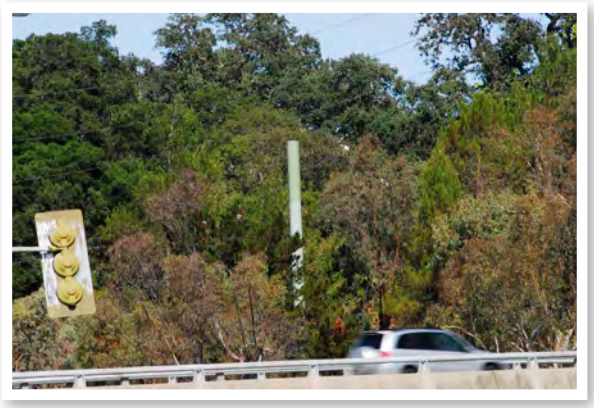
Land line phone service in Town is provided by AT&T. AT&T maintains all land line phone lines.

INTERNET

AT&T provides high speed internet, with a density policy similar to that of Comcast. Comcast subscribers can also receive broadband internet service. The areas of internet service availability are therefore primarily the same as cable television. Some areas of Town are served by smaller satellite providers, but these have the same limitations that impact satellite cable television.

CELLULAR FACILITIES

Cellular facilities in Town include tower and equipment locations maintained primarily by AT&T and Verizon. AT&T has cellular towers at I-280 and Farm Hill Boulevard, and Highway 35 (Skyline Boulevard) and Woodside Road; and equipment at Cañada and Woodside Roads. Verizon has a cellular tower at I-280 and Woodside Road. Woodside Municipal Code requires that a Conditional Use Permit be approved by the Planning Commission for wireless communications facilities. Considerations in reviewing the required Use Permit include: placement and design, technology and coverage capabilities, emergency response benefits, preference for locating on public or institutional sites, and discouragement for locating on residential properties and in visually sensitive areas.



A cellular antenna location in Woodside.

WATER SUPPLY

Water is supplied in Town primarily through either the California Water Service, or the City of Redwood City in the Emerald Lake Hills area (see map PU1). Both purveyors purchase all of their drinking water from the Hetch Hetchy regional water system operated by the San Francisco Public Utilities Commission (SFPUC). In 2009 and 2010, California Water Service acquired two small water purveyors, Skylonda Water Company and Woodside Mutual Water Company, which served the upper portion of the Western Hills. Water is supplied for both potable uses and for fire suppression.

Portions of Old La Honda Road and Emerald Lake Hills have water delivery and pressure deficiencies. Water wells exist in Town, but there is currently no complete record available from either the Town or the County on the number of wells, or their locations. Domestic water wells require a drilling permit to install, certification, and a permit to operate from the County Environmental Health Department.

Town staff has permitted a handful of rainwater harvesting systems in the last several years that have both detention and distribution capabilities. Such systems require a plumbing permit, and the reused water may be used for irrigation, but not for potable uses.

In October of 2008, the SFPUC acted to limit, until at least 2018, the water supply available from the San Francisco Regional Water System to the City of San Francisco and to all other agencies that rely upon the SFPUC as a water supply source. The Bay Area Water Supply & Conservation Agency (BAWSCA), which is an association that represents the interests of twenty-four Bay Area cities and water districts that purchases water wholesale from the San Francisco Regional Water System, has estimated that because of the limit being imposed by the SFPUC, and in the absence of increased water conservation efforts, water demands within the BAWSCA service area will exceed available water supplies by 2015. Cal Water is represented by the BAWSCA .

In addition to this water supply limitation, the State of California has imposed statewide water conservation regulations and water usage reduction goals. The Town will need to respond to these regulations and goals through the implementation of local rules and programs aimed at conserving and reusing water.

On August 4, 2009, the State approved emergency graywater standards which allow for the discharge and selective reuse of graywater on private property.

In 2011, both Cal Water and the City of Redwood City adopted water management plans which confirmed Woodside's water demand can be met. These two plans are: the Bear Gulch District Conservation Master Plan (Cal Water): 2011-2015; and the City of Redwood City 2010 Urban Water Management Plan. Pursuant to State law, water purveyors update their water conservation plans every five years.

