7

OPEN SPACE AND CONSERVATION

This element outlines policies relating to habitat and biological resources, water quality, air quality, greenhouse gas emissions and historic and cultural resources conservation. Background information is included to establish the context for the policies. Regulatory authority over environmental resources within the city is shared among various agencies; the City itself offers protection of natural resources through its land use and development policies, particularly in areas not protected under State or federal legislation. In addition, the City can also participate actively in restoring degraded habitat areas. The risks and opportunities presented by various environmental factors—such as seismicity and biotic habitats—would necessitate different kinds of assessments and reviews. These requirements are consolidated and presented in Figure 7-2. (Amended by Resolution 26-2014. Adopted on February 12, 2014.

South San Francisco's bayshore, near Point San Bruno. The South San Francisco/San Bruno Sewage Treatment Plant can be seen in the background.

Colma Creek, the city's largest waterway, meanders through residential and industrial areas to the Bay. Several streets cross it, including San Mateo Avenue.

7.1 HABITAT AND BIOLOGICAL RESOURCES CONSERVATION

The natural environment in South San Francisco has undergone drastic change during its history of urbanization. Although virtually the entire city is developed with urban uses, the city and the immediate surroundings are known to support remnant areas of high biological value, notably San Bruno Mountain, Sign Hill, and wetlands.

VEGETATION AND WILDLIFE

Historic vegetation in South San Francisco included native grasslands, coastal scrub, oak woodlands, riparian communities, and coastal salt and brackish marshes. Human intervention and development have altered the landscape, restricting natural vegetation to isolated, scattered parcels. South San Francisco's vegetative communities include annual grasslands, seasonal wetlands, fresh and saltwater marshes, mud flats, disturbed grasslands, and significant stands of trees. Much of the vegetative area is landscaped. Fresh emergent wetland is limited to channelized portions of Colma Creek, and potential saline emergent wetland habitat includes the tidal salt marshes along the Bay fringe.

Primary threats to vegetative communities in the city include:

- Further intrusion of urban development into wildlife habitats;
- Non-native vegetation originally introduced as landscaping, such as French broom, eucalyptus, Monterey pine, and Monterey cypress, which currently threaten habitat for threatened and endangered plant and animal species; and
- Toxic contaminants from commercial or industrial facilities that could result in risks to sensitive waters and nearshore communities of the Bay.

The vegetative communities support habitat for a wide range of animal species, including those under federal and State protection. The best-known of these special status species are the threatened and endangered butterflies on San Bruno Mountain and Sign Hill, including the special status Mission Blue, Calippe Silverspot, San Bruno Elfin, and Bay Checkerspot butterflies. San Bruno Mountain

supports many threatened or endangered plant species, and the city's salt marshes provide foraging habitat for seven special status bird species and may include red-legged frogs and two species of protected plants. Grassland and scrub habitat in the area attract a variety of reptile, amphibian, and bird species for breeding and foraging. Some reptile and amphibian species, as well as birds and small mammals, such as raccoon, skunk, and fox, may use wetland habitat. The nearshore tidal flats of San Francisco Bay, as well as the open waters, provide habitat for many species of plankton and other invertebrates, birds, fish, and mammals.

HABITAT CONSERVATION PLANS (HCP)

South San Francisco contains two areas set aside as habitat for the conservation of threatened and endangered species: the southern base of San Bruno Mountain within the city limits, and the portion of Sign Hill currently designated parkland by the City.

The purpose of the HCPs is to conserve and enhance as much of the remaining natural habitat on San Bruno Mountain and Sign Hill as possible. The plans allow for limited development in strict accordance with the provisions of each HCP, ensuring enhancement of habitat through the transfer of privately held lands to the public, and through the provision of funding for conservation and enhancement activities outlined in each HCP.

GUIDING POLICIES: HABITAT AND BIOLOGICAL RESOURCES CONSERVATION

7.1-G-1 *Protect special status species and supporting habitats within South San Francisco, including species that are State or federally listed as Endangered, Threatened, or Rare.*

New development projects in ecologically sensitive areas should consider impacts on valuable and sensitive natural habitats.

7.1-G-2 *Protect and, where reasonable and feasible, restore saltmarshes and wetlands.*

Colma Creek at South Airport Avenue. Creek and marshes serve as habitat for several species.

Although much of South San Francisco's saltmarshes and wetlands have been severely degraded through years of fill, they could be restored along portions of the city's southern bayshore.

