



## CONSERVATION

# 8

- 8.1 SUSTAINABLE DEVELOPMENT
- 8.2 NATURAL RESOURCE CONSERVATION
- 8.3 AIR QUALITY AND PUBLIC HEALTH

## Introduction

*Conservation* is the planned management, preservation, and wise utilization of natural resources and landscapes.

*Sustainable development* is development which respects the balance and relationship between the economy, ecology and equity.

The principles of conservation stress humankind's relationship to the natural environment and understand the benefits conferred socially as well as environmentally. Socially, these benefits can accrue to all people as well as future generations so there can be a sense of equity in the appropriate practice of conservation and the implementation of sustainable development.

Many elements of conservation and sustainability have much broader geographic and political relationships and may be more suited to implement on a citywide or even regional basis. However, there is much that can be done at the local community level and individual communities can also be at the forefront of the policy discussion.

The purpose of the City's General Plan Conservation Element is for the City to become an international model of sustainable development, and to provide for the long-term conservation and sustainable management of the City's natural resources, recognizing they define the City's identity, contribute to its economy, and improve its quality of life. Specific element policies relate to sustainable development, open space and landform preservation, water resource management, urban runoff management, air quality, biological diversity, wetlands, energy independence, urban forestry, and environmental education.

The Uptown community recognizes the importance of natural resources and the need for conservation. Many residents are proud of the community's environmental tradition, and actively participate in maintaining clean and healthy natural surroundings. Preservation of natural features and resources will depend on the integration of sustainable development practices. Implementation of the Conservation Element's policies and recommendations through development project review, infrastructure investment, and individual action is intended to conserve natural resources and minimize

ecological footprints within the community.

## CONSERVATION ELEMENT GOALS

- Sustainable development and 'green' building practices implemented to reduce dependence on non-renewable energy sources, lower energy costs, reduce emissions and water consumption.
- The natural character of Uptown's open space preserved for its biological diversity as well as important relief from urban development.
- Natural canyon landforms and habitat protected from building encroachment and incompatible uses.
- Scenic resources and public access to open space maintained and enhanced where needed.
- Sustainable storm water management techniques applied to support the surrounding landscape and reduce impacts on the surrounding canyons.
- A community that is supportive of regional and local initiatives to improve air quality.



View towards San Diego Bay from Quince Street.

## GENERAL PLAN CROSS-REFERENCE TABLE

The City of San Diego General Plan establishes citywide policies to be cited in conjunction with a community plan. Policies may also be further referenced, emphasized or detailed in a community plan to provide community-specific direction. General Plan Conservation Element policies particularly significant to the Uptown community are listed by their notation in the cross-reference Table 8-1.

**TABLE 8-1: GENERAL PLAN-RELATED CONSERVATION TOPICS AND POLICIES**

Community Plan Policy	General Plan Policy
Reduce the community's carbon footprint	CE-A.2
Employ sustainable/green building techniques	CE-A.5
Reduce construction and demolition waste	CE-A.8
Use sustainable building materials	CE-A.9
Implement sustainable landscape design and maintenance	CE-A.11
Reduce urban heat island effect	CE-A.12
Conserve landforms, canyon lands & open space	CE-B.1
Apply Environmentally Sensitive Lands Regulations	CE-B.2
Incorporate trails and greenways	CE-B.5
Conserve water resources	CE-D.1(d) & (h), CE-D.5
Control urban runoff	CE-E.2
Improve air quality by landscaping	CE-F.4
Protect biological diversity within open space	CE-G.1, CE-G.3
Develop a sustainable urban forest	CE-J.1
Support urban agriculture	CE-L.3

## 8.1 Sustainable Development

The General Plan bases its goals and policies regarding climate change and natural resources on a number of basic principles that are intended to guide future development in ways that conserve natural, non-renewable resources through sustainable development practices. This model of development considers a balance between natural resources and economic prosperity while protecting the public health, safety and welfare and reducing our environmental footprint.