SANITARY SEWER AND ON-SITE WASTEWATER DISPOSAL

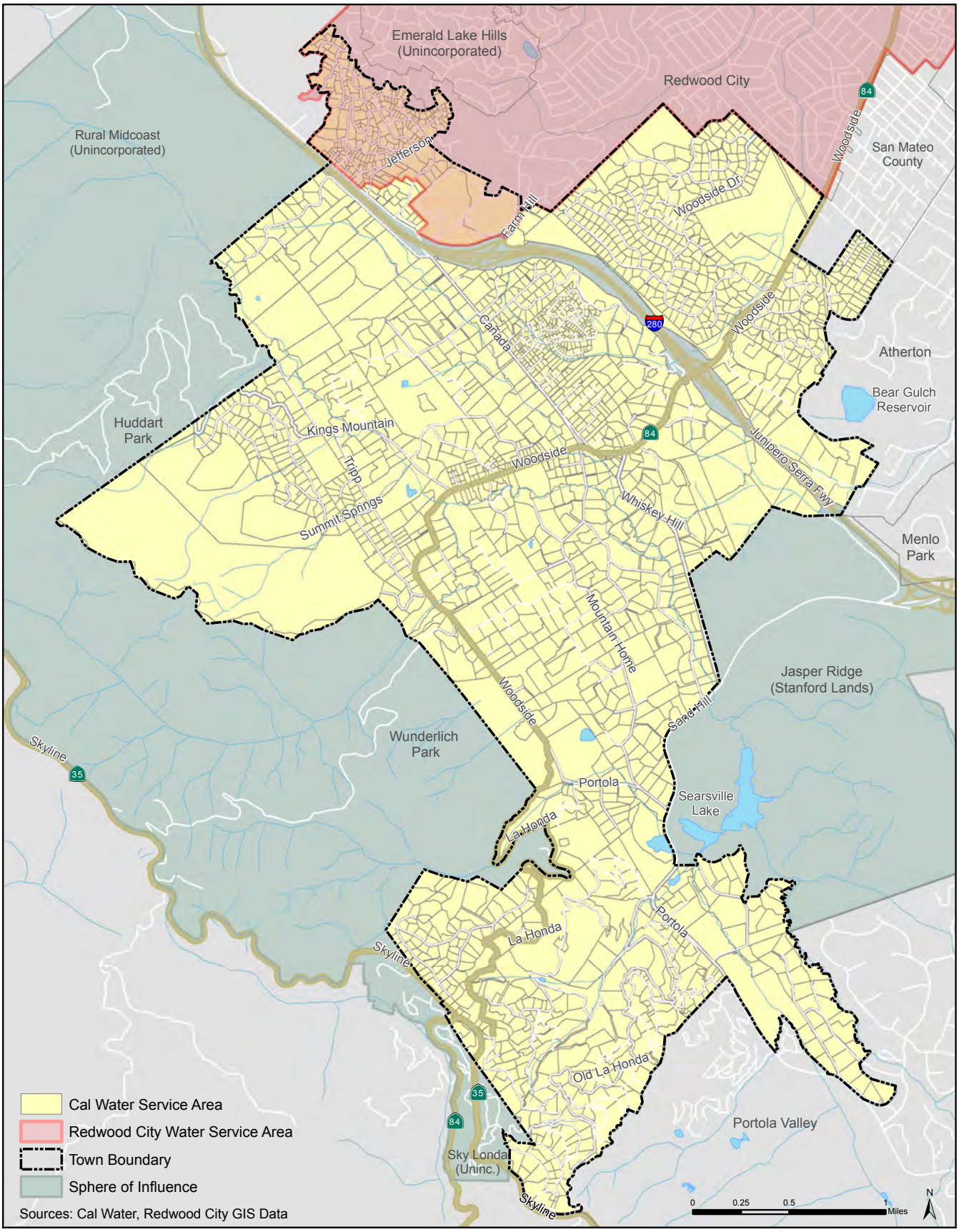
The Town of Woodside has historically utilized private on-site septic systems for managing waste disposal. This reflects the Town's rural nature and a basic recognition that such systems can be preferable to centralized public sewer systems from an environmental standpoint, as they can:

1. Minimize the risk of widespread contamination that could occur if seismic, landslide, or other geologic activity rupture collection lines; and,

Provide for the retention of more water resources on a parcel, sustaining vegetation and wildlife habitat and minimizing the export of water out of Town.

The Town's preference for the use of private on-site wastewater systems also reflects the reality of the Town's limited ability to provide public sewer service. The Town is not a party to the Joint Powers Authority that comprises the South Bayside System Authority (SBSA). The SBSA owns and maintains the treatment plant in Redwood City and maintains a permit from the Regional Water Quality Control Board for this purpose. The partners in the SBSA are Redwood City, Belmont, San Carlos, and the West Bay Sanitary District.

Map PU1: Woodside Water Districts



The SBSA is permitted for and designed to treat twenty-nine million gallons per day (29 mgd) of dry weather capacity. It serves an estimated 200,000 customers. Public sewer service in the Town of Woodside is only available to the extent that one of the SBSA partners has excess capacity and is willing to formally sell or lease that capacity to the Town. As is discussed in the next section, the Town has managed to avail itself of very limited amount of this capacity over the years.

PUBLIC SANITARY SEWER SYSTEMS

At the time of incorporation in 1956, relatively few properties were connected to public sewer systems, primarily within the Woodside Heights area and off of Moore Road. These connections were made through the Fair Oaks Sewer Maintenance District (FOSMD), or the facilities of the West Bay Sanitary District. The Town has no responsibility for these connections.

Since the 1960's, the Town has been directly responsible for the creation of two public sanitary sewer districts, both accomplished through special benefit assessment district proceedings, which are governed by State law. The first was the Redwood Creek Trunk Assessment District, and the second was the Town Center Sewer Assessment District (see Map PU2, Sewer Areas and Districts).