IMPLEMENTING POLICIES: HABITAT AND BIOLOGICAL RESOURCES CONSERVATION

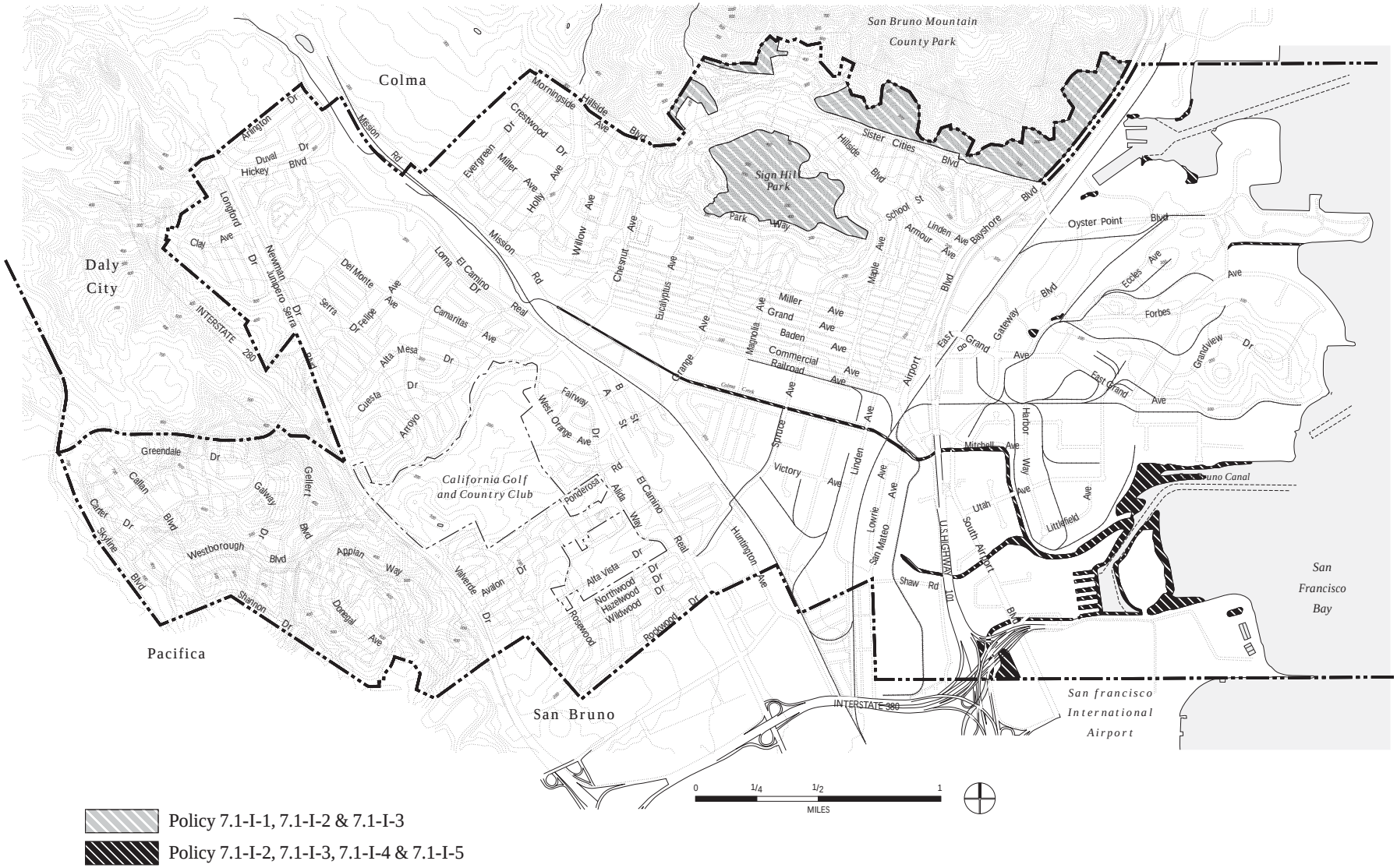
Special Habitat Areas

7.1-I-1 *Cooperate with State and federal agencies to ensure that development does not substantially affect special status species appearing on any State or federal list for any rare, endangered, or threatened species. Require assessments of biological resources prior to approval of any development on sites with ecologically sensitive habitat, as depicted in Figure 7-1.*

The city contains two types of ecologically sensitive habitat: Habitat Conservation areas and wetlands. Sign Hill and San Bruno Mountain—the two Habitat Conservation areas—consist of the annual grassland-Coyote Brush series vegetative community that has the potential to support many special status species. The marshes and seasonal wetlands concentrated along the city's southern shoreline and Colma Creek also could support protected species. Conservation will provide for the perpetuation of threatened, endangered, and other rare species, as well as the protection of the unique and diverse ecology of these areas as a whole.

Development located in these ecologically sensitive areas must complete a site-specific assessment of biological resources as part of the development review process. If development is located outside these ecologically sensitive regions, no site-specific assessment of biological resources is necessary. The City's environmental review process would be utilized to impose appropriate mitigation measures on development to reduce impacts on sensitive habitats and special status species. Figure 7-2 shows special environmental studies required for development proposals.

7.1-I-2 *As part of the Park, Recreation and Open Space (PROS) Master Plan*



Policy 7.1-I-1, 7.1-I-2 & 7.1-I-3

Policy 7.1-I-2, 7.1-I-3, 7.1-I-4 & 7.1-I-5

Source: Environmental Science Associates

Figure 7-1
General Plan Policies for
Sensitive Biological Resources

update, institute an ongoing program to remove invasive plant species from ecologically sensitive areas, including Sign Hill Park, Colma Creek Linear Park, Bayfront Linear Park, and other City-owned open space, as depicted in Figure 7-1.

Non-native vegetation originally introduced as landscaping includes French broom, eucalyptus, Star Thistle, and Pampas Grass. Removal of invasive species from public parks and open space in designated wetlands or habitat conservation areas is required only where these species are known to threaten habitat for special status plant and animal species. Removal of invasive species may also be required if they are a notable fire hazard in the parks or open space.

7.1-I-3 *As part of development approvals on sites that include ecologically sensitive habitat designated in Figure 7-2, require institution of an on-going program to remove and prevent the re-establishment of the invasive species and restore the native species.*

Development projects on ecologically sensitive lands at Sign Hill and wetlands along the bayshore and Colma Creek must consider the impact of invasive species on native plant communities in the assessment of biological resources. This program would be required only if the invasive species are found to be degrading to the habitat for special status plant and animal species. Table 7.1-1 presents a list of non-native invasive plant species that should be evaluated.

Assesments of Biological Resources Required

Geotechnical and Engineering Geology Reports Required

Source: Environmental Science Associates

Figure 7-2
Special Environmental Studies
Required for Development Proposals

Table 7.I-1:

Non-Native Invasive Plant Species that Should be Evaluated in Assessments of Biological Resources

Acacia (Acacia spp.)	Mattress vine (Muelenbeckia complexa)
Tree-of-heaven (Ailanthus altissima)	Tree tobacco (Nicotiana glauca)
Giant reed (Arundo donax)	Fountain grass (Pennisetum setaceum)
Bamboo (Bambusa spp., et al)	Pyracantha (Pyracantha angustifolia)
Pampas grass (Cortaderia selloana)	Castor bean (Ricinus communis)
Cotoneaster (Cotoneaster pannosa)	Black locust (Robinia pseudoacacia)
French broom (Cytisus monspessulanus)	German ivy (Senecio mikianoides)
Scotch broom (Cytisus scoparius)	Spanish broom (Sparteum junceum)
Blue gum (Eucalyptus globulus)	Tamarisk (Tamarix spp.)
English ivy (Hedera helix)	Gorse (Ulex europaeus)
Ice plant (Mesembryanthemum chilensis)	Periwinkle (Vinca major)
Tall fescue (Festuca arundinacea)	Purple fountain grass (Pennisetum setaceum)

