CHAPTER 3

Environmental Setting, Impacts, and Mitigation Measures

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A. Land Use

A.1 Introduction

This section of the PEIR analyzes the potential environmental effects on land use/planning from implementation of the City of San Diego (City) Climate Action Plan (CAP).

A.2 Environmental Setting

Regional Land Use Patterns

The City of San Diego is the largest incorporated city in San Diego County and borders unincorporated areas of the County, a number of other cities and the U.S.-Mexico border. The County of San Diego identifies 23 community and subregional areas throughout the County. The City of San Diego serves as the primary employment center for the region, with many residents of surrounding cities commuting to areas within San Diego.

San Diego's southern most communities lie along the U.S.-Mexico border near the San Diego-Baja California point-of-entry, which is considered one of the busiest in North America. On the other side of the border is the City of Tijuana, the largest city in the Mexican state of Baja California. The Otay sub-region is located east of the City of San Diego's Otay Mesa community planning area and the City of Chula Vista near the U.S.-Mexico border. East Otay Mesa, one of two specific plan areas within the Otay sub-region, is a relatively flat mesa with mountains at the eastern edge and a major river valley and tributary canyon to the north. The predominant land uses in this area are industrial land uses, including distribution and warehouse uses.

North of the City of San Diego are the cities of Escondido and Poway, which include predominantly large-lot single-family residences and regional commercial, industrial, and office complexes. The County's San Dieguito Community Plan area is also located to the north and consists primarily of low-density estate residential uses. The City of San Diego is bordered to the northwest by the City of Del Mar and the City of Solana Beach. Del Mar and Solana Beach are coastal cities, which include older community cores located close to the beach surrounded by lower density residential development. In addition, the City of Coronado lies west of San Diego Bay. The San Diego-Coronado Bay Bridge, a two-mile long area landmark, connects the island of Coronado to the City of San Diego.

The City of Chula Vista is the second largest city in the County and is located in southern San Diego County, between National City and the southernmost portion of the City of San Diego. East of San Diego are the cities of Santee, El Cajon, La Mesa and Lemon Grove, which consist of older urban cores and well-established residential areas. The County's unincorporated community of Lakeside is also located to the east and includes primarily residential uses with a rural/suburban character. Two non-contiguous county islands exist within the City of San Diego. The Mira Mesa Island (Davis Ranch) is approximately 77 acres located within the Scripps Miramar Ranch

Community Plan area. Greenwood Island (Mount Hope Cemetery) is approximately 100 acres located in the Southeastern Community Plan area.

Existing Land Uses

The existing land uses within the City are described in Chapter 3.8, Land Use, of the Final Environmental Impact Report for the City's 2008 General Plan Update (General Plan PEIR). Additionally, relevant goals and policies are summarized in Chapter 3 of the General Plan PEIR. The detailed setting and policies provided in the General Plan PEIR are fully incorporated by these references.

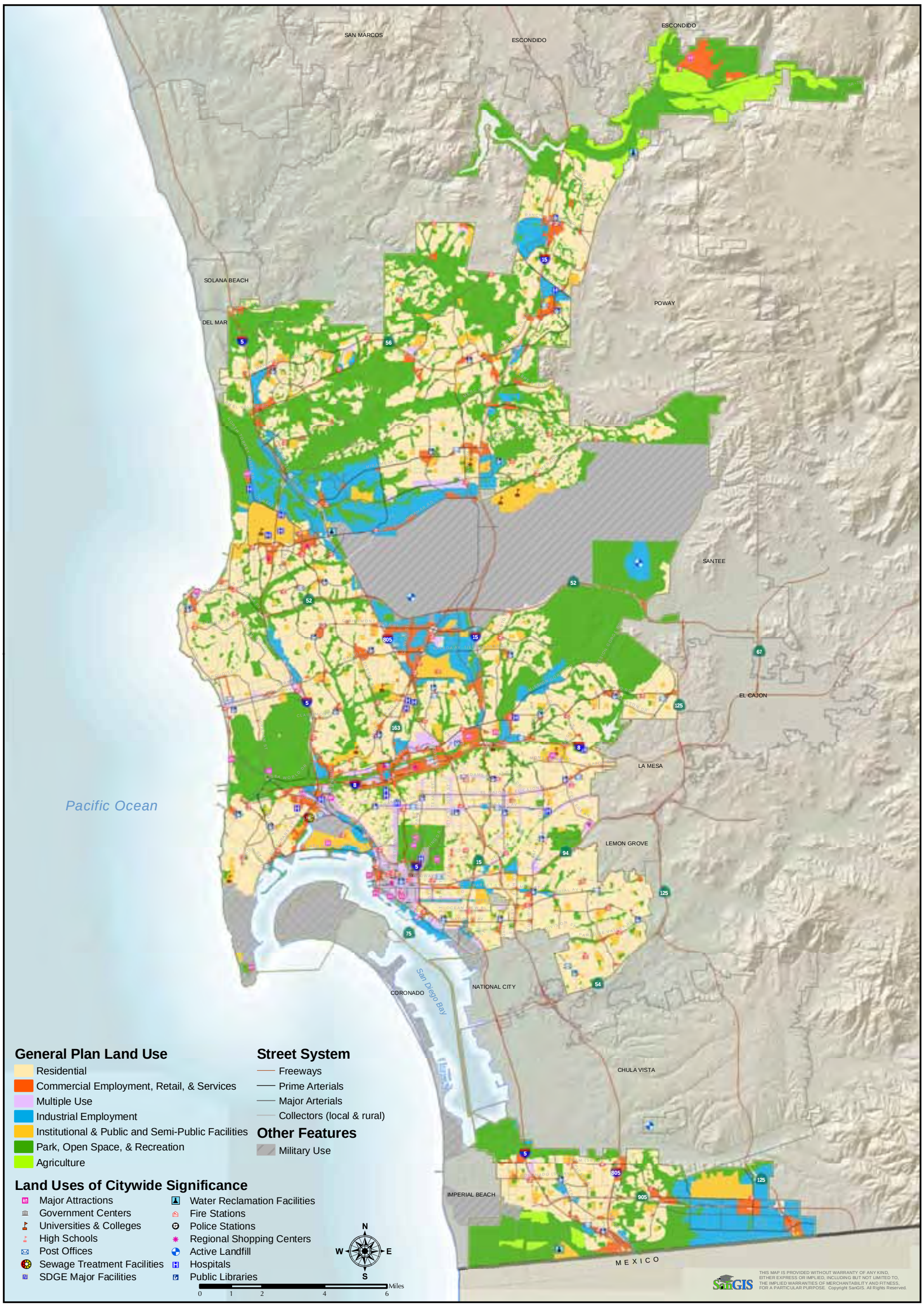
A summary of existing and planned land uses within the City are shown below in **Table 3.A-1** and in **Figure 3.A-1**. Much of the existing land use in the City is dedicated to Parks, Open Space, and Recreation as well as Residential land uses of varying densities, which combined amount to around 50 percent of the total land uses in the City. Institutional, Public and Semi-Public uses account for nearly 17 percent of the City's land use, and transportation related facilities account for 14 percent. Industrial Employment and Commercial Employment, Retail and Service uses account for a relatively small portion of land uses at four percent and 3.6 percent, respectively. Less than three percent of land is dedicated to Agriculture, and Vacant land accounts for 3.6 percent of the land area.

Under the City of San Diego General Plan (2008), all of the vacant land in the City would be developed. Agricultural, Commercial Employment, Retail, and Service uses and Institutional Public and Semi-Public Facilities would decrease in acreage. Much of this land would be converted to Multiple Use, Industrial Employment, Residential, and Park, Open Space, and Recreation uses.