The City's main responsibility when implementing State climate change laws and guidelines center around its authority to regulate land use. Through sensible land use regulation that reduces the number of vehicle miles travelled and promotes sustainable building and development practices, the City can achieve a meaningful reduction in carbon emissions. Actions that reduce dependence on the automobile by promoting walking, bicycling and transit use are key aspects of any strategy to reduce carbon emissions.



*Future parks in the community can be designed beyond the traditional idea of parks as turf spaces.*

The General Plan discussion on this topic is multi-faceted. Strategies included in the Conservation Element address: development and use of sustainable energy types, including solar; reuse or recycling of building material; adaptively retrofitting and reusing existing buildings; constructing energy efficient buildings with healthy and energy-efficient interior environments; creating quality outdoor living spaces; improving materials recycling programs; and, sustainable local food practices.

At the community plan level, policies and initiatives that further General Plan sustainable development policies focus on those that reduce dependence on the private automobile, protect and enhance the urban forest, and provide for storm water infiltration, water conservation and other green building practices. Applicable policies are located throughout the plan elements while specific policy direction is provided below.



*Adaptive reuse of older structures is not only energy efficient, but also helps maintain the community's neighborhood character.*



## POLICIES

- CE-1.1** Build-upon the existing community's street grid network to create a more functional environment for pedestrians and bicyclists in order to reduce local dependence on the automobile as a mode of transportation (also reference the Active Transportation transportation policies within the Mobility Element).
- CE-1.2** Implement the Sustainable Design recommendations of the Urban Design Element.
- CE-1.3** Existing buildings with important architectural or historic character are valued within the community. The most comprehensive energy reduction strategy is to promote the continued use or adaptive reuse of these buildings as well as any needed upgrades to their energy use efficiency. Structures that meet the Historical Resources criteria for designation shall be preserved and repositioned if necessary to maintain their economic viability.
- CE-1.4** Each multi-family development should create a meaningful visually and functionally cohesive outdoor gathering space that considers protection from excess noise, shadow impacts, and maximizes the positive effects of prevailing breezes to reduce heat and provide natural ventilation to individual residences.
- CE-1.5** Encourage the use of solar energy systems to supplement or replace traditional building energy systems.
- CE-1.6** Provide and/or retrofit lighting within the public-right-of-way that is energy efficient. Use solar powered lights where practical.
- CE-1.7** Seek small City-owned sites not suitable for recreation use as opportunities for community gardens.



*Drought tolerant residential landscapes reduce water usage as well as energy costs.*



*Community gardens provide locally sourced food and are spaces for community building and learning.*



*Increasing Uptown's tree canopy can provide multiple benefits from reducing summer heat temperatures to contributing to more pedestrian foot traffic in business districts.*

- CE-1.8 Encourage underdeveloped commercial/ industrial lots and buildings for use as small farms with associated sale of agricultural products.
- CE-1.9 Promote community initiatives for locally-sourced and more environmentally sustainable goods and services.
- CE-1.10 Implement the Urban Forestry recommendations of the Urban Design Element, including the development of a street tree master plan that can be applied to private development, community planting projects and the pursuit of grant funding.
- CE-1.11 New development should be designed and constructed to retain significant, mature and healthy trees located within required landscape setbacks, and within other portions of the site as feasible.
- CE-1.12 Add or replace street trees to fill existing gaps and provide continuous, regularly spaced tree canopies.

## 8.2 Natural Resource Conservation

Conservation efforts are important for the community's remaining open spaces, canyon landforms, natural habitats and public views. Local community initiatives to reduce consumption of potable water and effectively manage storm water runoff can also help achieve important regional goals to reduce dependence on imported water and protect water quality within streams, beaches and bays. While the General Plan, this community plan, San Diego's Multiple Species Conservation Program (MSCP), and zoning regulations provide the primary legal framework for natural resource conservation, the community's residents play an important role in determining the ultimate success of preservation and restoration programs. The boundaries of many residential neighborhoods surround the canyon areas providing an opportunity not only for visual enjoyment of these unique areas but also involvement in protection, education and restoration efforts.