Wetland Conservation

7.1-I-4 *Require development on the wetlands delineated in figure 7-1 to complete assessments of biological resources.*

The assessments of biological resources would consider the impacts on wetlands and special status species. Appropriate mitigation measures may be required as a condition of approval for development that significantly impacts wetland habitat or special status species. If any development is permitted within wetlands or to fill currently submerged portions of the Bay, mitigation measures must be required. This mitigation may include providing wetland habitat of the same type as the lost habitat, equal to or greater than existing conditions. Off-site mitigation of wetland impacts should be required in cases where on-site mitigation is not possible. Off-site mitigation sites should be as close to the project site as possible.

7.1-I-5 *Work with private, non-profit conservation, and public groups to secure funding for wetland and marsh protection and restoration projects.*

Since the City ability to fund these projects is limited, funding for restoration projects should be sought from a variety of sources. Alternative sources of funding may include development projects impacting Bay wetlands and habitat outside of South San Francisco that require wetland restoration as a mitigation measure, such as the expansion of the San Francisco International Airport. This will also enrich the overall visual quality of new shoreline parks that are being created.

7.2 WATER QUALITY

Water quality is a particular area of concern because of the ease of water pollution and the effects of pollution on nearshore wildlife habitat. Point sources of pollution are regulated through the National Pollutant Discharge Elimination System (NPDES) permit process. Permits are required under NPDES for all publicly operated treatment plants and for surface-water runoff in urban areas. These permits specify the discharge limits for certain pollutants and ensure that local industries pretreat the pollutants they discharge into treatment plants.

For the purposes of administering NPDES, the State Water Resources Control Board (SWRCB) has jurisdiction over nine Regional Water Quality Control Boards (RWQCB) in California. South San Francisco falls under the authority of the San Francisco Bay RWQCB, which is responsible for implementing State policy through the preparation of basin plans for water quality control and the regulation of all activities affecting water quality.

The quality of groundwater and water flowing into Colma Creek and the Bay is most likely to be affected by nonpoint pollution sources in South San Francisco, simply because they are not as rigorously regulated as point sources. Development can potentially pose a threat to surface and groundwater quality through construction sediment, materials used on-site, and related increases in automobile use.

SURFACE WATER QUALITY AND POLLUTION

Since the city is largely developed, there is a high proportion of impermeable surface area. Also, the clay soils typical of the hills surrounding the city are relatively impermeable, resulting in significant runoff with very little ground infiltration. Stormwater and irrigation runoff is collected in the City's storm system and discharged to Colma Creek or San Francisco Bay.

Colma Creek is particularly susceptible to water quality problems due to nonpoint sources of pollution. These sources include general pollutants picked up by runoff from streets, open areas, and urban lands. In most urban areas, nonpoint pollution includes sediment, oil, debris, heavy metals, hydrocarbons, volatile organic compounds, herbicides and pesticides, and fertilizers. Industrial areas may have a variety of other toxic and hazardous substances as well. Any pollution in Colma Creek

affects the immediate habitat and is ultimately discharged into San Francisco Bay near sensitive mudflat habitat areas.

In order to control nonpoint source pollution, which is generally difficult to manage, the City joined the San Mateo Countywide Stormwater Pollution Prevention Program (STOPPP) in 1991. STOPPP functions under a Joint Municipal NPDES Permit for stormwater quality management, as authorized by the San Francisco Bay RWQCB. The program includes pollutant source identification and water quality measurement, and elimination of illicit discharges; structural and nonstructural controls for commercial and residential areas, and controls for industrial facilities; and, controls for new development and construction sites[1] and other elements.

The program also calls for the preparation of a Stormwater Management Plan (SWMP) for each municipality. The City has selected a variety of best management practices (BMPs) for adoption into its plan. These practices include street sweeping, storm drain stenciling, spill cleanup, and annual catch basin maintenance. Since much of Colma Creek flows through private property, the City has also adopted a number of BMPs aimed at private land owners to control litter, gain compliance from industrial dischargers, reduce pollutants at commercial sites, minimize construction sediment, and clean and maintain privately-owned watercourses.

GROUNDWATER QUALITY AND POLLUTION

Much of the alluvium that underlies the lowland areas of the City is capable of transmitting groundwater, especially in the southwestern portion of the City which is underlain by a portion of the San Mateo Groundwater Basin. With the exception of industrial areas or locations with underground storage tanks where high levels of nitrate and manganese have been detected, the quality of this water is considered good. However, contamination may be present in existing or former industrial areas of unconfined waste disposal, or in the areas of high groundwater levels.

[1] Under the regulations promulgated by EPA, construction disturbance on sites greater than five acres requires a separate NPDES permit.

The quality of surface water resources will be improved through continued participation in regional programs.

GUIDING POLICIES: WATER QUALITY

7.2-G-1 *Comply with the San Francisco Bay RWQCB regulations and standards to maintain and improve the quality of both surface water and groundwater resources.*

7.2-G-2 *Enhance the quality of surface water resources and prevent their contamination.*

7.2-G-3 *Discourage use of insecticides, herbicides, or toxic chemical substances within the city.*

IMPLEMENTING POLICIES: WATER QUALITY

7.2-I-1 *Continue working with the San Francisco Bay RWQCB in the implementation of the NPDES, and continue participation in STOPPP for the protection of surface water and groundwater quality.*

The NPDES and STOPP have and will continue to be successful in improving surface water quality in the city.

The City has already identified a variety of best management practices to minimize construction sediment in its Stormwater Management Plan. Construction disturbance on sites greater than five acres also requires a separate NPDES permit.

7.2-I-2 *Review and update the Best Management Practices adopted by the City and in STOPP as needed.*

The BMPs were last updated for STOPP in 1991 when the program was established. Additional City BMPs may be updated if necessary.

