Casa de Lopez. Photo courtesy of Library of Congress, Prints & Photographs Division, HABS CAL,37-OLTO,3--3.

9

CONSERVATION

9. Conservation

GOALS

- Private and public development and improvements that help to reduce per capita greenhouse gas emissions, support active transportation and transit use, and support the local economy
- Natural resource conservation which includes the preservation of open space, natural landforms and protection of natural habitats
- Sustainable development, building practices, and landscapes that are consistent with Old Town's historical character and that reduce dependence on non-renewable energy sources and natural resources
- Implementation of sustainable storm water management techniques to support the surrounding landscape and reduce impacts on urban infrastructure and the downstream environment

INTRODUCTION

The concepts of conservation and sustainability address the relationship of the built environment to the natural environment with the objective of achieving environmental benefits through energy and resource conservation and sustainable development. The General Plan's Conservation Element identifies two citywide goals: for San Diego to become an international model of sustainable development; and to provide for the long-term conservation and sustainable management of the natural resources which define the City's identity, contribute to its economy, and improve its quality of life. Building on the General Plan, the City 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.

Sustainable development in Old Town will incorporate building features and streetscape design that reduce energy and water consumption, improve water and air quality, reduce waste, and facilitate and encourage alternatives to travel by single-occupant vehicles. Old Town benefits from the location of the Old Town Transit Center within the community. Residential, commercial, and visitor-oriented uses in the community can take advantage of the easy access to regional transit services that the Transit Center provides and reduce transportation-related GHG emissions.

The conservation of Old Town's open space areas, canyons, hillsides, and sensitive biological resources is key to the community's sustainable development, natural habitat protection, and preservation of its character and scenic resources. As the birthplace of California, the conservation of Old Town San Diego's historic buildings and sites is essential to preserving its historic character and cultural heritage. The Historic Preservation Element addresses the conservation of historical and cultural resources in Old Town. In new development, renovation, and reuse projects, sustainable features can be designed to maintain Old Town's community's character as well as conserve natural resources. In order to convey the importance of resource conservation and sustainable building and site design, conservation policies have also been incorporated into the Urban Design Element in the Building Design: Sustainability, Site Design, Urban Forestry and Landscaping, Streetscape, and Street Corridors and Gateways sections.

Incorporating sustainable development and landscaping practices as well as Low Impact Development principles in a manner that is consistent with Old Town's pre-1871 character will help reduce greenhouse gas emissions and maintain Old Town's unique character.

9.1 Sustainable Development

Sustainable development is important due to the visible effects of global climate change resulting from greenhouse gas emissions, as well as State and local legislation. The effects of a changing climate – higher seasonal temperatures, diminished water supplies, disruption of agricultural cycles – have consequences for the built and natural environment, and for the Old Town community's health and economic vitality.

The General Plan's goals and policies regarding climate change and natural resources aim for a balance between natural resources and economic prosperity while protecting the public health, safety, and welfare of residents by making our built environment more resilient and healthy. The CAP provides policies along with steps the City can take to achieve the 2035 GHG emissions reductions targets and address climate change. The CAP supports implementation 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 the city produces and uses energy and water. The CAP complements the General Plan policies to reduce greenhouse gas emissions.

The CAP policies and actions are organized around the following five strategies:

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

The CAP's mobility and land use strategy aims to expand bicycling, walking, and transit use as alternatives to automobile trips, particularly for work 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.

The majority of the Old Town community is within a ten minute (half-mile) walk from the Old Town Transit Center.

Old Town is well-positioned to reduce dependence on the private automobile due to the community's central location in the region, walkable size and generally walkable street grid, and access to the transit center. A majority of the community is within a half-mile walking distance to the transit center, 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. The land use plan (Figure 3-1) implements the CAP's land use and mobility strategy by designing areas for higher density housing within the TPA in a manner that is compatible with the historical resources and historical character of the community.

The Old Town Community Plan identifies bicycle and pedestrian facility improvements that complement the land use strategy to provide housing growth opportunities within TPAs. The community plan takes a multi-modal approach to improving circulation and access through and within the community. The plan envisions a more balanced mobility network that facilitates shifting trips to transit, walking, and bicycling, while also accommodating vehicle traffic and minimizing conflicts between travel modes. The pedestrian and bicycle improvements include intersection, sidewalk, and street improvements to increase accessibility and improve bicycle and pedestrian access. The planned infrastructure improvements as well as the interconnectedness of the transit, bicycle, and pedestrian network will support Old Town's residential and employment capacity with less increase in per capita vehicle emissions.

