

## WORKING DRAFT CONSERVATION ELEMENT

*[This working draft incorporates input from the October 10, 2017 CPU Ad-hoc Subcommittee Meeting]*

### CONSERVATION ELEMENT GOALS

- Protection and enhancement of canyons, hillsides, riparian areas, and dedicated open space for their ecological diversity and opportunities for trails
- Protection of public views to natural resources
- Incorporation of sustainable storm water management techniques to capture runoff and reduce impacts to the canyon network
- Incorporation of sustainable building, landscape, and development techniques to reduce dependency on non-renewable energy sources, reduce emissions, solid waste, and water consumption
- Reduction of greenhouse gas emission at the community level in a manner that enhances the quality of life and supports the local economy
- Promotion and expansion of the tree canopy along streets and on public and private property

### INTRODUCTION

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

The This Community Plan in conjunction with the California Environmental Quality Act (CEQA); the City's General Plan; the Environmentally Sensitive Lands Ordinance; the Multiple Species Conservation Program (MSCP), and development regulations provide the framework for conserving natural resources, including water and energy, within the community. 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.

## **SUSTAINABLE DEVELOPMENT**

The Community Plan places a focus on reducing dependence on the automobile, protecting and enhancing the community urban forest, providing storm water infiltration, water conservation, and encouraging green building practices. Sustainable development is a major aspect of importance due to the visible effects of global climate change resulting from greenhouse gas emissions, as well as State and local legislation intended to address this environmental problem. The known and potential impacts of a changing climate – higher seasonal temperatures, diminished water supplies, disruption of agricultural cycles – have consequences not only for the built and natural environment, but also for the community's health and economic vitality. The City of San Diego adopted a Climate Action Plan (CAP) to achieve the State of California's mandates for Greenhouse Gas (GHG) emission reductions through local action and to the benefit of San Diego's 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:

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

The CAP implements of 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.

## **CLIMATE CHANGE**

Although climate change is a global issue, the Clairemont community can contribute to the reduction in community-generated emissions that contribute to climate change through the promotion of a multi-modal transportation network that supports bicycle and transit use. Given the largely residential make-up of the community, pedestrian improvements that create safe and inviting connections from residential neighborhoods to commercial centers, access to school, employment, and parks can encourage more walking within the community.

## **LAND USE**

Of the five strategies identified in the CAP, the land use and mobility strategy aims to expand bicycling, walking, and transit use as alternatives to automobile trips, particularly for

commute trips. The strategy's land use component would advance the General Plan's "City of Villages" concept of walkable and pedestrian-friendly neighborhoods with a mix of uses. A majority of the community is within a half-mile walking distance to an existing or future transit stop, which makes public transit a viable transportation option. These areas are also within a Transit Priority Area (TPA) where existing and future transit investments are to be coordinated with land use. As part of the guiding principles of the Community Plan is to have a diversity of housing choices along transit corridors.

*[Additional discussion will be added on how the land use plan will address strategies in the Climate Action Plan.]*

## MOBILITY

*[Additional discussion on how pedestrian and bicycle improvements and transit connections implement the Climate Action Plan once the Mobility Element is drafted.]*

## CLEAN AND RENEWABLE ENERGY

The increased use of clean and renewable sources of energy is a CAP strategy to meet greenhouse gas reduction targets. Based upon Citywide data, the Clairemont community consumes energy primarily for motorized transportation and for building heating, cooling and lighting systems. The community also uses energy for light industrial activities.

Industrial uses along Morena Boulevard and Santa Fe Street have a unique opportunity to encourage on-site power generation in surface parking areas, parking structures, and flat rooftops that can accommodate photovoltaic arrays for solar power generation.

Development is likely to incorporate flat roofs to accommodate proposed development intensity and also reflect existing modern building forms within the community.

Photovoltaics on flat roofs can be screened by parapets with minimal visual impact to building architecture. Shade structures incorporated into surface parking areas can also accommodate photovoltaics. Power generated from these measures can fuel building energy systems and electric vehicles to lower the community's greenhouse gas emissions.