REDWOOD CREEK TRUNK ASSESSMENT DISTRICT (RCS)

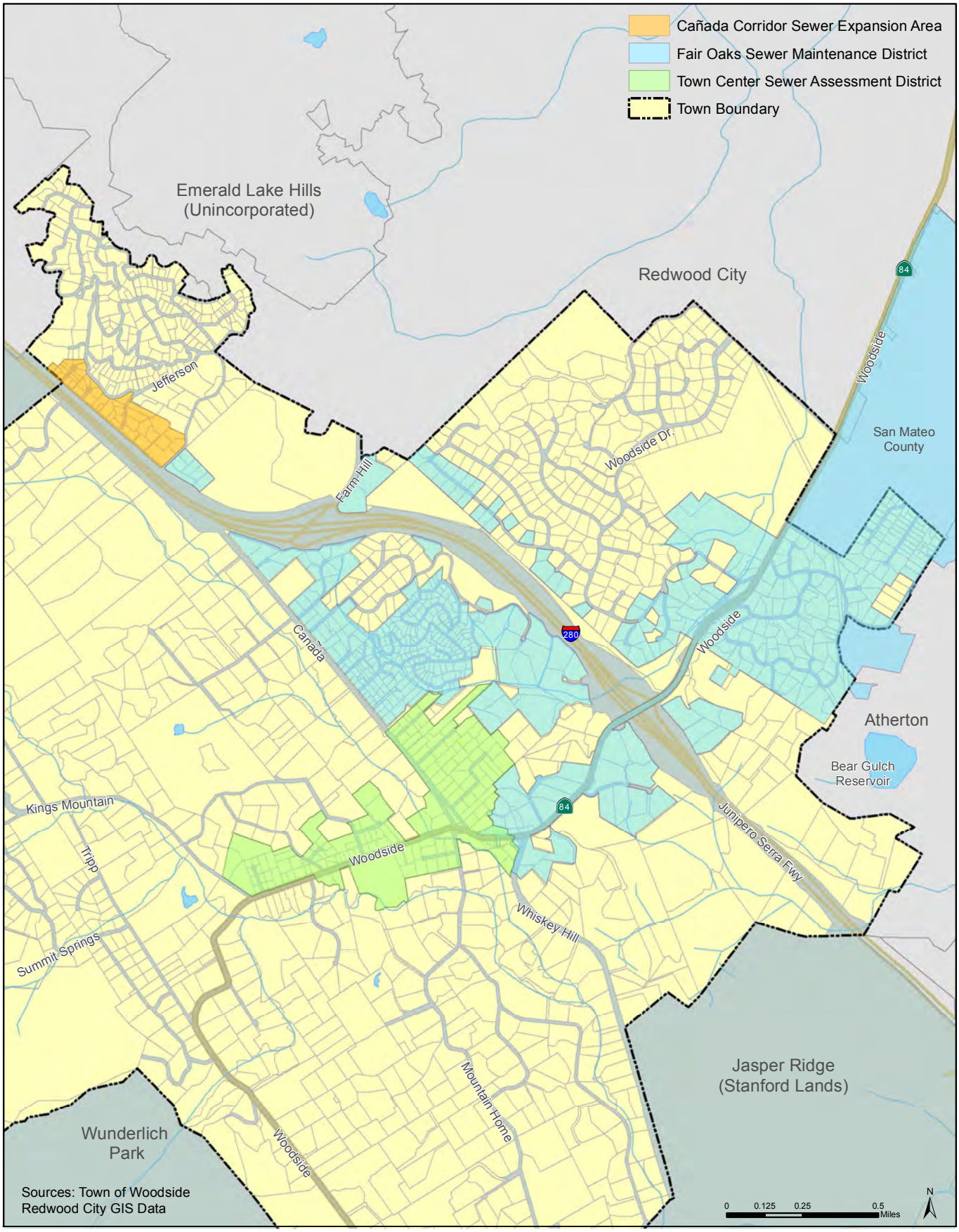
The Redwood Creek Trunk Assessment District (RCS) was formed in 1968. It included two components: the Redwood Creek Trunk Assessment Area and the Glens Sewer Collection System Area. The boundaries of the district generally encompass the Woodside Glens, the Laning Drive/Jane Drive area, portions of La Questa Way and Romero Road, the Haciendas Drive/Lindenbrook area, areas south of Woodside Road around the intersections with Quail Meadows and Moore Road, and much of Woodside Hills, as well as adjacent parcels along Farm Hill Boulevard. The Redwood Creek Trunk Assessment District is not an operating sewer district, but rather was formed as a financing mechanism for the formal assessment proceedings that the Town undertook in the late 1960's. The system cost $889,000 to construct and involved the acquisition of easements across eighty-five private properties. The Town sold tax free assessment district bonds to support the cost of construction and levied assessments against the benefitting properties over a twenty-five year period to defease the bonds. The bonds were paid off in 1993.

In 1968, as the Town was initiating the benefit assessment proceedings, a joint powers agreement was negotiated with the FOSMD, which is overseen by the County of San Mateo. The agreement specified that the maximum average daily flow from the RCS could not exceed 150,000 gallons per day. The Town-constructed facilities were to be maintained and operated by the FOSMD and that agency expanded its downstream lines to accommodate this addition. The treatment plant capacity for this area was provided by the FOSMD through its formal capacity agreement with Redwood City. The capacity was based upon an estimated 250 gallons per day per household use. About 573 assessments were originally levied, with 182 in the Glens and 391 outside of the Glens.