Sustainable development practices will implement the other CAP strategies and help meet the CAP's GHG emissions reduction goals. With careful design, the incorporation of sustainable features and materials into the retrofitting of existing buildings and the design of new buildings will be compatible with the community's historical character. Historical structures in Old Town were constructed with features such as thick adobe walls, porches, arcades, awnings, and deeply inset windows that maximized natural cooling to create comfortable homes in an environment with little natural shade. Modern sustainable building features can include alternative building materials, energy and water conservation systems, and alternative sources of energy. The use of architectural treatments or screening mechanisms can shield exterior placement of modern sustainable building features such as rainwater and greywater collection systems to support the historical character of Old Town.

Thick building walls, tile roofs, and shade-providing porticos are pre-1871 building elements that reduce solar heat gain and energy use.

Locating housing and employment uses within Transit Priority Areas supports transit use and helps to meet Climate Action Plan goals.

POLICIES

CE-1.1 Reduce greenhouse gas emissions through a wide range of actions consistent with the General Plan and Climate Action Plan.

a. Implement 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. Provide additional bicycle and pedestrian improvements in coordination with street resurfacing as feasible.

d. Coordinate 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. Support regional improvements that promote alternative modes of transportation, such as mobility hubs.

f. Provide bicycle- and car-sharing programs and their facilities such as bike-sharing stations and car-sharing vehicle access points.

g. Re-time traffic signals and installing roundabouts where needed to reduce vehicle fuel consumption.

h. Apply the CAP consistency checklist as a part of the development permit review process, as applicable.

i. Support and implementing improvements to enhance transit accessibility and operations, as feasible.

j. Monitor the mode share within the community's TPAs to support the CAP Annual Monitoring Report Program.

CE-1.2 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-1.3 Provide electric vehicle charging stations, including fast-charging stations, in parking

garages, near parks and public facilities, and in office, hotel, mixed-use, and residential developments.

CE-1.4 Promote car- and bicycle-sharing programs as cost-effective alternatives to car ownership for residents and employees.

CE-1.5 Encourage community organizations and businesses 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).

CE-1.6 Promote the continued use or adaptive reuse of existing buildings in conjunction with any needed renovations to increase their energy efficiency as part of a comprehensive energy use reduction strategy.

a. Preserve existing buildings with important architectural or historical character as valued community assets.

b. Preserve structures that meet the Historical Resources criteria for designation and adaptively reuse if necessary to maintain their economic viability.

CE-1.7 Ensure that development is consistent with General Plan and Community Plan sustainability policies and supports implementation of the Climate Action Plan.

a. Reduce development project-level greenhouse gas emissions to acceptable levels by incorporating sustainable building and development practices (refer to Urban Design Element, Building Design: Sustainability section), applying site-specific mitigation measures, and adhering to specific strategies and actions outlined in the Climate Action Plan.

b. Encourage the adherence to LEED standards for construction to achieve environmental benefits through new development and redevelopment projects.

CE-1.8 Improve energy and water conservation in the operation and design of existing and new public facilities and public landscaping areas.

CE-1.9 Encourage the implementation of energy- and water-efficient measures for commercial uses that exceed California Code, such as energy-efficient and water-efficient machinery for laundry operations; energy-efficient and water-efficient kitchens in restaurants; and storefront shading.

CE-1.10 Encourage new development and building retrofits to incorporate as many water-wise practices as possible.

a. Encourage the replacement of existing ornamental lawns with native and drought-tolerant landscaping (see also Urban Design Element, Urban Forestry & Landscaping section).

b. Encourage use of recycled and/or landscape irrigation systems.

c. Ensure that any community greening or community garden projects utilize water-efficient landscape and irrigation design.

CE-1.11 Encourage residential, commercial, and institutional development to implement composting for landscaping waste and compatible food waste.

CE-1.12 Encourage restaurant uses to participate in commercial food waste recycling programs and utilize eco-friendly take-out containers and reusable drink containers.