*[The Urban Design Element will contain policies addressing sustainable development.]*

## ENERGY AND EFFICIENT BUILDINGS

Both residential and non-residential buildings offer opportunities for reducing energy consumption in new development as well as existing buildings. CAP strategies for building focus on site-specific design and innovation, and technological improvements that increase energy efficiency and provide renewable energy generation. This Community Plan envisions new development incorporate design measures and technology to significantly reduce consumption of potable water and non-renewable energy.

Solar power and natural lighting and ventilation can replace or reduce the use of natural gas and non-renewable sourced electricity used for building functions and comfort. Access to sufficient natural light and air improves the health and enjoyment of residents within multifamily and mixed-use developments. Site and building designs that maximize density,

uniformity, living space and privacy often fail to prioritize access to light and air within individual dwelling units. Site and building designs should instead maximize access to light and air ventilation within each dwelling unit.

Given the California climate's tendency to shift between long periods of drought and shorter periods of concentrated rainfall, water conservation has become increasingly important. Since the San Diego region has limited local water resources and storage capacities and relies on imported water from the Colorado River and Northern California, it is important that water be used as efficiently. Water conservation building features and water-wise landscaping can play a pivotal role in reducing the amount of water consumed by both commercial and residential development. Planting native or more climate adapted plant species can meaningfully 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.

*[The Urban Design Element will contain policies addressing energy efficient buildings.]*

#### URBAN FORESTRY

Preservation, improvement and maintenance of the urban forest is an important goal and expansion of San Diego's tree canopy coverage is goal of the CAP. The community's tree canopy is a major infrastructure component and provides many benefits to the environment and the overall quality of life: 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/beautification.

*[The Urban Design Element will contain policies addressing urban forestry.]*

#### URBAN AGRICULTURE

Urban agriculture can be incorporated in underutilized or remnant publicly owned parcels, as part of new development, particularly on rooftops or when roofs are configured to incorporate natural light. Community gardens are a type of urban agriculture that makes public or private land available to the community through either an individual or shared plot system. Community gardens 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 provide important visual relief to the continuity of urban development, promote a community's health and wellness, and foster a sense of community and connection to the environment. Community gardens support food security by providing a source of fresh produce for nearby residents or restaurant operators who participate in the garden. Locally grown food can reduce a community's carbon footprint by shortening the distance produce travels from its point of origin to where it is consumed. As an added benefit, community gardens can serve to provide opportunities for infiltration for rainwater or storm water.

The Community Plan envisions the use of rooftop gardens or “green roofs” to capture rainwater, reduce urban runoff, and reduce the urban heat island effect and a heating costs by absorbing solar heat. While roof top gardens may not necessarily provide the same resources that a traditional community garden could provide or be as publicly accessible, they provide opportunities for rainwater harvesting and carbon sequestration.

## **NATURAL RESOURCE CONSERVATION**

The Community Plan envisions the ongoing protection and preservation of natural resources and the promotion of Clairemont as a sustainable community. The Clairemont community values its canyons, hillsides, and open spaces. Tecolote Canyon and Marian Bear Memorial Park (formerly San Clemente Canyon) are natural resources that not only serve as resource-based parks and make up the community’s largest natural open space features. They also preserve the native California flora and fauna that exists in the canyons. The Rose Creek Watershed, is a 36-mile area that extends from Marine Corps Air Station Miramar sixteen miles along San Clemente and Rose Creeks through Clairemont and the University City community to the east end of Mount Soledad. A Watershed Opportunities Assessment for Rose Creek was conducted to analyze the conditions within the watershed and enhance its environmental qualities. The Assessment represents local planning efforts to support proactive conservation, enhance and restore biological habitat, promote cultural resources, improve public safety and access, and manage water resources.

### **MULTIPLE SPECIES CONSERVATION PROGRAM**

The Multiple Species Conservation Program (MSCP) is a long-term habitat conservation planning program for southwestern San Diego County. The Multi-Habitat Planning Area (MHPA), is the City’s planned habitat preserve within the MSCP subarea and delineates core biological resources areas and corridors targeted for conservation. The MHPA 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 area 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.

### **CANYON SEWER PROGRAM**

Sewer lines were initially added into the City’s urban canyons to utilize gravity flow to transport sewage to the west 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. Under the City’s Long-Term Canyon Sewer Maintenance Program, sewer lines in the City’s canyons were evaluated for long-term maintenance access needs. Council Policies 400-13 and 400-14 were adopted to further identify the need to provide maintenance access in order 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.