## NATURAL RESOURCE MAPPING

As part of the community plan update process for Uptown, North Park and Golden Hill, the areas designated as open space in the 1988 Community Plan were reviewed using detailed maps available with Geographic Information Systems (GIS) software. The areas intended for preservation by the San Diego MSCP Subarea Plan were also reviewed. This mapping effort reviewed the following GIS data layers:

- Existing Multi-Habitat Planning Area (MHPA) and Community Plan Open Space boundaries
- 1992 and 2012 aerial maps
- Public ownership
- City dedicated and designated park and open space lands
- SANDAG conserved lands database
- Topography
- Vegetation types – 1997 and 2012

As a result, many areas designated Open Space in the previous community plan were found to contain a significant amount of existing development (e.g. houses, streets). The MHPA boundary was particularly affected and did not correlate well to either the community plan Open Space boundary nor to the actual location of sensitive biological resources intended for conservation. While the framework for open space conservation in the 1988 community plan allowed some development



*Canyon areas are an integral part of Uptown's residential neighborhoods.*

within open space, especially along canyon edges, the current framework established by the General Plan and MSCP intend mapped open space distinctly for conservation of sensitive natural resources and limits any type of development that impacts resources. Therefore, a comprehensive, systemic approach was developed in order to evaluate boundaries of community plan open space and the MHPA with respect to their protection of natural resources. This evaluation resulted in reconfiguring the Open Space boundary in the 1988 community plan to exclude most developed areas from Open Space due to their lack of natural resources as well as the long-established land use pattern in the community. Areas that contained sensitive biology that were previously excluded from the MHPA were also added as part of a MHPA boundary line correction. The correction for the three communities resulted in the addition of 89.2 acres of land containing sensitive biological resources and steep slopes and the deletion of 65.5 acres of developed/urban lands for a net gain of 23.7 acres to the MHPA (Refer to Appendix C).

## OPEN SPACE, LANDFORMS, AND NATURAL HABITATS

State law recognizes that open space land is a limited and valuable resource that should be conserved wherever possible. Open space serves as visual relief to urban development adding character and identity to a community and its neighborhoods. Protecting the community's open spaces serves as a fundamental component of natural resource conservation efforts by protecting canyon landforms, steep hillsides, sensitive biology, scenic resources & public views. Open space also has value for managing urban runoff and protecting water resources, understanding geology, as a buffer from climate change, enhancing urban forestry efforts, and as a component of sustainable development. Open Space lands and resource-based parks (e.g. Balboa Park) are also discussed in the Recreation Element as valued resources that may also provide public access and enjoyment. Open Space as a land use applied in the community is discussed in the Land Use Element.

Canyon landforms are a major defining characteristic of the community and its neighborhoods. Steep hillsides



*Residential development along hillsides can limit their impact in these areas by using building types such as houses on stilts which avoid the typical grading associated with flat slab construction.*

are associated with canyons, and to a lesser extent, the terraced landforms. Through long-standing policies, private development has largely been kept to canyon edges leaving many canyons as valuable open spaces, although development has occurred within steep hillsides to some extent. These natural open space areas are largely interspersed throughout the community and range from the steep, southern hillsides of Mission Valley, the western slopes within the Mission Hills neighborhood, the southerly-oriented Maple/Reynard canyon system, and the canyon extension of Balboa Park north of Upas Street in Hillcrest. Many canyon areas are covered by a grid of dedicated street rights-of-way which have not been improved because of the steep terrain. These dedicated street reservations are city-owned and provide opportunities for view retention, hiking trails, and connecting public open space unless they are vacated and sold or developed for access.

Portions of these canyons have also been disturbed by residential development within the canyons and along the canyon rims. Street improvements have also intersected or protruded into these canyons. The overall effect has been to interrupt the natural topographic and biological continuity of the canyon systems. Breaks in the development that surround canyon interfaces provide important interactive opportunities with open space. Most publicly-owned parcels within canyon open space are also included as dedicated open space lands for park and recreation use.