7.2-I-3 *Prepare and disseminate information, including a page on the City's web-site, about the potentially harmful effects of toxic chemical substances and safe alternative measures, including information about safe alternatives to toxics for home and garden use.*

7.3 AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Air and climate are important resources affecting the local quality of life. While changes in the climate and air quality are affected by local activities, they are regional and even global issues. Greenhouse gas (GHG) emissions have contributed to the creation of a barrier that prevents heat from escaping the earth's atmosphere in a process known as the greenhouse gas effect. Scientific consensus maintains that human activities are rapidly increasing the concentrations of GHG emissions in the atmosphere, resulting in a warming of the planet and altering the earth's climate systems. Climate change is projected to cause hotter and drier conditions in California, resulting in more extreme heat events, an increased risk of drought, more intense weather events, flooding of low-level coastal areas as a result of sea level rise, and less available water due to a decrease in snowfall. The combined impacts of these risks pose a significant threat to economic and natural systems both globally and locally. Yet South San Francisco is making strides in reducing the local contribution to climate change and preparing to adapt to new climate change conditions. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

Although both climate change and air quality are broader issues, they affect the local quality of life. Protecting these resources is vital to the overall health of the environment. While the local impact of climate change can be indirect and more long-term, air quality has directly observable impacts affecting the attractiveness of any locality. South San Francisco enjoys generally good air quality, due largely to the presence of the San Bruno Gap, a break in the Santa Cruz Mountains that allows onshore winds to flow easily into San Francisco Bay and quickly disperse air pollutants. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

Within South San Francisco, certain areas of the city are more likely to result in pollutant exposure for residents and workers. These areas include the U.S. 101, I-280, and El Camino Real corridors, which experience relatively high pollutant concentrations due to heavy traffic volumes, particularly during peak periods. In addition, wind blowing out of the south and southeast exposes the city to emissions from the San Francisco International Airport (SFO).

San Francisco Bay Area Air Basin

South San Francisco is located within the nine-county San Francisco Bay Area

Air Basin. Air quality in the basin is monitored by the Bay Area Air Quality Management District (BAAQMD), which operates a regional network of air pollution monitoring stations to determine if the national and State standards for criteria air pollutants and emission limits of toxic air contaminants are being achieved.

Under the federal Clean Air Act, the U.S. Environmental Protection Agency (EPA) can classify an air basin or a portion thereof, as either in "attainment" or "nonattainment." This classification is based on whether or not the basin meets national ambient air quality standards. Likewise, a basin is classified under the California Clean Air Act with respect to the achievement of State ambient air quality standards. The Bay Area is considered "attainment" for all of the national standards, with the exception of ozone. It is considered "nonattainment" for State standards for ozone and suspended particulate matter (PM-10).

In 1991, the Bay Area 1991 Clean Air Plan was developed to address the State requirements of the California Clean Air Act. The Plan has been updated twice, in 1994 and 1997, with the continued goal of improving air quality through tighter industry controls, cleaner fuels, and combustion in cars and trucks, and increased commute alternatives.

CRITERIA AIR POLLUTANTS

The federal Clean Air Act requires the EPA to identify National Ambient Air Quality Standards. The EPA has established national standards for six criteria air pollutants, including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, PM-10, and lead. In addition, under State law, the Air Resources Board has established State standards for ambient air quality that are more stringent than the corresponding national standards. The Air Resources Board also sets standards for sulfates, hydrogen sulfide, and vinyl chloride, pollutants for which no national standards have been set.

While no monitoring station is located in South San Francisco, BAAQMD samples local air quality from the nearby Arkansas Street station in San Francisco. Monitoring station measurements indicate that air quality in the vicinity of South San Francisco performs well against State standards for criteria air pollutants. No violations of the State standard for ozone occurred between 1993 and 1997, although locally generated emissions of ozone precursors, reactive gases (ROG), and nitrogen

oxides (NO_x), affect downwind areas where violations do occur.

With respect to carbon monoxide, again the State standard was not exceeded. However, since 71 percent of the carbon monoxide emitted in the Bay Area comes from on-road motor vehicles, concentrations in the vicinity of congested intersections and highway segments would be expectedly higher than the monitoring data indicates.

Ambient PM-10 concentrations do violate the State standard on occasion in the vicinity of South San Francisco. PM-10 in the atmosphere is the result many of dust- and fume-producing industrial and agricultural operations, construction, fugitive sources (such as roadway dust), and atmospheric photochemical reactions involving ROG and NOx.

TOXIC AIR CONTAMINANTS

Unlike criteria air pollutants, ambient air quality standards have not been established for toxic air contaminants. These pollutants are typically carcinogens, mutagens, or reproductive toxins. Regulation of toxic air contaminants is achieved through federal and State controls on individual sources.[2] The preferred technique for reducing toxic air emissions is source reduction, and as part of a local control strategy in the Bay Area, all applications for new stationary sources are reviewed to ensure compliance with required emission controls and limits.

BAAQMD maintains an inventory of stationary sources of toxic air contaminants in the Bay Area. There are 17 such sources listed within South San Francisco, 14 of which are dry cleaners. The remaining sources include the South San Francisco San Bruno Wastewater Treatment Plant, the Shell Oil Company Distribution Plant, and the Superior Aluminum Body Corporation.

Many other commercial/industrial facilities in South San Francisco are sources of toxic air contaminants, but none result in a substantial risk to the public. As noted, BAAQMD regulates toxic air contaminants from stationary sources through a permit process. Mobile sources of toxic air contaminants are regulated indirectly through vehicle emissions standards and fuel specifications.

[2] Federal environmental laws refer to "hazardous air pollutants" and California environmental laws refer to "toxic air contaminants". Each of these two terms encompasses the same constituent toxic compounds.

Sensitive Receptors

Some people are more sensitive than others to air pollutants. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and duration of exposure to air pollutants. Sensitive receptors are facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollution. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors. Residential areas are considered sensitive to poor air quality as people in residential areas are often at home for extended periods.