## URBAN RUNOFF MANAGEMENT

Urban runoff is surface water runoff generated from developed or disturbed land associated with an urbanized environment. Impervious surfaces and fewer opportunities for infiltration within the landscape environment increase the magnitude and duration of storm flows and provide a source for sediment and pollutants to enter the water source. Clairemont's canyons act as natural drainages for stormwater runoff due to the community's developed nature.

The reduction of overall imperviousness of a site is one of the most important strategies in addressing urban runoff. The incorporation of sustainable features in new and existing development that work with the natural hydrology of a site or the retrofitting of existing developed sites can serve to capture and use storm water runoff onsite. Low Impact Development (LID) techniques are approaches to storm water management that increase the ability of water to infiltrate into the ground. Examples of LID techniques are bio-infiltration and bio-retention areas, green roofs, permeable pavement, tree wells with filters, and soil amendments. Streets that incorporate LID techniques are commonly called "green" streets can include medians or parkways with bio-infiltration areas, permeable sidewalk pavement, and tree wells with filters that allow water infiltration.

*[The Urban Design Element will contain policies addressing Urban Greening policies.]*

## **AIR QUALITY AND PUBLIC HEALTH**

Suitable air quality is important in fostering a healthy living environment. Poor air quality creates health problems for groups with sensitivities, such as children, the elderly, and persons with respiratory problems. Air quality in Clairemont is affected by exhaust from motor vehicles that travel along I-5, I-805, and SR-52. 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 individual dwelling ventilation systems with high-efficiency particulate arresting air filters, careful location of heating, ventilation, and air condition intake vents away from pollution sources, and/or fixed windows facing the freeway.

## **POLICIES**

### *Sustainable Development*

- CE-1** Ensure that new development is consistent with the General Plan, Community Plan Conservation Element policies, and the City's Climate Action Plan (CAP).
- CE-2** Continue to implement General Plan policies related to climate change and support implementation of the CAP through a wide range of actions including:
  - a. Implementing pedestrian and bicycle infrastructure improvements in Transit Priority Areas to increase commuter walking and bicycling opportunities.

- b. Support higher density/intensity housing and employment development in Transit Priority Areas to increase transit ridership.
- c. Providing bicycle and pedestrian improvements in coordination with street resurfacing as feasible.
- d. Coordinating with San Diego Association of Governments to identify transit right-of-way and priority measures to support existing and planned transit routes, prioritizing for implementation the highest priority bicycle and pedestrian improvements.
- e. Supporting regional improvements that promote alternative modes of transportation, such as mobility hubs.
- f. Providing bicycle- and car-sharing programs and their facilities such as bike-sharing stations and car-sharing vehicle access points.
- g. Retiming traffic signals and installing roundabouts where needed to reduce vehicle fuel consumption.
- h. Supporting and implementing improvements to enhance transit accessibility and operations, as feasible.
- i. Monitoring the mode share within the community's TPAs to support the CAP Annual Monitoring Report Program.

*The Conservation Element policies in the General Plan and Community Plan work together to form a framework to encourage long term conservation and sustainability. Related Conservation Elements topics covered in the General Plan include the following and should be referenced as applicable:*

- *Reducing the community's carbon footprint*
- *Employing sustainable building techniques*
- *Reducing construction and demolition waste*
- *Using sustainable building materials*
- *Implementing sustainable landscape design and maintenance*
- *Reducing the urban heat island effect*
- *Conserving landforms, canyon lands & open space*
- *Applying Environmentally Sensitive Lands Regulations*
- *Incorporating trails and greenways*
- *Conserving water resources*
- *Controlling urban runoff*
- *Improving air quality by landscaping*
- *Protecting biological diversity within open space*
- *Developing local sustainable energy*

### *Mobility*

**CE-3** Implement mobility measures that reduce dependence on single-occupant vehicle use, increase fuel efficiency and promote the use of alternative more sustainable energy sources.

**CE-4** Support community organizations and businesses in their efforts to educate residents, employees and visitors about the accessibility of transit, community destinations, and regional recreational resources via walking and bicycling (see also Mobility Element).