The RCS was primarily formed because of health and safety concerns that existed within Woodside Glens, which had a history of failing septic systems dating back to 1959. The approach to the district was twofold. That portion of the district within Woodside Glens was subject to immediate construction of a completely operational sewer system, including trunk and collection laterals. This was called the "intract system" and Woodside Glens property owners were charged $2,934.70 per assessment. Connection to the system was required through adoption of a Town ordinance because of health and safety concerns. Connections for already developed parcels were completed by 1973.

The remainder of the RCS was assessed for only the cost of the main trunk line, which extended from Churchill Avenue near Woodside Road, through the Menlo Country Club, up Redwood Creek, under I-280, and through the Glens to Laning Drive. The properties outside of the Glens were required to pay $816.80 per assessment for their share of

Map PU2: Sewer Areas and Districts



the trunk line, as no "intract system" was constructed for these properties as a part of the original project. These properties were not required to connect to the sewer system, but could do so when the property owners so chose by:

1. Requesting annexation into the FOSMD;
2. Constructing necessary lateral lines; and,
3. Paying "intract" fees to the Town and connection fees to the FOSMD.

In lieu of the "intract" fees, a property owner may construct the needed collection lines and be a party to a formal reimbursement agreement, whereby a part of his or her construction costs is passed on to later benefitting property owners who wish to connect to the system by using these collection lines.

In 1974, the Town adopted a "Master Plan of Proposed Local Sanitary Sewer Facilities for the Redwood Creek Assessment District" which sets forth a plan for extending full sewer service to those parts of the RCS outside of the Glens. The plan has been used over the years to guide sewer extensions within the RCS and also provided the basis for the Town's "intract" fee for new connections.

TOWN CENTER SEWER ASSESSMENT DISTRICT (TCSAD)

The Town Center Sewer Assessment District (TCSAD) was formed in 1987. While a small portion of the Town Center had benefitted from public sewer service prior to 1987, the area to which sewer service was provided was greatly expanded through the Town Council's 1987 actions. The area includes the Town's commercial, institutional, and residential properties generally located along Woodside Road, Martin Lane, Prospect Street, Audiffred Lane, Cedar Lane, and up Cañada Road to Bardet Road. The effluent from the properties served by the TCSAD flows to the Town Center Pump Station located adjacent to the Gilbert Center (there are a few properties that do not utilize the pump station). Sewage is transported from the pump station down a line in Woodside Road to the FOSMD system and then through Redwood City to the treatment plant. Unlike the RCS, the TCSAD is an operating sewer system, owned and maintained by the Town.

The initial capacity estimated for the system was about 57,000 gallons per day, which is sufficient to accommodate 123 residential properties and 135.7 "residential unit equivalents" (RUE's) of commercial service. Each RUE is defined as 220 gallons per day. The system cost $2.1 million and, as with the RCS, tax free bonds were issued by the Town, and assessments of $14,895 were levied against each benefitting residential parcel (commercial and institutional parcels received higher levies). The Town Center bonds were paid off in 2008. Properties within the Town Center district were not required to immediately connect to the public sewer system, even though the "intract" system was available. The Town charges an annual Sewer Service and Use Charge to support the everyday costs of operating and maintaining the system and to cover current and future capital costs (both the Town's and those of the FOSMD and Redwood City).

The district was constructed and the facilities placed in service prior to the execution of needed transmission, treatment, and capacity agreements with the FOSMD and Redwood City. An agreement with Redwood City was approved by the Councils of both Woodside and Redwood City in 1996. This agreement includes Redwood City's provision of up to 100,000 gallons per day of treatment plant capacity, an amount that was negotiated by Town staff to provide enough capacity to serve the future needs of the Cañada Corridor area. Although the FOSMD was a party to the 1996 agreement, a separate agreement with that agency was needed to memorialize the FOSMD's willingness to allow the Town to transport its sewage through Fair Oaks facilities to those of Redwood City. This agreement was completed and approved in 2001.

In 2003, after failed attempts at forming a special benefit assessment district, the Town developed a successful plan for extending public sewer service to the Cañada Corridor area. Through a Development Agreement, sewer facilities were extended to about forty parcels along Cañada Road from Godetia Drive to the northerly Town boundary line. The facilities were constructed pursuant to

Town specifications by a private developer who made a financial contribution to the project in exchange for two sewer connections for properties that he was developing at the time. Each property owner who wished to participate was charged $15,208 per connection. The Town contributed $20,000 to the project as a Public Works Matching Fund Program grant and arranged a low interest loan program for interested property owners. The project cost just over $480,000. The developer was reimbursed for construction costs through the property owner assessments and Town loan funds. The facilities were dedicated to the Town upon completion and are now considered a part of the Town Center system, with a separate annual maintenance fee.

In 1998, the Town adopted Sewer Service Allocation Regulations, which provide procedures governing connection to the public sewer systems that serve the Town. The regulations were designed to:

1. Protect the connection rights of those property owners whose properties have a full paid assessment in one of the Town's sewer assessment districts;

2. Prohibit the connection of properties that have only a partial assessment; and,

3. Reserve whatever "surplus" capacity the Town does have for properties with failed or failing septic systems that can physically be annexed to an existing sewer system by virtue of being "contiguous" to such a system.

In 2011, the Town has a very limited amount of "surplus" capacity, about enough to provide sewer service to 100 to 150 residential parcels.