CE-1.13 Increase the community's overall tree canopy within the public right-of-way and development sites to provide air quality benefits and urban runoff management.

CE-1.14 Design and construct development to retain significant, mature and healthy trees located within required landscape setbacks, and within other portions of the site as feasible (also refer to Urban Design Element, Urban Forestry & Landscaping section).

CE-1.15 Plant street trees as part of a development where adequate right-of-way exists.

CE-1.16 Plant or replace street trees to fill existing gaps and provide continuous, regularly spaced tree canopies.

9.2 Natural Resource Conservation

Conservation efforts are important for Old Town's open space areas, canyons, natural habitats and public views. 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 and visitors play an important role in determining the ultimate success of preservation and restoration programs.

OPEN SPACE AND LANDFORMS

Open space has value for understanding geology, supporting local ecosystem and habitat preservation, managing urban water runoff and protecting water resources. Protecting the community's open space areas serves as a fundamental component of natural resource conservation efforts by protecting canyon landforms, steep hillsides, sensitive biology, scenic resources and public views. The community has a series of steep hillsides mainly located to the eastern portions of the community, including portions of Presidio Park and some undeveloped areas. Presidio Park is both a designated open space area and a resource-based park. Land use and recreation policies related to Presidio Park are found in the Land Use Element and Recreation Element.

Presidio Park'ssloping trails allow users to appreciate its natural and scenic resources.

Local ecosystem and habitat preservation supports long-term biological diversity. Presidio Park contains MHPA which contains sensitive vegetation and fauna.

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 (1997) provides policies, management directives, and acquisition requirements, as well as land use adjacency guidelines. The Multi-Habitat Planning Area (MHPA) is the City's planned habitat preserve within the MSCP Subarea, designed to be a managed, connected network of habitat and open space to ensure long-term biological diversity.

The MHPA found within Old Town San Diego encompasses two portions of the Presidio Park canyon system. Natural habitat areas within this MHPA include the remaining locations of indigenous plant communities, restored native plant communities, and naturalized landscapes. These natural habitat areas include native Diegan coastal sage scrub and non-native Eucalyptus woodland. They support a biological diversity that includes a variety of migrant and year-round fauna, including California gnatcatcher, roosting waterbird, Cooper's hawks and other birds of prey. Conservation of the habitat areas in the community which provide shelter and foraging opportunities to support biological diversity will require on-going effective protection, management, and restoration of remaining natural habitats.

ENVIRONMENTALLY SENSITIVE LANDS REGULATIONS

The City's Environmentally Sensitive Lands (ESL) regulations are intended to protect, preserve and, where damaged, restore the environmentally sensitive lands of San Diego. These lands include the steep hillsides, MHPA, flood hazard areas, and sensitive biological resources within the community. ESL prohibits unpermitted disturbance of natural resources wherever they are located within private as well as public property, through 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 regulations, and any impacts to habitats as a result of development would be mitigated in accordance with the provisions of ESL regulations and the City of San Diego's Biology Guidelines.

The Presidio Park canyon system contains natural habitat areas that support biological diversity. Conservation of these habitat areas provides shelter to a variety of migrant and year-round fauna.

POLICIES

CE-2.1 Implement applicable requirements of the Environmentally Sensitive Lands regulations, Biology Guidelines, MSCP Subarea Plan and State or Federal Endangered Species Acts for preservation, mitigation, acquisition, restoration, and management and monitoring of biological resources, as applicable.

CE-2.2 Minimize grading of steep hillsides and other significant natural features within the community.

CE-2.3 Re-vegetate areas of invasive vegetation with native vegetation to restore biological diversity and minimize erosion and soil instability.

CE-2.4 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-2.5 Support habitat restoration efforts and invasive species removal by seeking grant funding and working with community groups involved in these efforts.

CE-2.6 Restore or enhance natural biological values where trails and storm drain systems abut or cross canyons landforms or steep hillsides to aid wildlife movement by providing vegetative cover and controlling and directing access to designated trails.

CE-2.7 Foster local stewardship and develop positive awareness of the habitat preserve areas with environmental education programs through community groups and non-profit groups that address the local ecosystem and habitat preservation.