TABLE 3.A-1
EXISTING AND PLANNED LAND USE

	Existing (2008)		Planned (2035)		Land Use Changes	
Land Use	**Acres**	**Percent**	**Acres**	**Percent**	**Acres**	**Percent**
Agriculture	6,055	*2.8*	3,670	*1.7*	(2,385)	-39.4
Commercial Employment, Retail, and Services	7,887	*3.6*	6,114	*2.8*	(1,773)	-22.5
Industrial Employment	8,928	*4.1*	12,278	*5.6*	3,350	37.5
Institutional, Public and Semi-Public Facilities	37,103	*16.9*	36,545	*16.7*	(558)	-1.5
Multiple Use	-	-	4,534	*2.1*	4,534	2.1
Park, Open Space, and Recreation	60,654	*27.7*	62,686	*28.6*	2,032	3.4
Residential	52,389	*23.9*	55,987	*25.5*	3,598	6.9
Roads/Freeways/Transportation Facilities	31,291	*14.3*	30,495	*13.9*	(796)	-2.5
Water Bodies	6,932	*3.2*	6,932	*3.2*	-	0.0
Vacant	8,002	*3.6*	-	-	(8,002)	-100.0
Total	**219,241**	***100.0***	**219,241**	***100.0***	-	**NA**

SOURCE: General Plan Final PEIR, 2007.



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

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Figure 3.A-1
General Plan Land Use

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A.3 Regulatory Setting

Federal

Federal Aviation Administration (FAA)

The authority of the Federal Aviation Administration (FAA) over proposed projects is defined in the Code of Federal Regulations Title 14 Chapter 1 Subchapter E Part 77 – Safe, Efficient Use, and Preservation of the Navigable Airspace (49 CFR Part 77). Any project that is proposed within or near an airport, as described in §77.9 Construction or Alteration Requiring Notice, is required to coordinate with the FAA to ensure the construction and operation of the proposed project is consistent with all FAA requirements.

State

Sustainable Communities and Climate Protection Act of 2008

Senate Bill (SB) 375 was enacted in 2008 and is formally referred to as "The Sustainable Communities and Climate Protection Act of 2008." SB 375 relates to regional land use and transportation policies, with an emphasis on policies to reduce statewide GHG emissions. The law requires the State's 18 metropolitan planning organizations to adopt sustainable community strategies that, if implemented, would help each region achieve their respective targets for reducing GHG emissions from automobiles and light trucks. The targets are established by the California Air Resources Board. SANDAG, San Diego's metropolitan planning organization, adopted an updated Regional Transportation Plan and Sustainable Communities Strategy in October 2011 to address the requirements of SB 375.

Executive Order S-13-08

On November 14, 2008, Governor Schwarzenegger issued Executive Order S-13-08, the Climate Adaptation and Sea Level Rise Planning Directive, which provides clear direction for how the State should plan for future climate impacts. Executive Order S-13-08 calls for the implementation of four key actions to reduce the vulnerability of California to climate change:

- Initiate California's first statewide Climate Change Adaptation Strategy (CAS) that will assess the state's expected climate change impacts, identify where California is most vulnerable, and recommend climate adaptation policies
- Request that the National Academy of Sciences establish an expert panel to report on sea level rise impacts in California in order to inform State planning and development efforts
- Issue interim guidance to State agencies for how to plan for sea level rise in designated coastal and floodplain areas for new and existing projects
- Initiate studies on critical infrastructure and land-use policies vulnerable to sea level rise.

The 2009 CAS report summarizes the best known science on climate change impacts in the state to assess vulnerability, and outlines possible solutions that can be implemented within and across State agencies to promote resiliency. This is the first step in an ongoing, evolving process to reduce California's vulnerability to climate impacts (CNRA 2009).

California Code of Regulations (CCR) Title 24, Part 6

Title 24 CCR, Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) (Title 24) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce greenhouse gas (GHG) emissions, electricity production by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions. The most recent updates to Title 24 became effective on July 1, 2013.

California Coastal Act

The California Coastal Commission was established by voter initiative in 1972 (Proposition 20) and later made permanent by the Legislature through adoption of the California Coastal Act of 1976. The Coastal Commission, in partnership with coastal cities and counties, plans and regulates the use of land and water in the coastal zone. Development activities, which are broadly defined by the Coastal Act to include (among others) construction of buildings, divisions of land, and activities that change the intensity of use of land or public access to coastal waters, generally require a coastal permit from either the Coastal Commission or the local government.

The Coastal Act includes specific policies (see Division 20 of the Public Resources Code) that address issues such as shoreline public access and recreation, lower cost visitor accommodations, terrestrial and marine habitat protection, visual resources, landform alteration, agricultural lands, commercial fisheries, industrial uses, water quality, offshore oil and gas development, transportation, development design, power plants, ports, and public works. The policies of the Coastal Act constitute the statutory standards applied to planning and regulatory decisions made by the Commission and by local governments, pursuant to the Coastal Act.

Local Coastal Program

The City's Community Plans located within the State Coastal Zone Boundary must be certified by the California Coastal Commission (Coastal Commission) as being appropriate to implement the Coastal Act. The City of San Diego has the authority to issue Coastal Development Permits for areas of the Coastal Zone where the Coastal Commission has certified the Local Coastal Program (LCP). Other designations include appealable and nonappealable areas, in which a Coastal Development Permit may or may not be appealed to the Coastal Commission. In addition, there are deferred certification areas in which the Coastal Commission has not certified the City's land use plan and areas that are solely under the jurisdiction of the Coastal Commission, called areas of original jurisdiction.

The Coastal Zone Boundary encompasses much of the land west of Interstate 5 (I-5), as well as some land near State Route 56 (SR 56) to the north, and includes portions of the following communities: Barrio Logan, Carmel Valley, Del Mar Mesa, Downtown, La Jolla, Los Penasquitos Canyon, Midway-Pacific Highway, Mira Mesa, Mission Bay Park, Mission Beach, Ocean Beach, Pacific Beach, Peninsula, Torrey Hills, Tijuana River Valley, Torrey Pines, University, and Via De La Valle.

Regional

San Diego Association of Governments (SANDAG)

SANDAG is the region's metropolitan planning organization (MPO) and serves as a forum for public decision making on regional issues such as growth, transportation, and land use in the San Diego region and is comprised of representatives from each of San Diego County's local jurisdictions, including the City of San Diego. SANDAG programs such as the Regional Comprehensive Plan (RCP) and Regional Transportation Plan (RTP) are pertinent to the City of San Diego's General Plan efforts.

Regional Comprehensive Plan (RCP)

The RCP is the long-range planning document developed to address the region's housing, economic, transportation, environmental, and overall quality-of-life needs. The City of San Diego's General Plan is intended to complement this plan and encourage smart growth principles. Goals of the RCP are to establish a planning framework and implementation actions that increase the region's sustainability and encourage smart growth. The plan seeks to achieve sustainability through planning and development that meets economic, environmental, and community needs, without jeopardizing the ability of future generations to meet these needs. The RCP contains an incentive-based approach to encourage and channel growth into existing and future urban areas and smart growth communities. In May of 2012, the SANDAG board of directors voted to integrate the RCP with the development of the next RTP/SCS, with a target adoption date of July 2015.

SANDAG 2050 Regional Transportation Plan and Sustainable Communities Strategy

The 2050 Regional Transportation Plan/Sustainable Communities Strategy (2050 RTP/SCS), adopted by SANDAG in 2011, presents a transportation system designed to maximize transit enhancements, integrate biking and walking elements, and promote programs to reduce demand and increase efficiency (SANDAG 2011). One key theme of the RTP is to improve the connections between land use and transportation plans by using smart growth principles. The 2050 RTP includes a Sustainable Communities Strategy (SCS) that integrates land use planning, housing development, and transportation planning. The SCS also addresses how the transportation system is developed in such a way that the region reduces per-capita GHG emissions to State-mandated levels. The SCS includes a land use pattern that accommodates the region's future employment and housing needs, and protects sensitive habitats and resource areas. To accomplish this in a sustainable manner, the 2050 RTP/SCS land use pattern focuses housing and jobs growth in existing urbanized areas, protects about 1.3 million acres of land, and invests

in a transportation network that provides residents and workers with alternatives to driving alone. New development would be more compact and more accessible to public transit and other travel choices, such as walking and bicycling.

Local

San Diego General Plan

The City's General Plan, updated in 2008, sets out a long-range vision and comprehensive policy framework for how the City should grow and develop, provide public services, and maintain the qualities that define San Diego over the next 20 to 30 years. It provides a strategy, the City of Villages, for how the City can enhance its many communities and neighborhoods as growth occurs over time. The City of Villages strategy focuses growth into mixed use activity centers that are pedestrian-friendly districts linked to an improved regional transit system. The strategy draws upon the character and strengths of San Diego's natural environment, neighborhoods, commercial centers, institutions, and employment centers. The strategy is designed to sustain the long-term economic, environmental, and social health of the City and its many communities. It recognizes the value of San Diego's distinctive neighborhoods and open spaces that together form the City as a whole.

