



OPEN SPACE & CONSERVATION

CHAPTER 7: OPEN SPACE & CONSERVATION

GOALS

- Protection and enhancement of canyons, hillsides, riparian areas and dedicated open space.
- Reduction of greenhouse gas emissions at the community level in a manner that enhances the quality of life and supports the local economy.
- A sustainable storm water management system to capture runoff and reduce impacts to the canyon network.
- Sustainable development that reduces dependency on non-renewable energy sources, and reduces emissions, solid waste, and water consumption.
- Protection of public views to natural resources.
- Promotion and expansion of the tree canopy and urban greening.

INTRODUCTION

The General Plan Conservation Element and the Climate Action Plan address conservation and sustainability topics which have broad geographic relevance. The General Plan provides policy guidance for the long-term conservation and sustainable management of the City's natural resources, acknowledging that they help define the local identity, contribute to its economy, and improve its quality of life.

The Community Plan recognizes the importance of natural resources, including water and energy, to Clairemont. It supports sustainable development through community-specific policies and land use guidance that address natural resource conservation, reduction in the use of non-renewable resources, and climate resiliency. Implementation of these

policies through development, infrastructure investment, individual action, and participation in citywide and regional initiatives, is intended to conserve natural resources, minimize per capita ecological 'footprints,' and maintain the long-term health of the community and City.

The Open Space & Conservation Element serves as the sustainable development strategy for Clairemont, which aims to positively address the community contribution to global climate change and prepare for its potential effects. Key components of this strategy are policies that result in reductions to the community per capita greenhouse gas emissions, while fostering housing, employment growth, and development within a sustainable and climate-resilient manner.



Clairemont Mesa's gently rolling topography is separated by hillsides and canyons like Stevenson's Canyon shown above.

To achieve both per capita greenhouse gas emissions reductions and growth, the Community Plan contains policies that help to reduce the consumption of carbon-based energy resources for buildings, utilities and transportation. Reduced and more efficient use of energy, use of renewable and recycled building materials, and use of alternative and renewable energy sources can reduce the carbon footprint of existing and future buildings. Reducing vehicle miles travelled, traveling by walking/rolling, biking, or riding transit, and increasing vehicle fuel efficiency and alternative fuel use are measures that will improve transportation sustainability.

The Community Plan can help plan for the reduction of vehicle miles traveled in part from its central location within the region and

through a land use plan that focuses growth into villages and corridors and increased access to light rail and bus rapid transit service. Vehicle miles can be reduced by increasing employment and housing opportunities near high frequency transit, promoting walking and bicycle use as viable travel choices, and improving transit access and frequency.

The Community Plan also supports sustainable development through community-specific policies and land use guidance that address natural resource conservation, reduction in the use of non-renewable resources, and climate resiliency. Implementation of these policies through development, infrastructure investment, individual action and participation in citywide and regional initiatives is intended to conserve natural resources, minimize per

CLIMATE ACTION PLAN (CAP)

The City of San Diego adopted a Climate Action Plan (CAP) to achieve the State of California mandates for GHG emission reductions through local action and to the benefit of the local environment and economy. The CAP calls for eliminating half of all greenhouse gas emissions within the City by 2035. The CAP is a package of policies with steps the City can take to achieve the 2035 targets and is based upon these five strategies:

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1. Energy and water efficient buildings
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2. Clean and renewable
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3. Bicycle, walking, transit, & land use
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4. Zero waste
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5. Climate resilience

The CAP implements the General Plan through support for continued incremental changes to the urban land use and urban form, providing a greater variety of transportation choices, and transforming how we produce and use energy. Further, the CAP will complement the General Plan policies to reduce greenhouse gas emissions with quantifiable data and benchmarks for success.

capita ecological footprints and maintain the long-term health of the community and City.

The Community Plan, General Plan, Climate Action Plan, Multiple Species Conservation Program and development regulations including the Environmentally Sensitive Lands Regulations provide the framework for conserving natural resources, including water and energy, within Clairemont.

SUSTAINABLE DEVELOPMENT

The Community Plan focuses on reducing dependence on cars, protecting and enhancing the community urban forest, providing storm water infiltration and water conservation, and encouraging green building practices. Sustainable development can help to address the effects of climate change resulting from greenhouse gas emissions that include higher seasonal temperatures, diminished water supplies, disruption of agricultural cycles.

LAND USE AND MOBILITY CONNECTIONS

The community plan provides opportunities for homes and businesses within community villages, near light rail stations, and along transit corridors. It includes a transportation network that supports bicycling, walking and transit use by connecting homes, schools, businesses and parks; this can help to reduce vehicle emissions, miles traveled and trips.