CLIMATE CHANGE AND GREENHOUSE GAS EMISSIONS

GHG emissions result from day-to-day activities within the community. Key sectors that locally contribute GHG emissions include energy, transportation, and solid waste. These sectors cause emissions through activities such as the combustion of natural gas or fuel, and the decomposition of solid waste.

Standards for GHG emissions and guidance for addressing climate change primarily come from regional and state agencies. In 2006, California established itself as a national leader on climate change with the adoption of the California Global Warming Solutions Act of 2006, also known as Assembly Bill 32 (AB 32), which sets statewide targets for GHG emissions reductions and initiated numerous programs and standards for GHG emissions. AB 32 provides a statewide directive to achieve 1990 GHG emissions levels by 2020, equivalent to a 15% reduction below baseline 2005–2008 emissions levels. Statewide, new projects subject to the California Environmental Quality Act (CEQA) must analyze GHG emissions and contribution to climate change. Section 15183.5(b) of the CEQA guidelines also allows jurisdictions to use a GHG emissions reduction plan consistent with CEQA guidelines for assessing cumulative project impacts on climate change.

In 2010, the BAAQMD updated its air quality guidelines to include guidance on assessing GHG- and climate change-related impacts consistent with CEQA Section 15183.5(b). BAAQMD also adopted thresholds of significance for GHG emissions. These thresholds can be used to determine that a proposed project's impact on GHG emissions is less than significant if the project is in compliance with a Qualified Greenhouse Gas Reduction Strategy, as outlined by BAAQMD and the CEQA Guidelines.

South San Francisco Climate Action Plan

On February 12, 2014, the City of South San Francisco adopted a Climate Action Plan (CAP) that follows both the State and BAAQMD CEQA guidelines. The purpose of the CAP is to demonstrate the City of South San Francisco's commitment to reduce GHG emissions while protecting the unique resources of the community. As an implementation tool of the General Plan, the CAP provides specific programs and measures that the City will implement to reduce GHG emissions and achieve General Plan goals and policies. The CAP and General Plan function together, with the General Plan providing an overarching framework to reduce GHG emissions and the CAP identifying near-term actions to implement the General Plan. Technical analysis in the CAP also demonstrates the impact of South San Francisco policies and programs on GHG emissions. The CAP is a tool that allows the City to understand its impact on GHG emissions, establish goals for GHG emissions reductions, and create steps to achieve these reduction targets. Maintaining the CAP as a separate plan provides flexibility to the City as regulations change, guidance evolves, and new opportunities emerge. *(Climate change section: Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

GUIDING POLICIES: AIR QUALITY AND GREENHOUSE GAS EMISSIONS

7.3-G-1 *Continue to work toward improving air quality and meeting all national and State ambient air quality standards and by reducing the generation of air pollutants both from stationary and mobile sources, where feasible.*

While South San Francisco's air quality is generally good due to climatic conditions, local concentrations of toxic air contaminants, odors and dust are relatively high around certain uses and transportation corridors. In addition, the City has a responsibility to contribute to regional air quality improvement efforts.

7.3-G-2 *Mitigate the community of South San Francisco's impact on climate change by reducing greenhouse gas emissions consistent with state guidance.*

AB 32 calls for the reduction of GHG emissions to 15% below 1990 levels by the year 2020. This state target is also consistent with BAAQMD's CEQA compliance guidelines. The City commits to ongoing GHG emissions reductions consistent with state directives for the year 2020 and beyond. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-G-3 *Reduce energy use in the built environment.*

The energy sector is the single largest GHG emissions sector within South San Francisco, contributing approximately 47% of emissions in 2005. This sector consists of energy used in local homes and businesses that are generated from a mix of nonrenewable, fossil-fuel based sources, such as coal and natural gas, and renewable sources, such as biomass, geothermal, hydroelectric, and wind. The amount of energy used in South San Francisco homes and businesses determines how much power utility companies must generate and the quantity of GHGs emitted. Energy efficiency, conservation, and renewable energy systems can reduce GHG emissions by reducing the amount of electricity or natural gas that must be generated and supplied to the city. Optimizing energy use throughout the community also provides the benefit of improved building quality and indoor comfort. The City can support energy reductions through programs such as education, outreach, and incentives. Such efforts will draw on the City's long tradition of collaboration and outreach like the Green X-Ray House, a City project with exposed green remodel improvements that showcase energy improvements. Standards and regulations are also important opportunities to facilitate energy reductions in development. The Economic Development Element and the Housing Element also support business operations and improve the quality of the housing stock.*(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-G-4 *Encourage land use and transportation strategies that promote use of alternatives to the automobile for transportation, including bicycling, bus transit, and carpooling.*

Motor vehicles, regulations of whose emissions is preempted by State

laws, are the major source of criteria air pollutants in the Bay Area Air Basin, accounting for the vast majority of carbon monoxide and particulate matter and over a quarter of the reactive organic gases and nitrogen oxides in the region. The transportation sector also was the second largest community-wide source of GHG emissions in South San Francisco in 2005, contributing approximately 45% of emissions. A majority of automobile emissions in the city result from regional through-trips. Thus, while reduced traffic congestion or vehicle miles traveled in South San Francisco will only minimally impact the Bay Area's air quality, the City's planning decisions can help to moderately reduce motor vehicle use, contributing to cumulative reductions in emissions across the entire Bay Area. Increased use of transit and carpooling, coupled with land use and circulation patterns that promote walking and bicycling, can lead to a decrease in daily trips, less emissions, and improved air quality. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

Western Meat Company, East Grand Avenue, 1922. The city's industrial history is significant, although no industrial buildings or sites are currently designated historic resources.

The Transportation Element (Section 4.3) includes policies for bicycle and pedestrian circulation, and Transportation Demand Management designed to reduce emissions and alleviate traffic congestion. The Land Use Element includes policies that encourage pedestrian and transit travel between home and work, reducing negative air quality impacts.