About 28% of the developed parcels in Town are currently served by a public sanitary sewer system and, given the Town's available treatment plant capacity, this percentage is not likely to dramatically increase. The remaining parcels must utilize private on-site septic systems to handle sanitary waste.

PRIVATE ON-SITE SEPTIC SYSTEMS

Private on-site septic systems, which are maintained by individual property owners, are regulated and permitted by the County of San Mateo's Department of Environmental Health. Additionally, in 1992, the Town adopted its own regulations regarding septic systems and these are included in the Woodside Municipal Code. The Town's regulations adopt the County regulations by reference and also provide guidance as to the location of septic systems and to alternative designs. Alternative on-site sewage waste disposal may be permitted only with the approval of the Town Council and the County Health Officer and include mound systems, siphon systems, and other non-traditional designs.

Given the practical reality of limited public sewer treatment capacity, the use of private on-site septic systems will continue to be preferred by the Town. Many, if not most, of the current private systems in Town are decades old and some are reaching the end of their useful lives. The Town is experiencing an increased volume of inquiries from property owners whose septic systems are beginning to have problems. The Town Council has granted approval for the use of alternatively designed on-site systems in recent years to property owners with failed or failing traditional systems. Over time, it is likely that a higher incidence of failing on-site septic systems will occur, as these systems continue to age. Connection to a public sewer system will not be possible for most of these properties.

New on-site wastewater treatment technologies have developed since the Town adopted its septic system regulations. These systems and other improvements in industry practices are likely to hold an important place in the Town's standards and regulations governing private on-site septic systems. The loosening of State regulation of graywater systems also benefits water systems by reducing the amount of water entering the system and extending the life of leach fields.

STORM DRAINAGE

The storm drain system in Town consists primarily of open ditches, and some culverts which flow through private properties and public rights-of-way with limited sections of concrete-lined channels and pipes. The Town maintains drainage systems located within the public rights-of-way.

The Town prepared a Storm Drain Master Plan in 1978. This Plan identified the major watershed areas, discussed the hydrological characteristics within the Town, set forth design criteria for drainage facilities, analyzed existing drainage conditions, suggested drainage improvements, and identified deficient drainage structures. The Storm Drain Master Plan noted that natural drainage channels were being used to the fullest extent possible to conduct storm waters safely through the community, and that construction of extensive storm drainage systems utilizing lined channels and underground drains should be avoided since it is unnecessary, would be expensive, and would be significantly detrimental to the environment.

Debris build up within natural drainage channels and drainage structures is an acute problem in Woodside for which primary responsibility for maintenance rests with the owners of property, and which may require Fish and Game permits. Each fall, prior to the rainy season, the Town notifies holders of open permits of winterization and erosion control requirements.

The Town of Woodside reviews drainage and erosion control plans as part of a site development and/or building permit to ensure the latest Non Point Discharge Elimination System (NPDES) requirements are reflected and implemented as part of the permitted work. Currently, the Town requires that the post development storm water runoff from the property be the same as the predevelopment conditions of the property with no storm water increases. Generally this is done through the use of various storm water retention and/or storm water runoff reduction improvements such as vegetated swales in lieu of pipe conduits, bioretention areas for water percolation, flow-through planter boxes for water quality, underground pipe storage with bubblers to maintain pre-development storm water flows, and turf blocks and pervious concrete to reduce storm water runoff.

SOLID WASTE MANAGEMENT

Solid waste management services in Town are handled by GreenWaste Recovery. GreenWaste Recovery has been the solid waste collector since September 1, 1996. The contract was renewed in 2008, and is valid through June 30, 2018. GreenWaste collects refuse, recyclables, unlimited yard waste, and some household hazardous waste such as batteries and compact fluorescent lights. The Disposal Measurement System of 2008 (SB 1016) regulates and sets standards for solid waste management. SB 1016 increased focus on solid waste management programs, and established a new disposal measurement system. The target disposal rates for Woodside for Fiscal Year 2009 were 13.7 pounds/person/day for residential, and 37.0 pounds/person/day for commercial. Actual disposal rates for Woodside for Fiscal Year 2009 were 5.5 pounds/person/day for residential, and 16 pounds/person/day for commercial (significantly less than the target rates). SB 1016 requires annual reporting.

Special events and programs assist in managing specific waste streams. The County holds periodic hazardous waste collection events. The Woodside Fire Protection District manages the Chipper Program, which reduces residential fire fuel load by providing curbside chipping and removal of yard waste, such as brush and trimmings.

The Municipal Code requires recycling and diversion of construction and demolition debris. These regulations require that specified percentages of construction and demolition debris be diverted from landfills by using recycling, reuse, and diversion programs. To ensure compliance, a deposit is required based on the estimated tonnage of construction and demolition debris. The deposit is returned upon submittal of weight receipts which demonstrate that the required tonnage of debris has been diverted by recycling or reuse. If less than the required tonnage is diverted, a proportionate share of the deposit is retained. The Town has had nearly 100 percent compliance to date.

Animal waste disposal from private properties is handled by individual property owners, primarily by commercial haulers. Complaints regarding animal waste compliance are handled by the Town's Code Enforcement Officer, and potentially by the Regional Water Quality Control Board if they are impacting riparian resources.

GOAL PU1

Ensure adequate, safe, and site sensitive utilities.