ENERGY EFFICIENCY

Building design, innovation and technological improvements can increase energy efficiency, provide renewable energy generation and reduce consumption of non-renewable energy. Existing and new buildings present opportunities for on-site power generation in surface parking areas, parking structures and rooftops, which can accommodate photovoltaic arrays for solar power generation.

WATER CONSERVATION

Water conservation, building features and water-wise landscaping can play a pivotal role in reducing the amount of water consumed by development. Planting native or more climate adapted plant species can reduce outdoor water use. Other techniques for reducing outdoor water use include using ‘smart’ irrigation controllers that time and manage irrigation based upon weather and soil moisture conditions, performing regular maintenance on irrigation systems to ensure operational efficiency, changing spray systems to drip irrigation, capturing rainwater using cisterns for landscape irrigation, using graywater or recycled water for landscape irrigation, and using mulch to retain soil moisture.

URBAN FORESTRY

A tree canopy provides many benefits to the environment and the overall quality of life, including: energy conservation and the minimization of solar heat gain, improvement of air and water quality, and a more attractive and comfortable pedestrian environment by providing shade and visual relief, and beautification. Also see the Urban Design Element.



The Community Plan encourages land uses and development that support walking, bicycling, and transit. The image shown above is an example of an improvement that enhances the pedestrian environment, while providing storm water infiltration.

ROOFTOP GARDENS / GREEN ROOFS

Rooftop gardens or green roofs can capture rainwater, reduce urban runoff, and reduce the urban heat island effect and heating costs by absorbing solar heat.

COMMUNITY GARDENS / URBAN AGRICULTURE

Community gardens make public or private land available to the community through either an individual or shared plot system and can provide opportunities to create green space for outdoor enjoyment and physical activity, particularly in spaces not available or suitable for parks. Community gardens can also increase access to healthy foods.

NATURAL RESOURCE
CONSERVATION

The protection and preservation of natural resources and open space can provide for habitat restoration, wildlife connectivity, passive recreation as well as improve the quality of life. The protection of open space areas supports native wildlife and habitats, which help build environmental resiliency. Land designated as open space consist of canyons, mesas, hillsides, and other natural landforms, as shown on Figure 7-1, that contain sensitive plants and animals and their habitats.

MULTIPLE SPECIES CONSERVATION
PROGRAM

The Multiple Species Conservation Program Subarea Plan preserves and manages a network of core biological resource habitat and open space areas within the Multi-Habitat Planning Area that support a high concentration of sensitive plants and animals. The goal of protecting these areas is to conserve this land in perpetuity and protect the region’s biodiversity, including endangered species and the native California flora and fauna.

MULTI-HABITAT PLANNING AREA

Only limited development may occur within the Multi-Habitat Planning Area to ensure the long-term habitat conservation plan for the covered species and preserve the natural vegetation communities. The Multi-Habitat Planning Area balances the preservation and protection of natural resources with the allowance of compatible public recreation. Most of the community’s open space areas, inclusive of natural canyons and natural slopes, are in the Multi-Habitat Planning Area.

The Multi-Habitat Planning Area covers the Tecolote and Marian Bear Memorial Park canyon systems which include indigenous plant communities, restored native plant communities, and naturalized landscapes typically found in canyons and adjacent hillsides. These areas also provide habitat for migrant and year-round fauna, including the Coastal California Gnatcatcher and Cooper’s hawk, by providing shelter, foraging opportunities, and connectivity to other local and regional habitats.