CANYON SEWER PROGRAM

In 2001 the City initiated the Long-Term Canyon Sewer Maintenance Program, with a focus of evaluating 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 Policies 400-13, which identifies the need to provide maintenance access to all sewers to reduce the potential for spills, and Council Policy 400-14, which outlines a program to evaluate the potential to redirect sewage flow out of canyons and environmentally sensitive areas and to an existing or proposed sewer facility located in City streets or other accessible locations. Within Old Town San Diego, an existing sewer main crosses the south portion of the MHPA within Presidio Park and continues north in a direction parallel to the MHPA.

CE-2.8 Evaluate impacts of sewer cleaning and maintenance activities located in the community consistent with Council Policies 400-13 and 400-14 to assure an effective, efficient and environmentally sensitive means to accomplish these activities.

CE-2.9 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.

Landscaping areas provide opportunities to attenuate urban runoff impacts by capturing and filtering water contaminated by oils, chemicals, and bacteria that can run off from parking lots or other sources.

WATER RESOURCE MANAGEMENT

San Diego's 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 due 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. Water conservation is an important aspect of environmental sustainability. The City has no direct control over its imported water supply, however the City supports water conservation best practices. Related policies are found in Section 9.1.

9.3 Urban Runoff Management

Urbanization and development alter and inhibit the natural hydrologic process of surface water infiltration, percolation to groundwater, evapotranspiration, and transpiration. Urban runoff is surface water runoff generated from developed or disturbed land, and storm water is one significant type of urban runoff. Increases in impervious surfaces lead to fewer opportunities for water runoff to infiltrate into the ground. This increases the magnitude and duration of storm water flows, contributing to urban flooding, and results in sediment and pollutants entering watersheds and downstream water bodies. Urban runoff is the largest pollution source of San Diego's coastal beaches and near shore waters.

Old Town San Diego is located at the terminus of three watersheds (the San Diego River watershed, the Peñasquitos watershed, and the Pueblo watershed), which discharge into San Diego Bay and the Pacific Ocean. Because of the community's topography, which includes hillsides sloping downward from the Uptown Community to the San Diego River, storms can result in significant storm water flows along Juan Street and flooding at the base of the hills along Taylor Street and Pacific Highway.

Improvements in the management of storm water runoff can help address flooding in the community during wet weather and assist regional efforts to protect water quality within streams, bays, and the ocean. Low Impact Development (LID) techniques are approaches to storm water and urban runoff management that increase the ability of water to infiltrate into the ground. LID techniques that can be implemented through development projects include reduction of impermeable surfaces and installation of bio-infiltration and bio-retention areas, green roofs, and permeable pavement.

Incorporation of storm water management facilities in the public right-of-way will further improve storm water management in Old Town. Storm drains have been installed along Juan Street to manage storm water flowing downhill from Uptown, and the Street Corridors and Gateways section of the Urban Design Element recommends that storm water management features be implemented along Pacific Highway and Taylor Street to reduce flooding. These streets can incorporate LID features such as medians or parkways with bio-infiltration areas, permeable sidewalk pavement, and tree wells with filters that allow water to percolate into the ground instead of flowing directly into a storm drain.

POLICIES

CE-3.1 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-3.2 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-3.3 Prioritize Low Impact Development practices that encourage water infiltration to minimize reliance on storm drains that could be impaired by sea level rise.

9.4 Air Quality

Interstates 5 and 8 are primary source of air pollution that affects Old Town. Old Town's residential uses existed before the freeways were constructed, and the Community Plan recognizes the importance of Old Town as a residential community. Air pollution diminishes as distance from the freeway increases. For residential and other sensitive-receptor land uses within 500 feet of a freeway, building design features can minimize the effect of air pollution. Building features that can attenuate air pollution include individual dwelling ventilation systems with HEPA filters, careful location of HVAC intake vents away from pollution sources, and/or fixed windows facing the freeway.

POLICIES

CE-4.1 Incorporate building features into new residential buildings located within 500 feet of the outside freeway travel lane to reduce the effects of air pollution.

CE-4.2 Encourage Caltrans to plant trees in the landscaped areas in Caltrans right-of-way adjacent to I-5 and I-8 where feasible to assist in air pollution mitigation and noise mitigation.

Healthy air quality is important for maintaining a sutainable living environment in Old Town.

Casa de Carrillo, 1913. Photo courtesy of the San Diego History Center.