7.3-G-5 *Promote clean and alternative fuel combustion in mobile equipment and vehicles.*

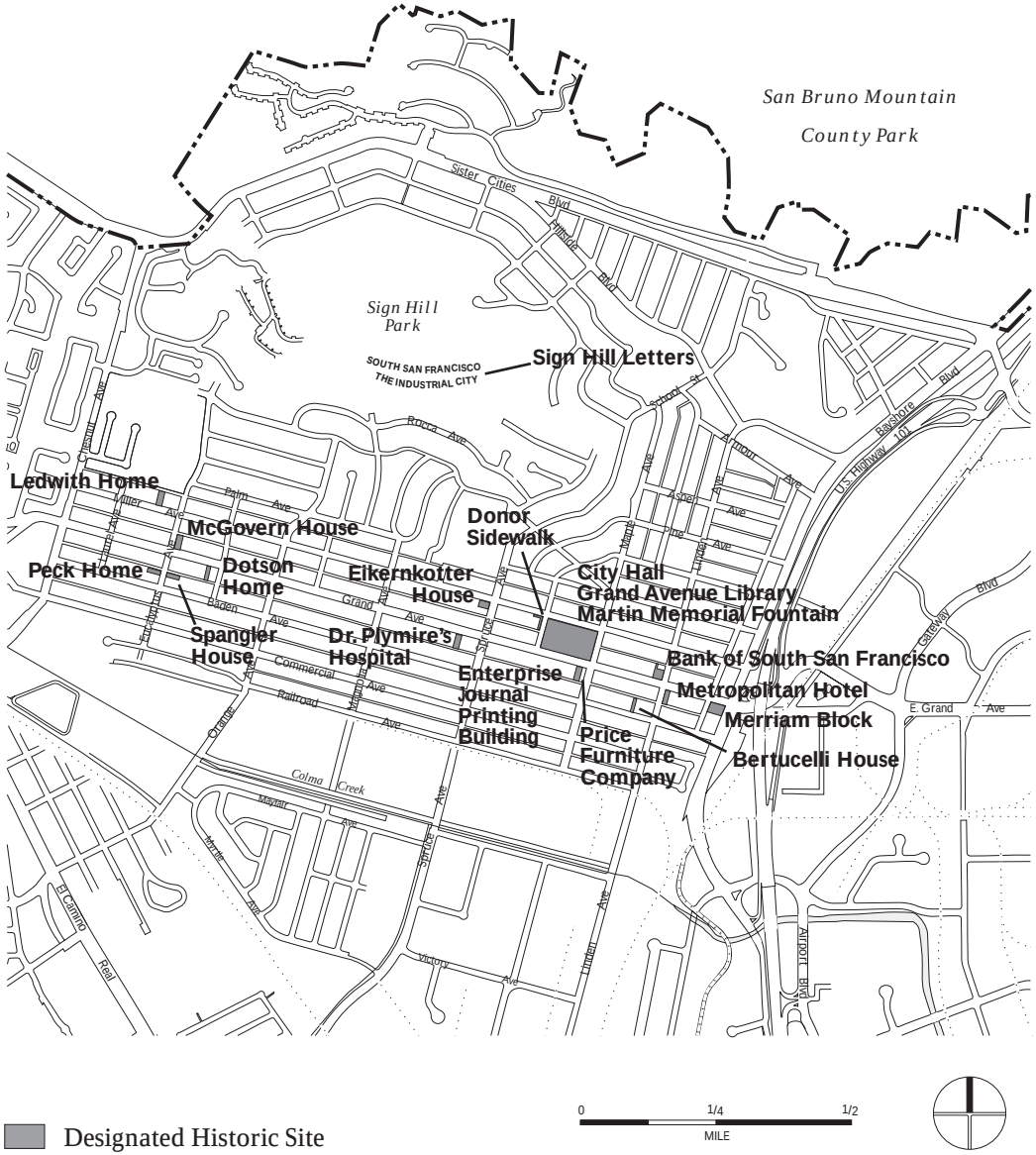
Combustion of fuels in mobile equipment and vehicles is a contributor to GHG emissions throughout the community and affects local air quality. BAAQMD provides guidance for the mitigation of construction-related impacts that may result from fuel combustion of heavy-duty equipment such as tractors and generators. The City of South San Francisco can also reduce fuel combustion by promoting idling time reductions, expanding the use of alternative fuels, and facilitating use of clean or plug-in electric vehicles and equipment. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-G-6 *Minimize conflicts between sensitive receptors and emissions generators by distancing them from one another.*

Development of sensitive receptors in close proximity to the South San Francisco San Bruno Wastewater Treatment Plant and other potential emissions sources is restricted by land use policies in Chapter 2: Land Use. Residential uses, as well as most other types of sensitive receptors except hotels, are not permitted east of 101.

IMPLEMENTING POLICIES: AIR QUALITY AND GREENHOUSE GAS EMISSIONS

7.3-I-1 *Cooperate with the Bay Area Air Quality Management District to achieve emissions reductions for nonattainment pollutants and their precursors, including carbon monoxide, ozone, and PM-10, by implementation of air pollution control measures as required by State and federal statutes.*



Source: South San Francisco Historic Resources

Figure 7-3
Designated Historic Resources

7.3-I-2 *Use the City's development review process and the California Environmental Quality Act (CEQA) regulations to evaluate and mitigate the local and cumulative effects of new development on air quality and GHG emissions. (Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

The BAAQMD's CEQA Guidelines could be used as the foundation for the City's review of air quality and GHG emissions impacts under CEQA, with the City's CAP serving as the tool for addressing cumulative GHG emissions.*(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

The City should continue to include responsible agencies in the review of proposed land uses that would handle, store, or transport any potential air pollutant sources such as, but not limited to, lead, mercury, vinyl chloride, benzene, asbestos, beryllium, and all fuels.

7.3-I-3 *Adopt the standard construction dust abatement measures included in BAAQMD's CEQA Guidelines.*

These measures would reduce particulate emissions from construction and grading activities.