A "village" is defined as the mixed-use heart of a community where residential, commercial, employment, and civic uses are all present and integrated. Each village will be unique to the community in which it is located. All villages will be pedestrian-friendly and characterized by inviting, accessible and attractive streets and public spaces. Public spaces will vary from village to village, consisting of well-designed public parks or plazas that bring people together. Individual villages will offer a variety of housing types affordable for people with different incomes and needs. Over time, villages will connect to each other via an expanded regional transit system.

Community Plans, Precise Plans, and Specific Plans

The City has 55 distinct community plan areas. The community plan areas fall within seven community typologies which describe predominant architectural features and urban planning characteristics. The seven typologies include: Coastal, Downtown, Military/Environmental/Other Limited Development, Pre-World War II (Pre 1945), Post-World War II Suburban (1945-1970), Newer Urban 1960 to Present, and Master Planned Suburban (1970-Present). Each community planning area has its own land use plan that specifically addresses land use distribution and land use designations in more detail than is possible at the General Plan level. Community plans also provide policy for community facilities, urban design and other aspects of community planning as needed. The City is in the process of updating community plans to reflect the policy changes of the General Plan.

Within the community plan framework, precise plans and specific plans detail land use, public facility, and design issues on a smaller scale than community plans, which represent a broader policy scope. While precise plans are typically policy documents focused on a portion of a community plan area, specific plans can be a policy document or a combined policy and

regulatory document that is reflected in the Land Development Code (LDC) through implementation of LDC zones.

Relevant General Plan Policies

The following General Plan policies from the Land Use Element and Urban Design Element address GHG emissions and climate change:

LU-A.1 Designate a hierarchy of village sites for citywide implementation.

b. Encourage further intensification of employment uses throughout Subregional Employment Districts. Where Appropriate, consider collocating medium-to high-density residential uses with employment uses (see also Economic Prosperity Element).

d. Revitalize transit corridors through the application of plan designations and zoning that permits a higher intensity of mixed-use development, employment uses, commercial uses, and higher density-residential development.

LU-A.2 Identify sites suitable for mixed-use village development that will complement existing community fabric or help achieve desired community character, with input from recognized community planning groups and the general public.

LU-A.3 Identify and evaluate potential village sites considering the following physical characteristics:

- Shopping centers, districts, or corridors that could be enhanced or expanded;
- Community or mixed-use centers that may have adjacent existing or planned residential neighborhoods;
- Vacant or underutilized sites that are outside of open space or community-plan designated single-family residential areas;
- Areas that have significant remaining development capacity based upon the adopted community plan; and
- Areas that are not subject to major development limitations due to topographic, environmental, or other physical constraints.

LU-A.4 Locate village sites where they can be served by existing or planned public facilities and services, including transit services.

LU-A.5 Conduct environmental review and focused study during the community plan update process, of potential village locations, with input from recognized community planning groups and the general public, to determine if these locations are appropriate for mixed-use development and village design.

LU-A.7 Determine the appropriate mix and densities, intensities of village land uses at the community plan level, or at the project level when adequate direction is not provided in the community plan.

b. Achieve transit-supportive density and design, where such density can be adequately served by public facilities and services (see also Mobility Element, Policy ME-B.9). Due to the distinctive nature of each of the community planning areas, population density and building intensity will differ by each community.

c. Evaluate the quality of existing and planned transit service.

LU-A.8 Determine at the community plan level where commercial uses should be intensified within villages and other areas served by transit, and where commercial uses should be limited or converted to other uses.

LU-A.10 Design infill projects along transit corridors to enhance or maintain a "Main Street" character through attention to site and building design, land use mix, housing opportunities, and streetscape improvements.

LU-H.6 Provide linkages among employment sites, housing, and villages via an integrated transit system and a well-defined pedestrian and bicycle network.

LU-I.11 Implement the City of Villages concept for mixed-use, transit-oriented development as a way to minimize the need to drive by increasing opportunities for individuals to live near where they work, offering a convenient mix of local goods and services, and providing access to high quality transit services.

UD-A.1 Preserve and protect natural landforms and features.

a. Protect the integrity of community plan designated open spaces (see also Conservation Element, Policy CE-B.1).

b. Continue to implement the Multiple Species Conservation Program (MSCP) to conserve San Diego's natural environment and create a linked open space system. Preserve and enhance remaining naturally occurring features such as wetlands, riparian zones, canyons, and ridge lines.

UD-A.10 Design or retrofit streets to improve walkability, bicycling, and transit integration; to strengthen connectivity; and to enhance community identity. Streets are an important aspect of Urban Design as referenced in the Mobility Element (see also Mobility Element, Sections A, B, C, and F).

UD-B.5d Emphasize the provision of high quality pedestrian and bikeway connections to transit stops/stations, village centers, and local schools.

UD-C.1 In villages and transit corridors identified in community plans, provide a mix of uses that create vibrant, active places in villages.

a. Encourage both vertical (stacked) and horizontal (side-by-side) mixed-use development.

b. Achieve a mix of housing types, by pursuing innovative designs to meet the needs of a broad range of households.

Open Space and Landform Preservation

CE-B.1 Protect and conserve the landforms, canyon lands, and open spaces that: define the City's urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetlands habitats; provide buffers within and between communities; or provide outdoor recreational opportunities.

a. Utilize Environmental Growth Funds and pursue additional funding for the acquisition and management of MHPA and other important community open space lands. Support the preservation of rural lands and open spaces throughout the region.

c. Protect urban canyons and other important community open spaces including those that have been designated in community plans for the many benefits they offer locally, and regionally as part of a collective citywide open space system (see also Recreation Element, Sections C and F; Urban Design Element, Section A).

d. Minimize or avoid impacts to canyons and other environmentally sensitive lands, by relocating sewer infrastructure out of these areas where possible, minimizing construction of new sewer access roads into these areas, and redirecting of sewage discharge away from canyons and other environmentally sensitive lands.

e. Encourage the removal of invasive plant species and the planting of native plants near open space preserves.

f. Pursue formal dedication of existing and future open space areas throughout the City, especially in core biological resource areas of the City's adopted MSCP Subarea Plan.

g. Require sensitive design, construction, relocation, and maintenance of trails to optimize public access and resource conservation.

CE-B.2 Apply the appropriate zoning and Environmentally Sensitive Lands (ESL) regulations to limit development of floodplains, sensitive biological areas including wetlands, steep hillsides, canyons, and coastal lands.

a. Manage watersheds and regulate floodplains to reduce disruption of natural systems, including the flow of sand to the beaches. Where possible and practical, restore water filtration, flood and erosion control, biodiversity and sand replenishment benefits.

b. limit grading and alterations of steep hillsides, cliffs and shoreline to prevent increased erosion and landform impacts.

Land Development Code

The City's Land Development Code (LDC) is found in Chapters 11-14 of the Municipal Code, and contains the City's planning, zoning, subdivision, and building regulations. Overlay zones are applied in conjunction with base zones to address certain issue areas. Three of the most important overlay zones are: the Community Plan Implementation Overlay Zone, the Airport Approach Overlay Zone, and the Airport Environs Overlay Zone. Overlay zones that correspond with the coastal zone include the Coastal Overlay Zone, Coastal Height Limit Overlay Zone, and the Sensitive Coastal Overlay Zone. The Land Development Code also contains the Environmentally Sensitive Lands (ESL) regulations and related Biology Guidelines, which establish regulations and guidance for development within environmentally sensitive lands.

The City also utilizes Planned District Ordinances which consist of 20 separate zoning codes that address land use and design that aim to protect unique community features. The LDC further contains general development regulations. The City's ESL regulations (ESLs) are intended to protect, preserve, and restore lands containing steep hillsides, sensitive biological resources, coastal beaches, sensitive coastal bluffs, or Special Flood Hazard Areas.