## MULTIPLE SPECIES CONSERVATION PROGRAM AND BIOLOGICAL DIVERSITY

The Multiple Species Conservation Program (MSCP) is a long-term habitat conservation planning program for southwestern San Diego County. The City’s MSCP Subarea Plan was adopted in 1997 and the MHPA is the plan’s habitat preserve area. The MHPA was designed to be a managed, connected network of habitat and open space to ensure long-term biological diversity. The Subarea Plan provides policies, management directives and acquisition requirements for the preserve as well as Land Use Adjacency Guidelines for development within or adjacent to the MHPA. The MHPA, as shown in Appendix C, covers several of the canyon systems within the Community Plan area.

Natural habitat areas in the community include the remaining locations of indigenous plant communities, restored native plant communities, and naturalized landscapes mainly found in the canyons and adjacent hillsides. The open space areas include coastal sage scrub, chaparral, grasslands, riparian/wetlands, and native and non-native woodland habitats. Biological diversity refers to the degree of variation of life forms within an ecosystem. These habitats support a variety of migrant and year-round fauna, including California gnatcatcher and Cooper’s Hawk, by providing shelter, foraging opportunities, and connectivity to other local and regional habitats.

The community’s “urban” canyons provide habitat for native species to continue to reproduce and find new territories, and provide necessary shelter and foraging opportunities for migrating species (primarily avian species). They also contribute to the public’s experience of nature and the local native environment. Conserving biodiversity will require effective protection, management, and restoration of remaining natural habitats.

## ENVIRONMENTALLY SENSITIVE LANDS

The Environmentally Sensitive Lands regulations “ESL” are intended to protect, preserve, and, where damaged, restore the environmentally sensitive lands of San Diego. These lands include the steep hillsides, sensitive biological

resources, lands within the MHPA, and flood hazard areas found in the community and coastal resources found elsewhere. ESL prohibits disturbance of natural resources wherever they are located within private as well as public property, and contains development regulations that allow development within sites containing environmentally sensitive lands subject to certain restrictions. Development in the community planning area is expected to comply with ESL and any impacts to habitats as the result of development would be mitigated in accordance with the provisions of ESL and the City of San Diego’s Biology Guidelines.

## POLICIES

- CE-2.1 Implement applicable requirements of the Environmentally Sensitive Lands regulations, Biology Guidelines, and MSCP Subarea Plan for preservation, mitigation, acquisition, restoration, and management and monitoring of biological resources.
- CE-2.2 Minimize grading of steep hillsides and other significant natural features within the community.
- CE-2.3 Graded areas and areas of invasive vegetation should be re-vegetated with native vegetation to restore biological diversity and minimize erosion and soil instability.
- CE-2.4 Areas mapped as designated open space should be preserved through easements, open space dedication and/or fee title ownership by the City of San Diego (reference Land Use Element, Figure 2-1).
- CE-2.5 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-2.6 Restore or enhance natural biological values and improve visual aesthetics where streets and storm drain systems abut or cross canyons landforms or steep hillsides. Habitat restoration efforts should aid wildlife movement by providing vegetative cover

and controlling and directing access to designated trails.

- CE-2.7** Repair and retrofit storm drain discharge systems to prevent erosion and improve water quality by adequately controlling flow and providing filtration. Storm drain outfalls should limit the use of concrete in favor of more natural, vegetated designs.
- CE-2.8** Foster local stewardship and develop positive neighborhood awareness of the open space preserve areas with environmental education programs through local schools, community groups, neighborhood and homeowner's associations, and non-profit groups that address the local ecosystem and habitat preservation. Incorporate hands-on learning via neighborhood hikes, or other initiatives that present information in a manner that will increase interest in the natural environment.
- CE-2.9** Preserve undeveloped canyons and hillsides as important features of visual open space, community definition and environmental quality.
- CE-2.10** Protect designated open space from development by securing public ownership where desirable. Obtain necessary property rights through public acquisition of parcels or easements for the protection of environmentally sensitive lands.
- CE-2.11** Where development in open space is permitted, restrict development to allow only limited, low intensity uses located and designed in a manner that respects the natural environment and conserves environmentally sensitive lands and resources.
- CE-2.12** Utilize publicly-controlled open space for passive recreation where desirable and where feasible.