OPEN SPACE DESIGNATION

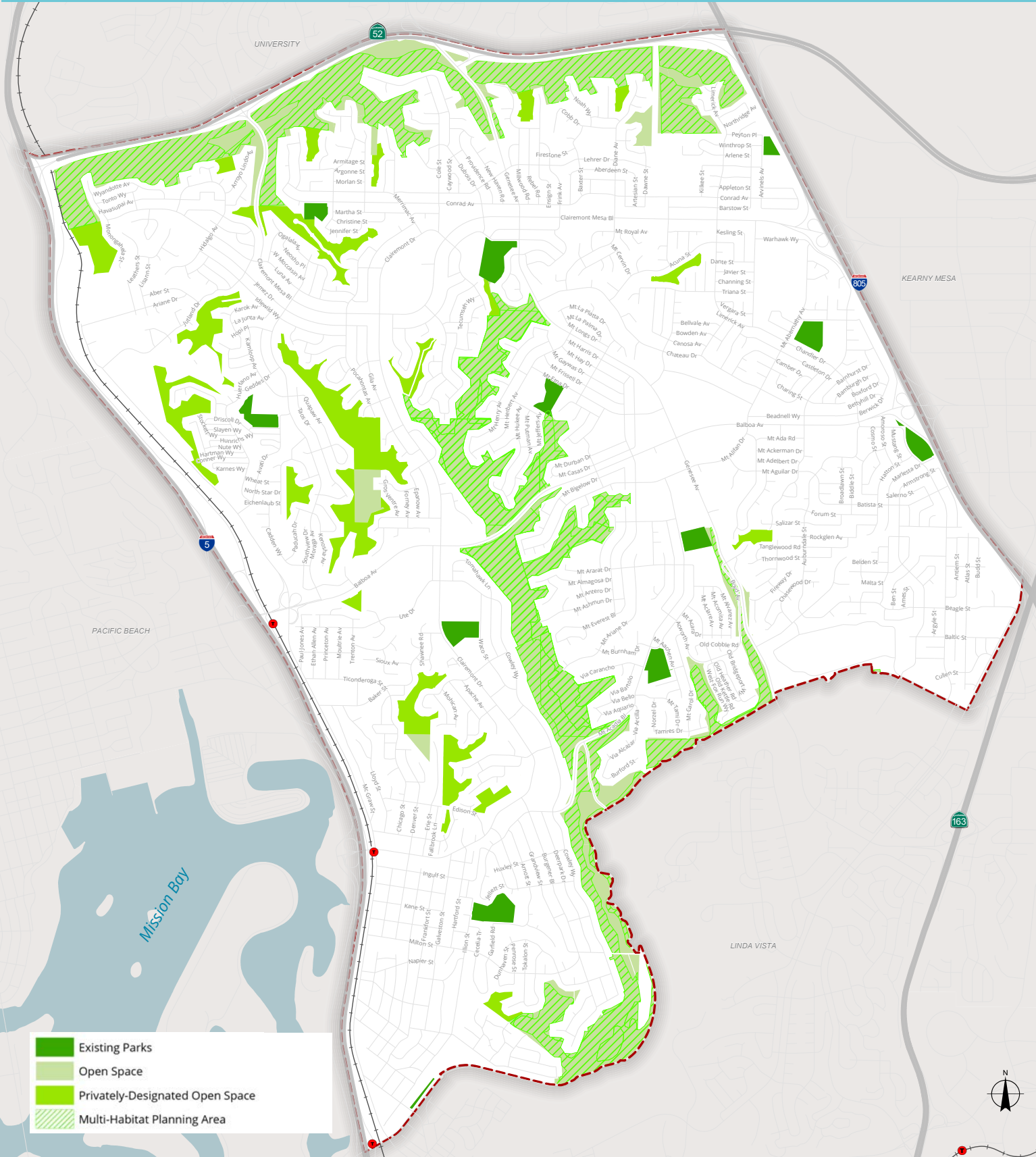
Designated open space is a component of the open space system that provides long term protections for natural landforms and ecosystems which can contain environmentally sensitive resources. Open space areas can be protected through regulations or other private property restrictions such as conservation or open space easements.

ADJACENT DEVELOPMENT

Development adjacent to open space areas must comply with specific regulations. The Land Development Code includes brush management regulations that apply to both publicly and privately owned properties to manage fire hazard risks near vegetation. These regulations require a fire break between building structures and areas of native or naturalized vegetation. The fire break consists of two zones. Zone One is the area near the structure and required to be least flammable. Zone Two is the area between Zone One any area of native or naturalized vegetation and typically consists of thinned, native or naturalized non-irrigated vegetation.

The Land Development Code also includes Environmentally Sensitive Lands (ESL) Regulations. The purpose of the ESL regulations is to “protect, preserve, and, where damaged restore, the environmentally sensitive lands of San Diego and the viability of the species

FIGURE 7-1: PARKS AND OPEN SPACE



supported by those lands.” Environmentally sensitive lands are defined to include sensitive biological resources, steep hillsides, coastal beaches, sensitive coastal bluffs, and 100-year floodplains.

CANYONLANDS

Public and private canyons contribute to Clairemont’s unique topography and natural resources. Tecolote Open Space Park and Marian Bear Memorial Park are City-owned resources that are a part of the the Multiple Species Conservation Program (MSCP) and conserved through the Multi-Habitat Planning Area (MHPA) and MHPA Land Use Adjacency Guidelines, and applicable environmental regulations. Development restrictions apply to privately-owned areas, as well. Environmentally Sensitive Lands Regulations limit development on steep hillsides. Low-density Open Space Residential (OR) zones, which designate private property as open space, further limit the developable footprint in and adjacent to privately-owned canyon areas.