Natural Resource Plans

Parks and Open Space Plans

In addition to the General Plan and community plans, which contain guidelines for growth, development and land use, there are park master plans and natural resource management plans for special areas of the City, which contain environmental goals, policies, and recommendations for park and open space areas. Natural resource management plans are required as a condition of the implementing agreement with the wildlife agencies for the Multiple Species Conservation Program (MSCP), and contain area-specific management directives to address management issues at the site-specific level. Plans include:

- Balboa Park Master Plan (Adopted 1989 and Amended 1997), Balboa Park East Mesa Precise Plan (Adopted 1993), and Balboa Park Inspiration Point Precise Plan (Draft 1998), Balboa Park Central Mesa Appendix (1992)
- Mission Bay Park Master Plan Update and Design Guidelines (Adopted 1994 and Amended 2002) Mission Bay Natural Resource Management Plan (1990)
- Otay Valley Regional Park Concept Plan (Adopted 2001)
- San Diego River Park Master Plan (Adopted 2013)
- Sunset Cliffs Natural Park Master Plan (Adopted 2005)
- Famosa Slough Enhancement Plan (1993)
- First San Diego River Improvement Project Specific Plan (Adopted 1984)
- First San Diego River Natural Resource Management Plan (Adopted 2004)
- Los Peñasquitos Enhancement Plan and Program (October 1985), Los Peñasquitos Canyon Preserve Master Plan (Adopted 1998), and Los Peñasquitos Canyon Preserve Natural Resource Management Plan (Adopted 1998)
- Marian Bear Memorial Park Natural Resource Management Plan (Adopted 1994)
- San Dieguito River Regional Park (Adopted 1984) and San Dieguito River Park Concept Plan (1994)
- Tecolote Canyon Natural Park Master Plan (1982)
- Chollas Creek Enhancement Program (Adopted 2002)
- Mission Trails Regional Park Master Plan (Adopted 1985), Mission Trails Regional Park Plan Update and Design Guidelines (Adopted 1994 and Amended 2002)
- Torrey Pines City Park General Development Plan (2012)
- Black Mountain Open Space Park Natural Resource Management Plan (Adopted 2014)
- Tijuana River National Estuarine Research Reserve Comprehensive Management Plan (2010)

Regional Natural Community Conservation Planning (NCCP)

Jurisdictions within San Diego County have developed several multiple jurisdiction natural habitat planning and open space conservation programs in accordance with the California Department of Fish and Wildlife (CDFW) Natural Community Conservation Planning (NCCP) program. The NCCP program, enacted in 1991, was established to provide long-term, regional protection of native vegetation and wildlife diversity while allowing compatible land uses and appropriate development and growth.

Multiple Species Conservation Program (MSCP)

The MSCP is a comprehensive habitat conservation planning program for 582,243 acres in southwestern San Diego County. The MSCP is intended to preserve a network of habitat and open space to protect biodiversity and enhance the region's quality of life. Economic benefits of the MSCP include reducing constraints on future development and decreasing the costs of compliance with federal and State natural resource laws. The City of San Diego is one of 11 jurisdictions within the MSCP study area. The City has adopted a Subarea Plan and implementing agreement with the United States Fish and Wildlife Service (USFWS) and CDFW.

San Diego Multiple Species Subarea Plan and Biological Resource Guidelines (2012)

The City of San Diego MSCP Subarea Plan (City of San Diego 1997) has been prepared pursuant to the overall MSCP guidelines to address habitat conservation goals within the City boundaries. The City's Multi-Habitat Planning Area (MHPA) is approximately 56,831 acres with 52,727 acres of core biological resource areas and corridors targeted for conservation. As of December, 2015, a total of 49,965.74 aces (94.4 percent) has been conserved or obligated towards the planned 52,727-acre goal. **Figure 3.A-2** shows the MHPA.

Approximately 15,341 acres of the remaining 19,614 acres are obligated as open space in association with public open space referred to as "cornerstone lands" and open space approved as a part of approved private projects that has not yet been placed in a conservation easement or dedicated to the City. The remaining 4,273 acres (8 percent) of open space required to assemble the preserve will be acquired through future private conservation and public acquisition of open space. Within the City of San Diego, preservation efforts are focused on assembling the regional preserve, or MHPA, which includes large, contiguous, biologically significant areas and associated corridors. These areas are found throughout the City, with large, core areas near the northern, eastern and southern jurisdictional boundaries; however, the MHPA also includes north-south and east-west corridors in the heart of the City (e.g., San Diego River) as well as urban canyons.

San Diego International Airport Land Use Compatibility Plan

The San Diego County Regional Airport Authority (Authority) serves as the Airport Land Use Commission (ALUC) for San Diego County. The ALUC is responsible for adopting Airport Land Use Compatibility Plans (ALUCPs) for sixteen public-use and military airports in San Diego County. The ALUCP establishes areas of influence within which airport operations are likely to affect land uses or land uses could affect airport operations. Safety and noise criteria are identified in the ALUCP so that land use conflicts with airport operations are minimized. Prior to amending a general plan, a local agency must refer the proposed action to the ALUC (Pub. Util.

Code Sec. 21676 et seq.). County and city general plans must be consistent with the ALUCP (Government Code Section 65302.2).

Currently, there are five adopted ALUCPs in place within the City's land use jurisdiction that include the San Diego International Airport, MCAS Miramar, Brown Field Municipal Airport, and Montgomery Field Municipal Airport. Compatibility plans have not been prepared for Naval Air Station North Island or Naval Outlying Field Imperial Beach.

Air Installations Compatible Use Zones (AICUZ) Study

The federal government requires that the military develop AICUZ studies for military air installations. An AICUZ study establishes land use strategies and noise and safety recommendations to prevent the encroachment of incompatible land use from degrading the operational capability of military air installations. State law requires that the ALUCP be consistent with the AICUZ studies. Once updated plans are published, the Airport Authority, acting as ALUC, addresses the AICUZ study strategies and recommendations as part the ALUCP update for military installations within the county.

A.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds (January 2011), the following questions provide guidance to determine potential significance for land use:

Would the proposal:

1. Require a deviation or variance, and the deviation or variance would in turn result in a physical impact on the environment?

2. Result in a conflict with the environmental goals, objectives and recommendations of the community plan in which it is located?

3. Conflict with the provisions of the City's Multiple Species Conservation Program Subarea Plan or other approved local, regional or State habitat conservation plan?

4. Physically divide an established community?

5. Result in land uses which are not compatible with an adopted airport Comprehensive Land Use Plan (CLUP)?

The Significance Determination Thresholds go on to state that a significant impact with regard to land use could occur if a project would result in any of the following:

- Inconsistency/conflict with the environmental goals, objectives, or guidelines of a community or general plan;

- Inconsistency/conflict with an adopted land use designation or intensity and indirect or secondary environmental impacts occur;

SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

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Figure 3.A-2
Habitat Conservation Areas

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- Substantial incompatibility with an adopted plan;
- Development or conversion of General Plan or Community Plan designated open space or prime farmland to a more intensive land use;
- Incompatible uses as defined in an Airport Land Use Plan or inconsistency with an airport's ACLUP as adopted by the ALUC;
- Inconsistency/conflict with adopted environmental plans for an area; and/or,
- Significantly increase the base flood elevation for upstream properties, or construct in a Special Flood Hazard Area (SFHA) or floodplain/wetland buffer zone.

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, the CAP strategies, actions, and supporting measures that could have an impact on land use include:

- **Action 2.1 Community Choice Aggregation Program or Similar Program.** Supporting measures and steps that implement this action could result in land use conflicts or inconsistencies related to the construction of large scale renewable energy generation, transmission, and storage systems.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas.** This action would facilitate the implementation of The City of Villages strategy and the shift to greater emphasis on mass transit and other modes of transportation. This action could therefore result in changes to the urban environment that could be inconsistent or conflict with existing land uses and land use plans and policies.

Issue 1: Would implementation of the CAP conflict with applicable land use plans, policies or regulations of an agency with jurisdiction over the Project?

The CAP is a policy-level document that proposes strategies to reduce GHG emissions and is designed to mitigate adverse environmental impacts associated with global climate change. The CAP has been prepared to be consistent with the City's General Plan, other planning documents, and the Development Code. The CAP does not propose any site-specific projects or grant any entitlements for development, but rather proposes a set of strategies, actions, and supporting measures that are intended to add detail to and implement climate-related policies of the General Plan and other plans.