### *Natural Resource Management*

**CE-5** Support the preparation of a Marian Bear Memorial Park Master Plan to establish a long-term comprehensive park program for the management and preservation of the resource-based park.

- CE-6** Consult the Marian Bear Memorial Park Natural Resource Management Plan for guidance in the protection of natural and cultural resources in the park.
- CE-7** Consult the Tecolote Canyon Natural Park Master Plan and Natural Resource Management Plan for the management and preservation of the resource-based park.
- CE-8** Promote education, interpretive programs, and stewardship of the community's canyons through public and private partnerships.
- CE-9** Support the enhancement of the Rose Creek Watershed.
- CE-10** Pursue opportunities for open space acquisition.
- CE-11** Encourage development especially 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 stormwater runoff.
- CE-12** Employ sensitive placement and consideration of appropriate design in locating bio-swales so as to not impede accessibility along residential and non-residential streets.
- CE-13** Re-vegetate or restore graded and disturbed lands, and areas with invasive plant species with native vegetation to restore biological diversity and minimize soil erosion.
- CE-14** Utilize appropriate low-fuel load natives in Brush Management Zone 2 and over utility easement in native areas. Refer to Public Safety section in the Public Facilities Element.
- CE-15** 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.
- CE-16** Support canyon habitat restoration efforts and invasive species removal by seeking grant funding and working with neighborhood and community groups involved in these efforts.
- CE-17** Continue communication between the community and the City to report sewer spills or other potential problems to minimize environmental damage and scope of repair.
- CE-18** Retain street dedications and/or reservations which provide or could provide public access for pedestrians and bicycles to Tecolote Canyon. These streets or right-of-ways include, but are not limited to the following:
- South end of Mt. Culebra Avenue (dedicated street)
  - South end of Mt. Bagot Avenue (street reservation)

- West end of Mt. Ashmun Drive (dedicated street)
- West end of Mt. Ariane Drive (dedicated street)
- South end of Mt. Carol Drive (dedicated street)
- North end of Goldboro Street (dedicated street)

### *Urban Forestry*

**CE-19** Increase the community's overall tree canopy within the public right-of-way and in developments to provide air quality benefits and urban runoff management.

**CE-20** Add or replace street trees to fill existing gaps and provide continuous, regularly spaced tree canopies. Ensure street trees are provided with new development.

### *Urban Agriculture*

**CE-21** Encourage short- and longer-term agricultural operations such as community farms and gardens (especially on underutilized or remnant sites) that provide recreation and educational experiences which demonstrate the history, importance, and value of agricultural ecosystems.

**CE-22** Encourage rooftop gardens and green roofs for their sustainability benefits that include reduced urban runoff and urban heat island effect.

**CE-23** Encourage the marketing and sales of local agricultural products to local residents, vendors, and restaurants through farmer's and outdoor markets, which could take place at community commercial centers, and other direct farm-to-table sales.

**CE-24** Integrate sustainable agriculture principles into community gardens that promote clean air and water, and healthy soils, habitats, and ecosystems.

### *Urban Runoff Management*

**CE-25** 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 storm water runoff.

**CE-26** Incorporate and maintain storm water best management practices in public infrastructure and private development projects, including streetscape improvements to limit water pollution, erosion, and sedimentation.

**CE-27** Prioritize Low Impact Development practices that encourage water infiltration to minimize reliance on storm drains.

**CE-28** Consider public-private partnerships to construct storm water management infrastructure as part of linear parks, urban paths, and/or urban greening projects.

**CE-29** Support efforts through grants and street-related Capital Improvement Projects (CIP) 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 stormwater, pollutants, and carbon dioxide.

*Air Quality and Public Health*

**CE-30** Consider air quality and air pollution sources in the siting, design, and construction of residential development and other development with sensitive receptors.

**CE-31** Incorporate building features into new buildings with residential units and other sensitive receptors located near freeways to reduce the effects of air pollution.

**CE-32** Encourage Caltrans to plant trees in landscape areas within freeway rights-of-way to improve air quality and provide visual relief.

**CE-33** Encourage street tree and private tree planting programs throughout the community to increase absorption of carbon dioxide and air pollutants.