ROSE CREEK WATERSHED

The Rose Creek Watershed is a 36-mile area that extends from Marine Corps Air Station Miramar 16 miles along San Clemente and Rose Creek through Clairemont and the University community to the east end of Mount Soledad. The Watershed Opportunities Assessment for Rose Creek provides guidance to support proactive conservation, enhance and restore biological habitat, promote cultural resources, improve public safety and access, and manage water resources. Resource Management Plans

The Marian Bear Memorial Park and Tecolote Canyon Resource Management Plans provide for the protection and preservation of natural and cultural resources including sensitive resources as well as allow safe and accessible use of these open space parks to meet the needs of the surrounding communities.

CANYON SEWER PROGRAM

Sewer lines were added into the local urban canyons to utilize gravity flow to transport sewage for treatment. Historically, these sewer lines and manholes have had limited cleaning due to unmaintained access paths to these facilities. As a result, sewer spills have occurred within urban canyons over the years. Consistent maintenance access, early coordination, and sensitive design in canyon areas in the long term can help to reduce potential sewer spills. The City’s Long-Term Canyon Sewer Maintenance Program, with sewer lines in the City’s canyons, was evaluated for long-term maintenance access needs. Council Policies 400-13 and 400-14 further identify the need to provide maintenance access to reduce the potential for spills and to evaluate the potential redirection of sewer flow out of the canyons and into streets and other accessible locations.

OPEN SPACE PARKS AND TRAILS

The preservation of regional open space resource-based parks provides a balance between access to nature- based recreation and protecting the natural resources, much of which is in the Multi-Habitat Planning Areas. Resource-based parks, such as Mission Bay Park, Tecolote Canyon Natural Park and Marian Bear Memorial Park play a role in connecting various neighborhoods in the community to each other and can provide a substantial amount of recreational value through improved trails systems and interpretive programs promoting education and stewardship of the canyons.

Portions of a resource-based park can provide recreational value to the local community by providing unique recreational opportunities that otherwise would not be available in the community. Interpretive signs featured at open space parks can educate the public on the unique natural history and scenic value, as well as inform the community about the native flora and fauna.

Tecolote Open Space Park

Tecolote Open Space Park contains approximately 956 acres of open space area made up of natural canyons, slopes, and trails. Within these areas are designated open space through the Multi-Habitat Planning Areas, planted areas and private amenities that provide passive recreation.

Marian Bear Memorial Park

Marian Bear Memorial Park stretches from Interstate 5 to Interstate 805. The park provides a natural setting in the midst of a bustling urban area. The 467 acres of dedicated natural parkland includes finger canyons and mesas on the south side, with a rich and diverse history.

Trails and Trailhead Parks

Trails through City-owned open space and canyons such as Tecolote Canyon Natural Park and Marian Bear Memorial Park, provide recreational value to the residents of Clairemont. The trailheads to these trails provide a unique opportunity for pocket parks, interpretive displays and picnic areas.

URBAN RUNOFF MANAGEMENT

Urban runoff is water that flows over impervious surfaces, such as paved roads and parking lots, and is unable to infiltrate the ground. Urban runoff picks up sediment and pollutants and deposits them into streams and creeks, polluting the waters. The canyons act as natural drainages for stormwater runoff. The incorporation of sustainable features in new and existing development, such as green spaces or permeable pavement, can help to absorb urban runoff and protect water quality. Permeable pavement and porous materials can be used for playgrounds, streets, and parking lots.

LOW IMPACT DEVELOPMENT

Low Impact Development techniques can increase the ability of water to infiltrate into the grounds such as bio-infiltration and bio-retention areas, green roofs, permeable pavement, tree wells with filters and soil amendments. Streets that incorporate Low Impact Development techniques are commonly called green streets and can include medians or parkways with bio-infiltration areas, permeable sidewalk pavement and tree wells with filters that allow water infiltration. See also the Urban Design Element for discussion and policies related to Urban Greening.

AIR QUALITY AND PUBLIC HEALTH

Suitable air quality is important in fostering a healthy living environment. Air pollution diminishes as distance from the freeway increases. For residential and other sensitive-receptor land uses located near a freeway, careful building design can minimize the effect of air pollution. Building features that can attenuate air pollution include ventilation systems with high-efficiency particulate arresting air filters, and carefully locating heating, ventilation and air condition intake vents away from pollution sources.