Action 2.1 provides for consideration of a community choice aggregation (CCA) program or other program to achieve a target of 100 percent renewable supply of electricity by 2035. The CAP does not propose to construct any site-specific renewable energy infrastructure projects; rather, Action 2.1 directs the City to consider adoption of a CCA program, or other program, to leverage its purchasing power for renewable sources of energy. This would include encouraging and facilitating the installation of distributed (small-scale) renewable energy systems for homes and businesses. It may also result in the need for large-scale generation, transmission, and storage systems to maintain a consistent energy supply. Large scale systems may be developed by the

City, or the City may enter into purchase agreements with owners of such facilities to supply renewable energy.

Small-scale renewable energy systems, such as residential and small commercial roof-top solar photovoltaic (PV), generally result in minimal environmental impacts and are exempt from analysis under CEQA if they are less than 500 square feet, pursuant to SB 226. They would not result in or require a change in land use designation and in general would not result in incompatibility with surrounding land uses. Smaller systems that are located in sensitive areas or where land uses are incompatible, such as in biologically sensitive areas or on or near historic buildings, would be subject to existing Land Development Code restrictions and regulations designed to protect these resources, thereby avoiding a significant land use conflict (see further discussion of potential conflicts with habitat conservation plans, in Issue 3, below).

Potential land use compatibility issues may, however, result from the development of larger renewable energy generation, transmission, and storage systems. Larger renewable energy systems that may be encouraged or facilitated by implementation of the CAP may include, but are not limited to, large-scale solar PV and solar thermal facilities; on- and off-shore wind turbines, tidal and water power systems, geothermal systems, hydropower systems; and biomass systems; as well as new or upgraded transmission lines, substations, and energy storage systems. In general, larger-scale renewable energy facilities would be located in industrial areas, industrial brownfields,[1] and near existing utility infrastructure. This would include areas designated in the General Plan for industrial uses, institutional, public, and semi-public facilities, and military uses. Land use compatibility conflicts would not generally be expected for facilities located in these areas. If a project were proposed on agricultural land, private land near residential uses, or open space, then land use compatibility conflicts could arise. This may occur, for example, with a proposed wind project on private lands on coastal bluffs or ridgelines. A project of this kind may be incompatible with existing land use and zoning designations, and may conflict with adjacent land uses, for example residential and open space uses. This could result in a significant impact.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands. Such developments could be proposed for locations with General Plan or Zoning Code designations incompatible with facilities of this kind. In such cases, it would be the responsible of the agency with land use authority over the project site to ensure that such developments were compatible with existing designations or zoning, or to consider a variance or changing the designation or zoning to accommodate the project. Therefore, conflicts either would not occur, or would have to be resolved by the local agency. In either case, it is anticipated that conflicts with land use designations be considered in the planning and environmental review process for proposed facilities.

Action 3.1 prioritizes implementing the General Plan City of Villages Strategy in Transit Priority Areas (TPAs) identified in the 2050 San Diego Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The CAP would not change the land use designation of any

[1] Brownfields refer to land previously used for commercial or industrial purposes that is known to be or believed to be contaminated with hazardous waste or pollution.

land within the planning area; however, the CAP may indirectly influence land use decisions through this action, by establishing policies and programs to concentrate development and related infrastructure within the TPAs.

The RTP/SCS forecasts population and employment growth in the region and establishes a regional plan for future land use and transportation system improvements that would reduce GHG emissions from passenger vehicles and light trucks. The CAP does not propose large-scale transportation improvements; rather, the CAP quantifies the GHG reduction potential of locating future growth within TPAs, which are centered on the transportation and transit system improvements planned for in the RTP/SCS. The CAP supports the land use strategy in the RTP/SCS by encouraging community plans to direct growth within TPAs.

The General Plan's City of Villages strategy provides an overarching land use strategy for San Diego that is implemented through individual community land use plans. As described in General Plan policy LU-A.1, the City of Villages strategy encourages the intensification of employment uses in subregional employment districts, increases residential and commercial density near transit corridors, and encourages mixed-use development.

Because TPAs are located in proximity to key transportation corridors and transit routes, a land use conflict could occur if villages were located within TPAs near existing uses that could be affected by increased development density, such as land within an airport zone, adjacent to open space or other protected natural resources, or in areas that are designated for very low-density residential or agricultural uses.

Localized land use conflicts would be examined through implementation of General Plan policy LU.A-5, which requires that environmental review of potential village locations during the community update process "with input from recognized community planning groups and the general public, to determine if these locations are appropriate for mixed-use development and village design." Prior to adoption, every community plan would undergo environmental review to analyze the potential for local impacts due to land use changes in TPAs. In addition, implementation of the City of Villages strategy is accommodated through application of the City's Urban Village Overlay Zone, pursuant to §132.1101 et seq. of the Land Development Code, which is intended to create a mix of land uses in a compact pattern that will reduce dependency on the automobile, improve air quality, and promote high quality, interactive neighborhoods, as specified in Action 3.1. Much of the development called for in the CAP would occur within this overlay zone.

Future land use changes and any large-scale renewable energy projects proposed to implement the CAP would undergo further CEQA analysis to identify project-specific impacts, to identify feasible mitigation measures, and to consider alternatives, and to provide for public review and comment, prior to approval of any plan or project. Through the CEQA process, the compatibility of surrounding land uses and applicability of all land use plans would be reviewed to determine land use impacts that would result from the project. The City would review future proposed plans and projects for consistency with the policies in the General Plan, community plans, and the Zoning Code. The San Diego County Regional Airport Authority (Authority), acting as the Airport Land Use Commission (ALUC), would review future proposed land use plans and

policies for all community plan updates for consistency with airport land use compatibility plans and the military air installations compatible use zone studies for consistency with applicable land use regulations. The Coastal Commission would also review all proposed community land use plans for compatibility with the Coastal Zone regulations.

Significance of Impact

As described above, implementation of the CAP would generally be consistent with all applicable land use plans, policies, and regulations of agencies with jurisdiction over the Project, and would not conflict with any land use plans. Some projects undertaken pursuant to the CAP or in support of CAP programs, particularly the development of large-scale renewable energy facilities within the City limits, could conflict with existing land use and zoning designations or could conflict with adjacent land uses. This could result in a significant land use impact.

Mitigation Framework

Mitigation Measure LU-1: Siting of Large-scale Renewable Energy Projects.

To ensure that large-scale renewable energy projects are compatible and not in conflict with existing land use and zoning designations, and that any such facilities do not result in conflicts with adjacent land uses, the City shall develop a set of siting guidelines for such facilities prior to permitting any large-scale renewable energy projects. The guidelines shall avoid land use conflicts and contain specific provisions for appropriate siting of large renewable energy facilities to include all of the following at a minimum:

- A definition of the type and scale of facility that is subject to the siting guidelines. This list may be revised from time to time, as new technologies emerge and evolve.
- A matrix table that shows, for each type of facility, the appropriate land use and zoning designations, where siting of facilities would not be expected to cause a significant land use conflict.
- Guidelines or best management practices for minimizing conflicts with neighboring land uses. These would include, but not be limited to, required and recommended siting criteria; general design guidelines (such as property line setbacks); minimizing construction and operational noise (such as adherence to Noise Ordinance standards and General Plan compatibility standards); minimizing electromagnetic frequency (EMF) exposure; ~~and~~ minimizing visual prominence (for example, by avoiding siting of facilities on ridgelines and other prominent topographical features, or by providing vegetative screens); and minimizing lighting and glare effects (such as adherence to the City's Outdoor Lighting Regulations).
- The requirement that a facility demonstrate that there are no sensitive biological resources present on-site that would be impacted by development of the proposed large-scale renewable energy facility, or demonstrate compliance with the MSCP Subarea Plan Section 1.4.3, Land Use Adjacency Guidelines, and with the City's ESL Regulations.
- The requirement that a facility demonstrate that there are no historical resources present on-site that would be impacted by development of the proposed large-scale renewable energy facility, or demonstrate compliance with Mitigation Framework HIST-1.

- A checklist to determine whether, even with adherence to the guidelines provided, a facility may still result in a land use conflict.