*Local canyon clean ups have contributed to efforts to spread awareness and increase stewardship of Uptown's natural resources.*

## CANYON SEWER PROGRAM

During the early 1900's, as the City of San Diego developed, sewer lines were added in the canyons to utilize gravity flow to transport sewage to the west for treatment. Of the 2,894 miles of sewer lines in the city, 253 miles are currently situated in canyons and other environmentally sensitive areas. These pipelines and manholes have historically had limited cleaning because the original maintenance paths to these facilities were not adequately maintained. As a result, a number of sewer spills have occurred within urban canyons or other inaccessible areas over the years. In 2001, the City initiated the Long-Term Canyon Sewer Maintenance Program, which focus was to evaluate each of the City's sewer lines in canyons and environmentally sensitive areas for long-term maintenance access needs. In January of 2002, the City Council adopted two council policies related to this purpose.

Council Policy 400-13 identifies the need to provide maintenance access to all sewers in order to reduce the potential for spills. The policy requires that environmental impacts from access paths in environmentally sensitive areas should be minimized to the maximum extent possible through the use of sensitive access path design, canyon-proficient maintenance vehicles, and preparation of plans that dictate routine maintenance and emergency access procedures.



Council Policy 400-14 outlines a program to evaluate the potential to redirect sewage flow out of canyons and environmentally sensitive areas and into streets or other accessible locations. The policy includes an evaluation procedure that requires both a physical evaluation and a cost-benefit analysis. Based on the analysis, if redirection of flow outside the canyon is found to be infeasible, a Long-Term Maintenance and Emergency Access Plan is required. The plan would be specific to the canyon evaluated, and would prescribe, long term access locations for routine maintenance and emergency repairs along with standard operating procedures identifying cleaning methods and inspection frequency.

## POLICIES

- CE-2.13** Evaluate impacts of sewer cleaning and maintenance activities located in the community to assure an effective, efficient and environmentally sensitive means to accomplish these activities.
- CE-2.14** Continue communication between the community and the City to report sewer spills or other potential problems as quickly as possible to minimize environmental damage and scope of repair.

## SCENIC RESOURCES & PUBLIC VIEWS

Scenic resources and public views are intended to be preserved and enhanced. Types of scenic resources considered by this plan include:

- Viewsheds: generally unobstructed panoramic view from a public vantage point
- Scenic Overlooks: view over private property from a public right-of-way
- View Corridors: view along public rights-of-way framed by permitted development

Due to the community's sloping topography, public views (both near and far) are common. Views are particularly associated with the community's natural, scenic amenities of San Diego Bay, Balboa Park, Mission Valley as well as the community's many canyons.

Un-improved rights-of-way, or 'paper streets', are common in the community and provide opportunities for public views when they intersect or abut canyons or steep hillsides. Views from public vantage points (e.g. public streets, trails, parks) are intended to be protected.

## POLICIES

- CE-2.15** Public views from identified vantage points, to and from community landmarks and scenic vistas shall be retained and enhanced as a public resource.
- CE-2.16** Select street trees for their ability to provide canopy and frame public views (refer to the Urban Design Element's Urban Forestry section).
- CE-2.17** Where streets and public right-of-way easements intersect or abut canyon landforms or designed open space, ensure unobstructed visual access that provides or preserves public views. Landscaping may be provided at these locations but should be designed to frame, not screen or obstruct public views.
- CE-2.18** Evaluate the need for modified or increased setbacks when building adjacent to public view angles. Reject or object to reduced setbacks that obscure established public vantage points unless alternative or improved public views are proposed.



*Scenic view from the western slopes of the Middletown neighborhood.*

## WATER RESOURCE MANAGEMENT

The amount of water on earth remains fairly constant over time, however, water is moved between different geographic locations and phases (e.g. rain, snow) known as the water cycle. In San Diego, the natural water cycle is dominated by moist air from the Pacific that condenses as rain, fog or mountain snow and collects within the rivers and streams of local watersheds. Due to the pronounced dry season, rivers and streams often flow intermittently. Rainfall within local watersheds is also insufficient to effectively supply water to the region's population, therefore the primary water supply is from sources outside the region, largely from the Colorado River and watersheds in Northern California. The City's historically reliable water supply is credited to its ability to secure and import water from these sources. However, these sources face limitations especially in times of drought. The conveyance systems needed to provide this water also consume resources, particularly large amounts of energy.