7.3-I-4 *Require new residential development and remodeled existing homes to install clean-burning fireplaces and wood stoves.*

Residential woodburning is a growing source of localized air pollution. Woodsmoke released from fireplaces and wood stoves contains carbon monoxide, nitrogen dioxide, and PM-10. Pollution can be reduced by installing gas fireplaces or EPA certified wood heaters and operating existing fireplaces and wood stoves more efficiently.

7.3-I-5 *In cooperation with local conservation groups, institute an active urban forest management program that consists of planting new trees and maintaining existing ones.*

South San Francisco has few street trees compared to other Bay Area cities. Trees growing in urban settings provide environmental benefits

including energy carbon-dioxide absorption, reduced air and noise pollution, and erosion control. Trees also beautify, shade, and mitigation the 'urban heat island effect' by shading pavement and other dark surfaces and through the cooling effects of their evapotranspiration. Funding should be sought from a variety of sources. Businesses or new development should also be encouraged to plant more trees in parking lots and building landscaping.

7.3-I-6 *Periodically update the inventory of community-wide GHG emissions and evaluate appropriate GHG emissions reduction targets, consistent with current State objectives, statewide guidance, and regulations.*

The CAP can provide streamlining to new development only if it provides a process for evaluating and updating the CAP. Accordingly, the City will monitor progress toward CAP targets and provide a mechanism to revise the CAP, should programs and measures not be achieving anticipated reductions. Conducting regular inventories allows the City to monitor progress toward the reduction target. Inventory updates also provide an opportunity to evaluate the City's reduction target based on current State guidance and best practices. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-I-7 *Adopt and implement the City of South San Francisco's CAP, which will identify a GHG emissions reduction target and measures and actions to achieve the reduction target.*

To meet CEQA guidelines and provide streamlining benefits, the CAP must identify and quantify actions that will reduce emissions to a less than significant level. The City will ensure that the CAP meets these necessary criteria of the CEQA Guidelines to provide streamlining benefits to new development. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-I-8 *Evaluate and regularly report to City Council, or its designee, on the implementation status of the CAP and update the CAP as necessary should the City find that adopted strategies are not achieving anticipated reductions, or to otherwise incorporate new opportunities.*

Regular monitoring and reporting on CAP progress allows the City to capitalize on new opportunities and evaluate the results of programs intended to reduce GHG emissions. Revisiting the CAP helps identify new opportunities to leverage CAP programs with other efforts, address challenges, and ensure success as the City works toward CAP reduction targets. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-I-9 *Promote land uses that facilitate alternative transit use, including high-density housing, mixed uses, and affordable housing served by alternative transit infrastructure.*

The City's location and the predominance of large-scale industrial and commercial activities with a large commuting workforce are factors that have resulted in a high number of vehicle miles traveled throughout the community. In concert with the Transportation Element and Specific Plans, the City is facilitating the development of transit-oriented and mixed-use development in distinct and vital neighborhoods. This implementing policy supports the development of interconnected neighborhoods that reduce car travel and improve the local quality of life. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-I-10 *Facilitate energy efficiency in building regulations and streamlined review processes, providing flexibility to achieve specified energy performance levels and requiring energy efficiency measures as appropriate.*

The regulatory permit process can be a disincentive to easy and feasible energy efficiency improvements. South San Francisco will support energy efficiency through effective and flexible processes. To the extent feasible, simple permits and checklists for energy-related improvements will be convenient and user-friendly. Through the CAP, the City will evaluate the lowest-burden programs or standards to achieve energy efficiency while supporting the growth objectives of the city. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-I-11 *Coordinate with the business community to encourage energy efficiency in the City's largest energy users while supporting economic growth objectives.*

The biotechnology and industrial sectors are pillars of South San Francisco's identity and local economy. Policies promoting the success of these and other economic sectors are provided in the Economic Development Element. Understanding and addressing the distinct energy needs of the City's economic sectors is critical to ensure ongoing economic success while supporting efficient energy use. Top nonresidential energy sectors include biotechnology, high technology industries, food processing, offices, and hospitality. The City will implement a collaborative approach to achieve nonresidential energy reductions, strengthening partnerships with companies and businesses to understand efficiency opportunities, identify funding opportunities, and implement efficiency standards and programs tailored to local practices and facilities. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-I-12 *Adopt guidelines, standards, and flexible regulations that promote on-site renewable energy systems while strengthening South San Francisco's economic competitiveness.*

South San Francisco's large nonresidential energy users can benefit from the installation of on-site renewable energy systems with short payback that reduce expenditures on electricity and natural gas. City standards and development programs will encourage and/or require the use of on-site renewable energy systems to meet local energy needs, focusing on options that maximize benefit to the community. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-I-13 *Encourage efficient, clean energy and fuel use through collaborative programs, award programs, and incentives, while removing barriers to the expansion of alternative fuel facilities and infrastructure.*

By acting as a leader and educator, the City can promote voluntary reductions in GHG emissions. The City can share information through the City website, public events, and other materials. City staff can also work with project applicants during the CEQA review process to encourage use of alternative, grid-connected, and low-emissions equipment for construction activities. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-I-14 Ensure that design guidelines and standards support operation of alternative fuel facilities, vehicles, and equipment.

Simple requirements such as requiring electrical outlets on building exteriors can remove barriers to the use of electric or clean fuel equipment options. South San Francisco is also implementing new CALGreen state requirements that support electric vehicle-charging in new homes. The City will continue to provide code incentives that address barriers to lower-emissions equipment and vehicles. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.3-I-15 Demonstrate effective operations in municipal facilities that reduce GHG emissions.

The City has taken a number of steps to reduce energy use and improve sustainability at municipal facilities and in the community. By demonstrating leadership in addressing sustainability issues and providing an example to the community of South San Francisco and other municipal governments in the Bay Area, the City will foster an environment where GHG emissions considerations become a part of the City, business, and citizen decision-making process. *(Amended by Resolution 26-2014. Adopted on February 12, 2014.)*

7.4 HISTORIC AND CULTURAL RESOURCES

South San Francisco's growth is notable for the close relationship between industry and community. The development of a residential town in support of new industrial plants was the calculated strategy of local industrialists. With the success of the city's industries, South San Francisco earned an important role as "The Industrial City" of the region.