Significance after Mitigation

With implementation of Mitigation Measure LU-1, potentially significant land use conflicts from siting of large-scale renewable energy facilities would be avoided. In the case where projects are found to have the potential for conflicts, additional environmental review would be required to determine the significance of impacts, the potential for mitigating impacts, and to consider project alternatives that may reduce or avoid impacts. After mitigation, this impact would be less than significant. The physical impacts that could result from land use conflicts may be significant and unavoidable and those impacts are analyzed in Sections 3.B (Visual Effects and Neighborhood Quality), 3.C (Air Quality), and 3.F (Transportation and Circulation).

Issue 2: Would implementation of the CAP conflict with the environmental goals, objectives, or recommendations of the General Plan or affected community plans?

As discussed in Chapter 1, Introduction and Environmental Setting, the General Plan, adopted in 2008, is the framework for the City's commitment to long-term conservation, sustainable growth, and resource management. It addresses GHG emission reductions through its City of Villages growth strategy and a wide range of inter-disciplinary policies. The General Plan contains Policy CE-A.2:

> Reduce the City's carbon footprint. Develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:
>
> - Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;
> - Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;
> - Improve energy efficiency, especially in the transportation sector and buildings and appliances;
> - Reduce the Urban Heat Island effect through sustainable design and building practices, as well as planting trees (consistent with habitat and water conservation policies) for their many environmental benefits, including natural carbon sequestration;
> - Reduce waste by improving management and recycling programs; and
> - Plan for water supply and emergency reserves.

In general, the CAP would be consistent with this policy as it would further its implementation, since it contains strategies, actions, and supporting measures aimed at each of the specific points contained in the policy. Specifically, CAP Action 3.1, which implements the City of Villages land use strategy, is consistent with Policy CE-A.2, since it facilitates the concentration of future development in the TPAs.

At the time that the General Plan was adopted, the City had already adopted its Climate Protection Action Plan (CPAP). The CPAP was approved in 2005, and focused on reducing emissions from municipal operations. The General Plan contains Policy CE-A.13, which lays out the requirements for updating, expanding, and implementing the CPAP:

> Regularly monitor, update, and implement the City's Climate Protection Action Plan, to ensure, at a minimum, compliance with all applicable federal, State, and local laws.
>
> a. Inventory greenhouse gas emissions, including emissions for the City community-at-large, and for the City as an organization.
>
> b. Identify actions and programs designed to reduce the climate change impacts caused by the community-at-large and the City as an organization.

The CAP would implement Policy CE-A.13, since it updates the City's Climate Protection Action Plan to be consistent with current federal, State, and local laws; provides a new community GHG inventory, and identifies actions and programs to reduce GHG emissions and increase community resiliency to climate change.

Chapter 3 of the CAP indicates the General Plan policies that support each CAP strategy. **Table 3.A-2** relates these General Plan polices to the proposed CAP actions. As shown in the table, each proposed CAP action is consistent with several General Plan policies. The Table also provides an indication of how each CAP action is consistent with other adopted environmental plans and policies. As shown in Table 3.A-2, the CAP would implement and be consistent with many of the environmental policies in the General Plan and community plans. For example, Strategy 3 and its related actions would facilitate implementation of the General Plan's City of Villages strategy and community plans that provide neighborhood-level planning for the City of Villages strategy. Actions 2.1 and 2.2 in the CAP would implement General Plan policies which prioritize the development of sustainable energy (policies CE-I.2, CE-I.3, CE-I.5, CE-I.10, and CE-I.11). Actions 1.3, 1.4, and 1.5 would implement General Plan policies to reduce water demand (policies PF-H.1 and CE-D.1-4). Action 4.1 would implement General Plan policy to divert solid waste from landfills and extend the useful life of exiting landfills (policy PF-I.2), and Action 5.1 would implement General Plan policies to plant shade trees and expand the City's urban tree canopy (policies CE-J.1 and CE-J.4).

With regard to the community plans, as noted in the Regulatory Setting section above, each community planning area has its own land use plan that specifically addresses land use distribution and land use designations in more detail than is possible at the General Plan level. Community plans also provide policy for community facilities, urban design and other aspects of community planning. The City is in the process of updating community plans to reflect the policy changes of the General Plan, particularly to add specificity to the City of Villages strategy. The CAP strategies and actions are intended to support and facilitate implementation of the community plans that have already been updated to incorporate the City of Villages strategy. As noted in the General Plan PEIR, Chapter 3.8, Land Use, until all of the community plans have been updated to reflect and incorporate the City of Villages strategy, there may be conflicts between the policies contained in the older community plans and the General Plan.

TABLE 3.A-2
MATRIX OF CAP ACTIONS/PLAN CONSISTENCY

CAP Strategies/Actions	Target	GP Supporting Policies	Other Relevant Plans and Plan Policies
Strategy 1: Water & Energy Efficient Buildings			
Action 1.1 Residential Energy Conservation and Disclosure Ordinance	Reduce energy use by 15 percent per unit in 20 percent of residential housing units by 2020 and 50 percent of units by 2035.	• CE-I.7 Energy Efficiency Investments • CE-I.5b Renewable Energy Installation for New and Existing Buildings • CE-I.13 Energy Conservation Education	• Proposition D - height limitations west of I-5 for solar rooftop installations • San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of retrofits • San Diego Historical Resources Guidelines - retrofit alterations to historic buildings • Senate Bill 226 – exemption for rooftop solar
Action 1.2: City of San Diego's Municipal Energy Strategy and Implementation Plan	Reduce energy consumption at municipal facilities by 15 percent by 2020 and an additional 25 percent by 2035.	• CE-I.7 Energy Efficiency Investments • CE-I.5b Renewable Energy Installation for New and Existing Buildings • CE-I.4 Water Conservation and Waste Diversion	• San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of retrofits • San Diego Historical Resources Guidelines - retrofit alterations to historic buildings • Senate Bill 226– exemption for rooftop solar
Action 1.3 New Water Rate and Billing Structure	Reduce daily per capita water consumption by four gallons by 2020 and nine gallons by 2035 from a potential new water rate billing structure	• CE-A.11h Implement Water Conservation Measures • CE-D.1h Water Conservation Incentives • CE-D.1i Water Shortage Response Plan • CE-D.1j Conservation Enforcement • CE-D.1m Water Conservation Education • CE-I.4 Water Conservation and Waste Diversion	• City of San Diego Urban Water Management Plan (UWMP) - for implementing water conservation measures • San Diego County Water Authority UWMP- for implementing water conservation measures • San Diego Integrated Water Management Plan (IRWMP) – for reduction in use of groundwater or any alteration of groundwater resources
Action 1.4 Water Conservation, Disclosure, and Benchmarking Ordinance	Reduce daily per capita water consumption by four gallons by 2020 and nine gallons by 2035.	• CE-A.11h Implement Water Conservation Measures • CE-D.1j Conservation Enforcement • CE-D.1k Water Conservation Technology • CE-D.1l Update Landscaping Regulations • CE-D.1m Water Conservation Education • CE-I.4 Water Conservation and Waste Diversion	• City of San Diego Urban Water Management Plan (UWMP) - for implementing water conservation measures • San Diego County Water Authority UWMP- for implementing water conservation measures • San Diego Integrated Water Management Plan (IRWMP) – for reduction in use of groundwater or any alteration of groundwater resources
Action 1.5: Outdoor Landscaping Ordinance	Reduce daily per capita water consumption by an additional three gallons by 2020 and an additional five gallons by 2035.	• CE-A.11e Lawn Replacement • CE-A.11h Implement Water Conservation Measures • CE-A.11i Reduce Potable Water Use for Irrigation • CE-D.1i Water Shortage Response Plan • CE-D.1k Water Conservation Technology • CE-D.1l Update Landscaping Regulations • CE-D.1m Water Conservation Education • CE-I.4 Water Conservation and Waste Diversion	• City of San Diego Urban Water Management Plan (UWMP) - for implementing water conservation measures • San Diego County Water Authority UWMP- for implementing water conservation measures • San Diego Integrated Water Management Plan (IRWMP) – for reduction in use of groundwater or any alteration of groundwater resources