POLICIES

Sustainable Design

- 7.1 Promote and facilitate the siting of new on-site photovoltaic energy generation and energy storage systems.
- 7.2 Encourage development and building retrofits to incorporate energy- and water-efficient building systems, components, and practices.
- 7.3 Utilize sustainable design that reduces greenhouse gas emissions, pollution and dependency on non-renewable energy sources, makes efficient use of local resources, and incorporates sustainable landscaping, water use, and storm-water management.
- 7.4 Encourage fire resistant landscaping and design, such as the use of fire-resistant plant species and non-combustible materials, fire breaks, and regular brush management.

Urban Forestry

- 7.5 Encourage Caltrans to plant trees in landscape areas within freeway rights-of-way to improve air quality and provide visual relief.
- 7.6 Encourage street tree and private tree planting programs throughout the community to increase absorption of carbon dioxide and air pollutants and mitigate heat impacts.

Community Gardens

- 7.7 Encourage community gardens on underutilized or remnant sites and on rooftops.
- 7.8 Integrate sustainable agriculture principles into community gardens that promote clean air and water, and healthy soils, habitats and ecosystems.

Open Spaces Parks and Trails

- 7.9 Encourage trail connections between parks and recreational facilities, and incorporate trailheads, multilingual wayfinding maps and multilingual signage.
- 7.10 Promote community awareness and responsible use of City-owned open space and canyons.
- 7.11 Utilize publicly designated open space for passive recreation where desirable and feasible.
- 7.12 Support the preparation of a Marian Bear Memorial Park Master Plan to establish a long-term comprehensive park program for its management and preservation.
- 7.13 Consult the Marian Bear Memorial Park Natural Resource Management Plan for guidance in the protection of natural and cultural resources in the park.

- 7.14 Consult the Tecolote Canyon Natural Park Master Plan and Natural Resource Management Plan for the management and preservation of the resource-based park.
- 7.15 Support the enhancement of the Rose Creek Watershed.
- 7.16 Work to address impacts related to future development within the Rose Canyon industrial area, which could include restoring habitat in Rose Creek, improving water quality, enhancing wildlife connectivity, controlling invasive species, promoting environmental education and stewardship, and creating a pedestrian-friendly connection between Mission Bay Park to Marian Bear Memorial Park.

Open Space Designation

- 7.17 Protect and preserve native species and their unique and sensitive habitats within the open space systems consistent with the Multiple Species Conservation Program.
- 7.18 Preserve, protect and restore canyons and hillsides as important visual features of community character.
- 7.19 Promote education, interpretive programs and stewardship of the canyons in the community through public and private partnerships.
- 7.20 Promote opportunities to preserve, enhance and/or restore native landscaping and remove invasive species.

Adjacent Development

- 7.21 Utilize appropriate low-fuel load natives in Brush Management Zone 2 and over utility easements in native areas.
- 7.22 Restore or enhance natural biological values and improve visual aesthetics where streets and storm drain systems abut or cross canyon landforms or steep hillsides. Habitat restoration efforts should aid wildlife movement by providing vegetative cover and controlling and directing access to designated trails.
- 7.23 Encourage development adjacent to canyons and open space to include pervious areas that include, but are not limited to: bio-swales, pervious pavers and cement, green roofs, and cisterns to better manage storm water runoff.

Urban Runoff Management

- 7.24 Support the replacement of impermeable surfaces with permeable surfaces to support storm runoff infiltration.
- 7.25 Incorporate and maintain stormwater best management practices in public infrastructure and private development projects, including streetscape improvements to limit water pollution, erosion, and sedimentation.
- 7.26 Encourage sensitive placement and consideration of appropriate design in locating bio-swales to not impede accessibility along residential and non-residential streets.

7.27

Consider public-private partnerships to construct storm water management infrastructure as part of linear parks, urban paths, and/or urban greening projects.

7.28

Support efforts through grants and street-related capital improvement projects to create “green” streets or incorporate elements of “green” streets to encourage walkability and treat runoff such as, but not limited to, enhanced pedestrian and bicycle facilities, canopy street trees, and storm water management features that increase absorption of storm water, pollutants and carbon dioxide.

7.29

Address storm drain and culvert erosion in all canyons, creeks and open space areas by restoring eroded tributaries, addressing outfalls and downstream gully erosion and reducing runoff draining through outfalls starting at the source where feasible.

Low Impact Development

7.30

Incorporate low impact development practices into building design and site plans that work with the natural hydrology of a site to reduce urban runoff, including the design or retrofit of existing landscaped or impervious areas to better capture stormwater runoff.

Air Quality

7.31

Consider air quality and air pollution sources in the siting, design, and construction of residential development, as well as other development with sensitive receptors.

7.32

Incorporate building features into new buildings located near freeways to reduce the effects of air pollution on residents and possible sensitive receptors.

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