Ensure that all development and property has access to utility services of a quality and quantity which will adequately serve the project scope. Utilities shall be installed in a manner which will protect health and safety and conserve the Town's rural character.

POLICY PU1.1 - ENSURE ADEQUATE UTILITIES

The property owner shall ensure that adequate utility services are available from the utility providers for their property. On-site waste disposal systems shall be used on all properties not within existing public sewer service districts. Connection to public sewer systems shall be provided in accordance with the Town's adopted Sewer Service Allocation Regulations.

Strategies:

a. "Will serve" letters

Continue to require property owners to submit "will serve" letters from the utility providers along with permit applications which include the installation of new utilities.

POLICY PU1.2 - INSTALL UTILITIES IN AN ENVIRONMENTALLY SENSITIVE MANNER

Pursue all reasonable measures to support or require undergrounding of all utilities in public rights-of-way and on private property. Ensure that utility installation minimizes disruption to the environment and disturbance to vegetation.

Strategies:

a. Undergrounding

Ensure undergrounding of utilities on private property as required by the Woodside Municipal Code. Actively pursue all reasonable measures to support undergrounding of utilities in public rights-of-way.

b. Site and engineering plan review

Town staff shall continue to review site and engineering plans, which include the installation of new utilities, to ascertain if the proposed utilities are being installed in an environmentally sensitive manner.

POLICY PU1.3 - ENSURE CONTINUITY OF UTILITY SERVICES

Utility installations should be sensitive to geologic hazards of fault zones, steep slopes, and expansive soils. Utility systems which provide service on both sides of a fault shall be designed to consider continuity of service and minimization of failure (See the Natural Hazards and Safety Element).

Strategies:

a. Disruption of services

Utility supply lines, such as those for water, electricity, and natural gas shall, where feasible, incorporate "loop systems", so that in the event of damage to one section of the line, service can continue.

b. Site, engineering, and building plan review

Town staff shall continue to review site, engineering, and building plans, which include the installation of new utilities, to ascertain if the proposed utilities are being installed in a manner which could minimize disruption to service.

POLICY PU1.4 – COORDINATE WITH PUBLIC UTILITY PURVEYORS

Strengthen relationships with public utility purveyors, and continue to coordinate Town and public utility purveyor infrastructure improvements.

Strategies:

a. Relationships with public utility purveyors

Strengthen relationships with public utility purveyors and keep current contact information.

b. Infrastructure improvement coordination

Coordinate Town and public utility purveyor infrastructure improvements, such as Town road improvements and necessary infrastructure installation within Town rights-of-way.

GOAL PU2

Promote installation of alternative power sources.

Promote installation of gas and electric, and alternative power sources, in a manner that is safe, sensitive to the environment, and conserves resources.

POLICY PU2.1 – PROMOTE ENERGY CONSERVATION

Encourage or require measures to reduce or minimize energy consumption.

Strategies:

a. Energy audits

Encourage high energy users to do audits. Advertise the availability of energy audit programs, such as the High Energy Home Project.

b. Green building code

Consider adopting green building standards which increase along with project size.

POLICY PU2.2 ENCOURAGE THE INSTALLATION OF ALTERNATIVE POWER SYSTEMS

Encourage the installation of alternative power systems to reduce energy consumption.

Strategies:

a. Solar Rights Act

Adhere to the provisions of the State of California's Solar Rights Act.

b. Staff training

Provide key staff with training on new technologies for alternative power systems to reduce the length of the permitting process.

c. Local power sources

Consider installations of environmentally sensitive alternative power systems for community use.

d. Incentives

Consider incentives for property owners to encourage installation of alternative power systems.

POLICY PU2.3 – PROMOTE SAFE AND SITE SENSITIVE GAS AND ELECTRIC, AND ALTERNATIVE POWER SOURCES.

The installation, maintenance, and location of gas and electric utilities, and alternative power sources, are an important safety, environmental, and aesthetic concern for the Town. New utilities should be installed in a safe, environmentally sensitive, and aesthetic manner.

Strategies:

a. Safe installation, maintenance, and repair

Foster a positive working relationship with the public gas and electric purveyor to encourage safe installation, the provision of needed and scheduled maintenance, and prompt repair of the power infrastructure when damaged.

b. Environmentally sensitive installation

Require adequate environmental review for power services, such as boring in environmentally sensitive areas, and develop appropriate mitigation measures.

c. Installation and maintenance

Foster a positive working relationship with the public gas and electric purveyor to encourage undergrounding of power lines and the aesthetic location and placement of utility boxes. Necessary tree trimming around power lines should maintain the natural tree form and tree health. Work with private property owners on these same aesthetic issues to the extent feasible under State law.

d. Off-site impacts

Work with property owners who are considering the installation of solar panels and other alternative power systems to minimize their visual, aesthetic, and noise impacts on neighboring properties.

GOAL PU3

Promote adequate communications access.

POLICY PU3.1 – INCREASE ACCESS TO COMMUNICATIONS

Communication utilities, such as internet, cable, and mobile phones are becoming increasingly more important. The Town should work to increase access to broadband voice, data, and video; and wireless communications.