The conservation of this unique history is the objective of historic and cultural preservation in South San Francisco. In addition to Sign Hill, designated resources in South San Francisco include several residential and commercial buildings in the downtown area. The City's Municipal Code and State and federal law, protect these local, State, and national historic resources from alteration and demolition. The Historic Preservation Commission oversees the protection of these resources. As such, designation is an important tool for preserving reminders of the past that

contribute to the City's identity. Equally central, and perhaps more difficult, is the broader goal of conserving the city's unique industrial heritage.

HISTORIC LANDMARKS

South San Francisco's only national historic landmark—Sign Hill—is also its best-known feature. Sign Hill has proclaimed the City's identity since 1891 when the J. Dunn Real Estate Company, South San Francisco's first realtor, initially installed the sign. After a period of several years during which the sign was absent, the Chamber of Commerce had the words "South San Francisco The Industrial City" whitewashed onto the hillside. The concrete letters were installed in 1929. The sign has become a regional landmark, clearly visible to travelers on nearby freeways and to those flying into and out of San Francisco International Airport.

LOCAL LANDMARKS

South San Francisco's older buildings display a wide range of architectural styles, emblematic of the shifting styles that characterize the periods of the city's growth. Queen Anne, Victorian, Neoclassical, Craftsman, Spanish and Mission Revival, Moderne, as well as contemporary styles, are all represented in the city's central neighborhoods.

The city has several historic homes and commercial buildings. Most are located along Grand Avenue near the Civic Center, and around the intersection of Grand Avenue and Eucalyptus Street. In addition, many of the structures in downtown along Grand, Linden, Baden, and Miller avenues were identified as potential historic resources in a comprehensive survey completed in 1986. These buildings are representative of an architectural period, are of local historic prominence, or are well-restored examples of vernacular architecture. Regardless of their role, these buildings contribute to the overall scale and character of the area, and are included on the City's list of potential historic resources, giving the Historic Preservation Commission an opportunity to review all requests for demolition permits in the area.

Although industry played a critical role in South San Francisco's history, no industrial buildings or sites are currently designated historic resources. While buildings representing various historical styles are present in numerous communities in the Bay Area, few communities have manufacturing buildings, and those that remain are disappearing rapidly. The lack of designated industrial buildings puts the com-

munity in danger of losing these reminders of its past as new industrial and commercial uses expand. However, the need to preserve the city's history must be balanced with the economic considerations of industrial operations.

ARCHAEOLOGICAL RESOURCES

Consistent with its history as an Ohlone settlement location, South San Francisco has Native American village sites and shell mounds scattered around the city. Known resources include:

- A Native American archaeological village (CA-SMA-299) located within the El Camino Real Corridor Redevelopment Area that contains household items, projectile points, dietary debris, and human burials.
- A large shell mound (CA-SMA-40) and one small shell midden (CA-SMA-40) near the south slope of San Bruno Mountain. The shell mound is considered a significant archaeological resource.

South San Francisco's coastal location, and its rich history as a center of industry, makes the existence of additional prehistoric and historic archaeological resources likely. While the city is essentially built out, archaeological surveys may be appropriate as part of large project redevelopment activities.

GUIDING POLICIES: HISTORIC AND CULTURAL RESOURCES

7.5-G-1 *Conserve historic, cultural, and archaeological resources for the aesthetic, educational, economic, and scientific contribution they make to South San Francisco's identity and quality of life.*

7.5-G-2 *Encourage municipal and community awareness, appreciation, and support for South San Francisco's historic, cultural, and archaeological resources.*

IMPLEMENTING POLICIES: HISTORIC AND CULTURAL RESOURCES

7.5-I-1 *Explore the feasibility of establishing a Downtown South San Francisco Historical Commercial District, as designated in figure 7-3,*

to promote the revitalization and redevelopment of the area.

The 1986 Historic Resources Inventory recommended designation of the Downtown South San Francisco Historical Commercial District. The proposed district extends along Grand Avenue from Airport Boulevard to Maple Street, just below City Hall and also includes Linden Avenue to a distance of one block from Grand Avenue. The district is composed of late 19th and early-mid 20th century one-, two-, and three-story commercial buildings, with a pattern of large or architecturally prominent buildings at street corners. Several structures have residential apartments above the street level.

Formal designation of the Historical District would be an important economic development initiative in generating interest and support for efforts to revitalize the commercial area.

7.5-I-2 *Institute downtown urban design guidelines, and require a design review of developments in the proposed Downtown South San Francisco Historical Commercial District to ensure that the height, massing, and design of buildings furthers Downtown's character (see also policies 3.1-I-4 and 3.1-I-5).*

7.5-I-3 *Explore mechanisms to incorporate South San Francisco's industrial heritage in historic and cultural preservation.*

An inventory of industrial buildings in the city would identify important reminders of South San Francisco's industrial history. Without historic designation, these buildings are at risk of being demolished as new industrial and commercial uses expand. The adaptive reuse of these buildings would encourage an architecturally diverse and historic texture in South San Francisco's industrial areas. However, the need to preserve the city's industrial history must be balanced with the economic considerations of industrial operations.

7.5-I-4 *Ensure the protection of known archaeological resources in the city by requiring a records review for any development proposed areas of known resources.*

South San Francisco's known archaeological resources are located within areas undergoing development: Terrabay and the El Camino

Real corridor. The East of 101 area, which is a likely location for new development, has the potential to contain additional resources due to the extensive marshlands that existed prior to landfill activities. Adequate policies and measures for protection of known and unknown archaeological resources that can supplement CEQA requirements may need to be incorporated into future plans and development activities.

7.5-I-5 *In accordance with State law, require the preparation of a resource mitigation plan and monitoring program by a qualified archaeologist in the event that archaeological resources are uncovered.*

CEQA requires the evaluation of any archaeological resource on the site of a development project. State law also protects these resources. City involvement in the identification, mitigation, and monitoring of project impacts on these resources will ensure the protection of South San Francisco's cultural heritage.