TABLE 3.A-2 (Continued)
MATRIX OF CAP ACTIONS/ PLAN CONSISTENCY

CAP Strategies/Actions	Target	GP Supporting Policies	Other Relevant Plans and Plan Policies
Strategy 2: Clean & Renewable Energy			
Action 2.1 Community Choice Aggregation Program or Another ~~Similar~~ Program	Add additional renewable electricity supply to achieve 100 percent renewable electricity by 2035 city-wide including 19 percent net metered and shared solar by 2035	• CE-I.5 Photovoltaic/ Renewables Installation • CE-I.10 Renewable Energy Procurement • CE-I.11 Renewable Energy Incentives • CE-A.5 Sustainable Buildings/ Renewables • CE-A.6 Renewables on City Buildings • UD-A.4 Sustainable Buildings/ Renewables	• Land Development Code – renewable systems must comply with LDC • City's Various Parks, Open Space, and Natural Resource Plans – may be effected due to siting of renewable systems • SD County MSCP Subarea Plan – renewable system installation may affect lands within or in proximity to the MSCP Subarea • Biological Resource Guidelines – system installation must comply with guidelines • Environmentally Sensitive Lands (ESLs) Regulations – system installation must comply with regulations • Airport Land Use Commission (ALUC) for San Diego County – systems installed within or in proximity to ALUC plan must be consistent • Air Installations Compatible Use Zones (AICUZ) Studies– systems installed within or in proximity to AICUZ areas must be consistent • Caltrans Scenic Highway Program – installation of systems may affect views along scenic highways • San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of systems • Regional Energy Strategy (RES) 2030 – is this goal consistent with the RES? Does RES support or can County support such significant increases in renewables? • Senate Bill 226– exemption for rooftop solar
Action 2.2 Municipal Zero Emissions Vehicles	Increase the number of zero emissions vehicles in the municipal fleet to 50 percent by 2020 and 90 percent by 2035.	• CE-A.2 Reduce City's Carbon Footprint	• None
Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel	100 percent conversion from diesel fuel used by municipal solid waste collection trucks to compressed natural gas or other alternative low emission fuels by 2035.	• CE-A.2 Reduce City's Carbon Footprint	• None

TABLE 3.A-2 (Continued)
MATRIX OF CAP ACTIONS/ PLAN CONSISTENCY

CAP Strategies/Actions	Target	GP Supporting Policies	Other Relevant Plans and Plan Policies
Strategy 3: Bicycling, Walking, Transit & Land Use			
Action 3.1 Mass Transit	Achieve mass transit mode share of 12 percent by 2020 and 25 percent by 2035 in Transit Priority Areas (TPA).	• CE-F.1Reduce Fossil Fuel Use • ME-E.6 Alternative Modes of Transportation for New Development • ME-B.9 Transit Planning • LU-A.7 Increased/ Transit Supportive Density	• Land Development Code – renewable systems must comply with LDC • San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of systems • SANDAG RTP/SCS – TPA development must support goals of RTP/SCS
Action 3.2: Commuter Walking	Achieve walking commuter mode share of three percent by 2020 and seven percent by 2035 in TPA.	• CE-A.2 Reduce City's Carbon Footprint • ME-E.6 Alternative Modes of Transportation for New Development • ME-B.9 Transit Planning • ME-C.4 Street and Sidewalk Operations	• San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of systems • San Diego Pedestrian Master Plan – would be implemented under this action
Action 3.3 Commuter Bicycling	Achieve six percent bicycle commuter mode share by 2020 and 18 percent mode share by 2035 in Transit Priority Areas.	• CE-A.2 Reduce City's Carbon Footprint • ME-E.6 Alternative Modes of Transportation for New Development • ME-F.5 Increase Bicycle to Transit Trips • ME-F.6 Bicycle Safety Education • ME-C.4 Street and Sidewalk Operations	• San Diego Regional Air Quality Strategy (RAQS) - emissions exceedances possible during construction of systems • San Diego Bicycle Master Plan– would be implemented under this action
Action 3.4 Retiming Traffic Signals	Retime 200 traffic signals by 2020.	• CE-A.2 Reduce City's Carbon Footprint • CE-F.1Reduce Fossil Fuel Use • CE-F.5 Reduce Emissions from Motors • ME-C.4 Street and Sidewalk Operations	• None
Action 3.5 Install Roundabouts	Install roundabouts at 15 intersections by 2020 and an additional 20 intersections by 2035.	• CE-A.2 Reduce City's Carbon Footprint • CE-F.1Reduce Fossil Fuel Use • ME-C.4 Street and Sidewalk Operations	• San Diego Regional Air Quality Strategy (RAQS) during retrofit construction
Action 3.6 Reduction in Commute Miles	Reduce average vehicle commute distance by two miles through implementation of the General Plan City of Villages Strategy by 2035.	• CE-A.2 Reduce City's Carbon Footprint • CE-F.1Reduce Fossil Fuel Use • ME-E.6 Alternative Modes of Transportation for New Development • ME-F.5 Increase Bicycle to Transit Trips • ME-B.9 Transit Planning • LU-A.7 Increased/ Transit Supportive Density	• Land Development Code • City Natural Resource Plans • SD County MSCP Subarea Plan and Biological Resource Guidelines • San Diego Regional Air Quality Strategy (RAQS) during construction • San Diego Historical Resources Guidelines with increased density • SANDAG RTP/SCS

TABLE 3.A-2 (Continued)
MATRIX OF CAP ACTIONS/ PLAN CONSISTENCY

CAP Strategies/Actions	Target	GP Supporting Policies	Other Relevant Plans and Plan Policies
Strategy 4: Zero Waste			
Action 4.1 Divert Solid Waste and Capture Landfill Emissions	75 percent diversion by 2020 and 90 percent by 2035	• CE-A.2 Reduce City's Carbon Footprint • CE-A.8 Reduce C&D Waste • CE-A.9 Reduce C&D Waste • CE-E.6 Pollution Control • CE-M.3 International Pollution Control Coordination • CE-N.4 Reduce Energy Waste • CE-N.7 Waste Diversion Education • PF-I.1 Waste Collection Efficiency • PF-I.2 Waste Diversion	• San Diego Regional Air Quality Strategy (RAQS) during retrofit or new facility construction, Construction and Demolition Debris Ordinance • ARB Landfill Methane Control Regulation • AB 939 and amendments and required planning documents.
Action 4.2 Capture Methane from Wastewater Treatment	Capture 98 percent wastewater treatment gases by 2035.	• CE-A.2 Reduce City's Carbon Footprint	• San Diego Regional Air Quality Strategy (RAQS) during retrofit construction
Strategy 5: Climate Resiliency			
Action 5.1 Urban Tree Planting Program	Achieve 15 percent urban canopy cover by 2020 and 35 percent urban canopy cover by 2035	• CE-A.2 Reduce City's Carbon Footprint • CE-J.1 Urban Forestry • CE-J.2 Street Tree Master Plan • CE-J.3 Street Tree Master Plan Development	• City of San Diego Urban Water Management Plan (UWMP) – would this result in a significant increase in demand for water that City cannot supply?

Significance of Impact

As described above, implementation of the CAP would not conflict with the environmental goals, objectives, or recommendations of the General Plan; rather, the CAP is consistent with implements the environmental goals, policies, and recommendations of the General Plan. Therefore, this impact is less than significant.

Mitigation Framework

No mitigation is required.

Issue 3: Would implementation of the CAP result in a conflict with an adopted environmental plan or other approved local, regional or State habitat conservation plan?

As described above, the applicable habitat conservation plan within the City is the MSCP Subarea Plan. Other adopted environmental regulations include the City's Environmentally Sensitive Lands (ESL) ordinance, a part of the City's Land Development Code, and the related Biology Guidelines.

The City's MSCP Subarea Plan identifies Park, Opens Space, and Recreation uses in the General Plan that are protected from development through implementation of the Subarea Plan Land Use Considerations (Section 1.4.1 to 1.4.3). The ESL Ordinance applies to all sensitive biological resources as well as environmentally sensitive lands, including steep hillsides, beaches, coastal bluffs, and special flood hazard areas.