Strategies:

a. Increase coverage

Assess communication needs and seek public or private partnerships to increase coverage in accordance with federal, State, and local regulations.

b. Environmentally sensitive installation

Require adequate environmental review and/or permitting of communication utilities.

c. Update regulations

Periodically update the Town's communication system permitting regulations to ensure compliance with General Plan goals and policies, and State law.

GOAL PU4

Maintain and improve the adequacy of the water supply.

POLICY PU4.1 - MAINTAIN AND IMPROVE THE ADEQUACY OF THE WATER SUPPLY AND DELIVERY

Adequate water supply for the Planning Area is a matter of utmost concern to the Town. Efforts to maintain and improve the adequacy of the water supply and delivery shall be continued.

Strategies:

a. Secure water supply

Assess community needs, and seek public or private partnerships to secure needed water supply.

b. Maintain water supply

The Town should continue to keep abreast of regional water issues to maintain adequate water supply.

c. Improve water delivery

Work shall be continued toward the improvement of all water systems to provide sufficient line size and storage to meet established health and fire protection standards. Particular attention should be given to the northerly area of the Town and the Woodside Country Club-Portola Hills area, where distribution systems, supply and storage facilities are inadequate.

d. Provide adequate water flow

Work with the Woodside Fire Protection District and water purveyors to identify substandard fire flow areas and to improve water systems to ensure adequate water flow in all areas of Town.

POLICY PU4.2 - SEEK ADEQUATE MAINTENANCE AND PROMPT REPAIR OF WATER SUPPLY INFRASTRUCTURE

Water purveyors shall provide adequate scheduled maintenance and prompt repair of damaged systems.

Strategies:

a. Maintenance and repair

Assess community needs, and foster positive working relationships with the public or private purveyors to encourage the provision of needed and scheduled maintenance and prompt repair of the water system when damaged.

POLICY PU4.3 - INTERCONNECT WATER SUPPLY INFRASTRUCTURE

The existing water supply systems in the Woodside Planning Area should be effectively interconnected with an adequate number of strategically-placed control valves, to assure adequate delivery of water supply in the event of a water line break.

Strategies:

a. Improve water system connectivity

Assess community needs and seek public or private partnerships to improve the interconnectivity of the Town's water delivery systems.

GOAL PU5

Encourage and support on-site sewage disposal systems.

POLICY PU5.1 – REQUIRE ON-SITE SEWAGE DISPOSAL SYSTEMS

Individual on-site sewage disposal systems meeting Town standards are required. If a property meets the criteria of the Town's sewer service allocation requirements, connection of that property to the public sewer system may be required.

POLICY PU5.2 – ENFORCE ON-SITE DISPOSAL STANDARDS

Each parcel served by an individual sewage disposal system should be of such size and characteristics that an effective, reliable disposal system can be installed and maintained, and should demonstrate effective functioning under wet weather conditions. Permitting by the Town and the County is required.

Strategies:

a. Permit process

Review, and update as needed, the Town/County interface for the preliminary review and final approval of on-site disposal systems.

b. Residential Design Guidelines

Update the Residential Design Guidelines to address site planning considerations for septic systems.

POLICY PU5.3 – CONSIDER ALTERNATIVE SEPTIC SYSTEMS

On-site sewage disposal systems are typically comprised of a septic tank with gravity-fed, subsurface leachfields. Pressure dosing, where required, is also considered a feature of a standard septic system. Systems other than standard septic tank-leachfield systems may be considered on a case-by-case basis for existing developed lots.

Strategies:

a. Update regulations

Review, and update where appropriate, the Town's septic system regulations and consider technological advances in on-site systems. Investigate alternative septic systems and methods, and techniques for rebuilding existing septic systems in situ.

b. Alternative on-site disposal system proposals

Consider alternative on-site disposal systems proposed by applicants.

POLICY PU5.4 – PROMOTE EDUCATION AND OUTREACH

The Town should implement an education and information program to support efficient and effective design, use, and maintenance of septic systems by owners.

Strategies:

a. Public information

Develop handouts on Town factors affecting septic design, including soils, topography, and limited lot size; and on recommended septic system maintenance practices, water conservation practices, and other measures, such as limiting irrigation over, and near leachfields, which can extend the life of a septic system.

GOAL PU6

Manage and allocate the Town's limited public sanitary sewer allocations appropriately.

POLICY PU6.1 – MANAGE SEWER SERVICE ALLOCATIONS

Connection to a sanitary sewer may be permitted in accordance with current Woodside Municipal Code regulations and based upon available sewer service capacity.

Strategies:

a. Determine existing capacity

Periodically determine how much of the Town's existing capacity is being utilized.

b. Reduce outflows

Promote efforts to reduce outflows.

c. Update regulations

Periodically review and update the Town's Sewer Service Allocation Regulations to reflect current conditions.

POLICY PU6.2 – SEEK INCREASED SANITARY SEWER CAPACITY

Current contractual public sewer treatment capacity is limited and will not serve the eventual needs of all properties in the Town that may require it. The Town should therefore seek additional capacity.

Strategies:

a. Pursue additional capacity

Explore increasing public sanitary sewer treatment capacity from the parties to the South Bayside System Authority (SBSA).

POLICY PU6.3 – CONDUCT ENVIRONMENTAL REVIEW

All construction and maintenance of sewer lines and related facilities shall consider impacts on drainage, vegetation and trees, soil erosion and geologic hazards, and water conservation.