The City has no direct control over its imported water supply, but is a member agency of the San Diego County Water Authority which is responsible for securing the region's imported water supply, largely from the Metropolitan Water District of Southern California in Los Angeles. The California Constitution also requires uses of the state's water be both reasonable and beneficial, and places a limitation on water rights by prohibiting waste and unreasonable use. However, the interpretation of what is wasteful can vary significantly depending on circumstances such as drought conditions. Water conservation is therefore an important aspect of environmental sustainability.

## POLICY

**CE-2.19** Encourage new development and building retrofits to incorporate as many water-wise practices as possible in their design and construction. Specifically encourage:

- a) Use of recycled and/or gray water landscape irrigation systems;
- b) Retrofit public spaces and public rights-of-way with low-water use vegetation and/or alternative permeable surface materials

that meet adopted landscape regulations; and

- c) Ensure that any 'community greening' projects utilize water-efficient landscape design.

## URBAN RUNOFF MANAGEMENT

Urban runoff is surface water runoff generated from developed or disturbed land associated with urbanization. The increase in impervious surfaces and fewer opportunities for infiltration within the landscape increase the magnitude and duration of storm flows and provide a source for sediment and pollutants to enter the water source. Urban runoff is a major component of urban flooding and is a particular problem for management of watersheds. Urban runoff is the largest pollution source of Southern California's coastal beaches and near-shore waters. Urban runoff control programs typically focus on managing the effect that new impervious surfaces have on stream channels, but may also provide remediation of existing problems. The northern portion of the community is within the San Diego Watershed which comprises the San Diego River and the southern portion is within the Pueblo San Diego Watershed which ultimately discharges into San Diego Bay.

## POLICIES

**CE-2.20** Incorporate sustainable site planning practices (Low Impact Development) that work with the natural hydrology of a site, including the design or retrofit of landscaped or impervious areas to better capture and use storm water runoff onsite.

**CE-2.21** Identify opportunities for additional hydromodification management measures to protect natural drainages from erosion and other problems. Give particular attention to the steeper canyon drainages receiving runoff directly from developed areas through storm drains or other conveyance systems.

**CE-2.22** Maintain best management practices in all development to limit erosion and sedimentation.



*Bioswales along streets can serve the dual function of creating aesthetically pleasing urban areas and filtering stormwater.*



*Residences can contribute to stormwater filtration efforts by reducing the amount of impervious driveway areas.*

Freeways are a primary source of concentrated adverse health effects resulting from air pollution. These associations are diminished with distance from the pollution source. The City of San Diego 2008 General Plan Conservation Element addresses air quality in the San Diego Air Basin and includes policies designed to improve air quality on a citywide level. Location-specific conditions can lead to ongoing community-based recommendations for improvement.

## POLICIES

- CE-3.1 Implement a pattern of land uses and street designs that foster walking and biking as modes of travel.
- CE-3.2 Consider a buffer between freeways and sensitive receptor land uses such as housing, schools and active use parks. Design of the buffer should take into consideration the ambient type and concentration of air pollutants from vehicle emissions on a particular roadway, prevailing wind patterns and topography; established neighborhood land use patterns and character.
- CE-3.3 Encourage street tree and private tree planting programs as well as the retention of mature landscaping throughout the community to increase adsorption of carbon dioxide and pollutants.

## 8.3 Air Quality and Public Health

Air is shared by all members of a community and suitable air quality is important in fostering healthy living and working environments. Maintaining suitable air quality requires continual attentiveness to mitigate or eliminate unfavorable conditions. Poor air quality due to pollution causes harm to humans, animals, plant life, water quality and aesthetics (e.g. visibility). Poor air quality creates health problems particularly for groups with sensitivities such as children, the elderly, and persons with respiratory problems. Local air quality is affected most significantly by motor vehicles and other fossil-fuel burning vehicles, accounting for approximately 80 percent of air pollution emissions in the San Diego region.



*This page is intentionally left blank.*