Strategies:

a. Environmentally sensitive installation

Require adequate environmental review for sewer service and develop appropriate mitigation measures.

GOAL PU7

Promote reduction of water usage and increased conservation of water resources.

POLICY PU7.1 – PROMOTE WATER CONSERVATION

Promote water conservation to reduce water usage.

Strategies:

a. Outdoor water efficiency

Adopt and implement the State of California's Model Water Efficient Landscape ordinance requirements, or equivalent.

b. Indoor water efficiency

Adopt and implement the State of California's Green Building Standards code requirements.

c. Water collection systems

Encourage the installation of water collection systems, such as rainwater collection and storage, which reuse water resources and adhere to the State of California's graywater regulations.

d. Water audits

Encourage and assist property owners with water audits.

e. Update regulations

Update regulations to reflect the requirements of the State of California's model water efficiency landscape ordinance requirements.

POLICY PU7.2 – ENCOURAGE WATER CONSERVATION AND WASTEWATER TREATMENT SYSTEMS

The Town should encourage water conservation through the development of procedures allowing the use of graywater or recycled water by Town residents and businesses, and should encourage San Mateo County and the State to allow such beneficial reuse of wastewater.

Strategies:

a. Monitor regulations

Monitor County and State regulations on the use of recycled water.

b. Develop regulations

Develop Town implementing regulations as appropriate.

GOAL PU8

Manage storm water drainage to minimize erosion and runoff.

POLICY PU8.1 – RETAIN STORM WATER RUNOFF

Vegetative ground cover shall be retained to the maximum extent feasible, as a means of reducing storm water runoff and minimizing erosion and sedimentation.

Strategies:

a. Encourage bioretention

Require vegetated swales, biorention areas, flow through planter boxes, and turf blocks to direct and treat storm water, and minimize erosion.

b. Use best management practices

Implement additional sustainable practices, as practicable, as part of the NPDES permitting requirements, such as ground water recharge.

POLICY PU8.2 – UTILIZE NATURAL DRAINAGE

Natural drainage features should be utilized to conduct storm waters safely through the community wherever possible. Construction utilizing lined channels, or underground drains should be avoided.

Strategies:

a. Review drainage system design

1. Discourage the use of underground piping systems, and incorporate natural drainage channels as part of the drainage and landscape design.
2. Prohibit unpermitted drainage system releases into streams and wetlands.

b. Prepare drainage system design guidelines

Prepare guidelines for drainage system design. Possible guideline forms could include updates to the Residential Design Guidelines, Town CEQA guidelines, and handouts.

POLICY PU8.3 – MAINTAIN NATURAL DRAINAGE WAYS

The Town should encourage measures to keep natural drainage ways free of obstructions such as fallen trees, debris, landslide material, and sedimentation, thereby maintaining capacity in the natural drainage system to prevent damage from overflowing streams. In compliance with regional, State, and federal laws, primary responsibility for maintenance of drainage ways rests with the owners of property through which the drainage ways pass. The Town is responsible for maintenance of drainage ways in the public rights-of-way.

Strategies:

a. Public information

Continue to provide leadership, advice, and encouragement to property owners regarding natural drainage maintenance.

b. Town maintenance

Continue to maintain public roadside drainage ways as part of the annual Road Program.

POLICY PU8.4 – CONTROL EROSION, SEDIMENTATION, AND FLOODING

The Town shall implement and encourage measures to limit erosion, sedimentation, and flooding.

Strategies:

a. Review erosion control plans

Continue to review erosion control plans to ensure measures are being taken which prevent erosion, sedimentation, and flooding.

b. Prepare for winter erosion control

Continue to notify holders of open permits each fall of winterization and erosion control requirements, prior to the rainy season.

c. Respond to water hazard emergencies

Continue to respond to emergency calls related to erosion and flood control.

GOAL PU9

Manage solid waste to protect public health, reduce waste generation, and conserve resources.

POLICY PU9.1 – ADMINISTER SOLID WASTE PROGRAM

It is the policy of Woodside to support a solid waste management program which will provide adequate services, protect the public health, prevent the creation of nuisances, reduce waste generation, conserve natural resources and energy, provide for maximum resource recovery from solid waste, and enhance the beauty and quality of the environment.

Strategies:

a. Encourage increased recycling and waste reduction

Provide education and support to further recycling and waste reduction efforts by publicizing recycling events for electronics and hazardous waste. Publicize the availability of smaller general refuse hauler cans.

b. Update regulations

Monitor State legislation and current solid waste practices and update Town regulations and programs as appropriate.

POLICY PU9.2 – MANAGE ANIMAL WASTE

Manage wastes resulting from the keeping of horses, cows, and other livestock, to prevent health hazards.

Strategies:

a. Monitor animal waste disposal

The Town should actively monitor waste management on horse properties.

b. Composting program

Develop waste management guidelines and encourage an animal waste composting program.

POLICY PU9.3 – REDIRECT BIODEGRADABLE HOUSEHOLD WASTE

Encourage the redirection of biodegradable household waste from off-haul as general refuse to on-site composting.

Strategies:

a. Provide composting information

Provide residents with a source of information for identifying a comprehensive list of biodegradable household waste, and composting methods such as compost bin and worm composting.