Action 2.1 of the CAP could indirectly result in the construction of large-scale renewable energy generation, transmission, and storage systems, in order to support achievement of the CAP goal to supply 100 percent renewable energy to the City's power grid by the year 2035. It is anticipated that within the City limits, the majority of these systems would be located outside of biologically sensitive lands, with favored locations in industrial and commercial areas, such as roof tops, industrial brownfields, and parking lots. There is the potential, however, for development of renewable energy facilities in undeveloped areas and more sensitive areas, both within and outside the City limits.

Within the City limits, any such development would be subject to the restrictions and requirements of the MSCP Subarea Plan, ESL ordinance, and the Biology Guidelines. Such projects would be required to comply with the MSCP Land Use Adjacency Guidelines, which require all projects to ensure that site drainage is not directed directly into MSCP lands, measures are incorporated to reduce potential for chemicals to enter the MHPA lands, lighting is directed away from MHPA lands and buffered by landscaping where possible, noises are minimized and excessive noise during the breeding season is curtailed, and barriers are constructed along new development to protect MHPA lands from the public. Any renewable energy project proposed to support the goals of the CAP would be subject to the ESL Ordinance, Section143.0101 et seq. of the Land Development Code, which would reduce impacts to these areas. Therefore, conflicts or inconsistencies with these plans are not expected to occur within the City.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands. Such developments could be proposed for locations within the boundaries of adopted habitat conservation plans or other environmental plans. In such cases, it would be the responsible of the agency with land use authority over the project site to ensure that such developments were compatible with the requirements of any such plans. Therefore, conflicts either would not occur, or would have to be resolved by the local agency. In either case, it is anticipated that any impacts on sensitive biological resources would be identified and mitigated through the planning process for proposed facilities.

CAP Action 3.1 would facilitate the implementation of the General Plan City of Villages land use strategy, through supporting measures that encouraging new development within TPAs, prioritizing infrastructure improvements in TPAs, and implementing bicycle and pedestrian facilities improvements. More site-specific planning for TPAs is contained in the community plans, or will be added to community plans that have not yet been updated to reflect the City of Villages strategy.

The TPAs are generally urbanized areas centered on existing transit corridors. Action 3.1 would not in itself result in any changes to any environmentally sensitive lands. Action 3.1 could result in or facilitate changes to land uses or construction of new developments and transportation facilities in proximity to the MHPA or other environmentally sensitive lands. As with all developments within the City, such projects would be subject to the restrictions and requirements of the regulations contained in the MSCP Subarea Plan, the ESL Ordinance, and the Biology Guidelines. For these reasons, adoption and implementation of the CAP would not be expected to conflict with any local, regional, or State habitat conservation plan. The impact is, therefore, less than significant.

Significance of Impact

For the reasons stated above, the project is not expected to conflict with an adopted environmental plan or other approved local, regional or State habitat conservation plan. This impact is therefore less than significant.

Mitigation Framework

No mitigation is required.

B. Visual Effects and Neighborhood Character

B.1 Introduction

This section of the PEIR analyzes the potential environmental effects on visual resources and neighborhood character from implementation of the City of San Diego (City) Draft Climate Action Plan (CAP).

B.2 Environmental Setting

Regional Setting

The San Diego region is a visually diverse region rich in natural open space, topographic resources, scenic highways, scenic vistas, and other distinct aesthetic resources. San Diego's location bordering the Pacific Ocean also contributes to the natural setting of the region. The topography of the region contributes greatly to the overall character and quality of the existing visual setting. In general terms, the region is characterized by four physiographic regions: the low-lying coastal plain, the foothills, the mountains, and the lowlands of the desert. The visual character of each is described briefly below.

The coastal plain ranges in elevation from sea level to approximately 600 feet above mean sea level (AMSL) and includes beaches; bays; shoreline; coastal canyons; and the rivers, streams, and other watercourses that drain inland areas, eventually reaching the coastal environment and waters. The coastal plain provides expansive views of scenic resources in all directions, with the coastline visible from regional transportation facilities including the Los Angeles to San Diego (LOSSAN) rail corridor and Interstate 5 (I-5). Much of the coastal plain is developed with urban land uses. Agricultural uses within the coastal area include row crops, field flowers, and greenhouses.

The foothills of the San Diego region range in elevation from 600 to 2,000 feet AMSL and are characterized by rolling to hilly uplands that contain frequent narrow, winding valleys. This area is traversed by several rivers, as well as a number of intermittent drainages. Several side canyons have incised the coastal plan and created major drainages that generally flow westward toward the coast. These major drainages are the San Dieguito River Valley, Los Peñasquitos Creek, Carroll Creek, Rose Creek, San Diego River, Las Chollas Creek, Sweetwater River, Otay River, and the westernmost mouth of the Tijuana River. The foothills are also developed with various urban and rural land uses. Agriculture consists of citrus and avocado orchards as well as row crops.

The mountain region features steep-sided mountains that are typically covered with granitic boulders. Lower slopes feature chaparral vegetation. Higher elevations are host to oak woodlands and coniferous forest. Elevations range from 2,000 to 6,000 feet AMSL. The mountain areas are generally undeveloped with rural communities scattered throughout such as Alpine, Pine Valley, Campo, Ramona, and Julian.

The eastern portion of the San Diego region is within the desert zone. Elevations range from sea level to 3,000 feet AMSL and the terrain includes mountains, alluvial fans, and desert floor. The majority of this region is part of the Anza-Borrego Desert State Park. The desert region is generally undeveloped and sparsely populated in scattered towns such as the community of Borrego Springs. The desert region provides expansive views of the surrounding area, which is characterized by dramatic landforms and native desert habitats.

Throughout the coastal plain, foothills, mountains, and desert are vast amounts of publicly owned lands that provide open space and visual relief from the human-made environment. These include Marine Corps Base Camp Pendleton (MCBCP) on the coastal plain in northern San Diego region, the Cleveland National Forest in the Peninsular Range; and the Anza-Borrego Desert State park in the desert region. In addition to these examples of large expanses of open space, State, county, and local parks; habitat preserves; reservoirs; farmland; and undeveloped land lend to San Diego region's open space lands and overall aesthetic resource value.

Scenic Highways

The California Scenic Highways Program is run by Caltrans and is intended to protect and enhance the natural scenic beauty of California's highways and adjacent corridors, through special conservation treatment. State Route 163 (SR-163) through Balboa Park, State Route 75 (SR-75) at the Silver Strand, and State Route 125 (SR-125) from State Route 94 (SR-94) to Interstate 8 (I-8) are the three transportation corridors in the region that are designated as State Scenic Highways; only SR-163 is completely within city limits.

Scenic Views and Vistas

The coastal plain and foothills each contain numerous scenic resources and significant landscape features that contribute to the City's overall scenic quality. Major scenic resources within the coastal areas include views of the Pacific Ocean, beaches, bays, lagoons, and harbors. Notable features include San Diego Bay, Mission Bay Park, and Los Peñasquitos Lagoon. Notable features in surrounding cities that contribute to the visual character of the region include Batiquitos Lagoon, Agua Hedionda Lagoon, Buena Vista Lagoon, San Elijo Lagoon, and Oceanside Harbor. Coastal parks, including Border Field State Park, the Tijuana estuary, Silver Strand State Beach, and Torrey Pines State Reserve and Beach; and prominent land and water features, such as Cabrillo National Monument on Point Loma, Sunset Cliffs, La Jolla Cove, Mount Soledad, and the offshore Coronado Islands, are also visual resources along the coast.

Within the foothills, the prominent visual resources include rivers, lakes, open bodies of water, and parks such as the Otay River, Sweetwater River, San Diego River, Upper and Lower Otay Lakes, Sweetwater Reservoir, Lake Hodges, San Vicente Reservoir, Mission Trails Regional Park, Santee Lakes Regional Park, Tecolote Canyon, Los Peñasquitos Canyon Preserve, Old Town State Historic Park, and Presidio Park.

Public vantage points by community planning area are included in **Table 3.B-1** and generally relate to areas that face the Pacific Ocean, or other bodies of water, views overlooking canyons and open space, and views of the downtown skyline. Such views are further protected by Proposition D, which was passed in 1972 and limits the building height in areas generally west of I-5 to a maximum of 30 feet. Scenic views in the City are gradually being improved through the City's Utilities Undergrounding Program, which began in 1970 and has relocated 30-35 miles of overhead utility lines underground each year with the goal of relocating all lines within the next 50 years.

City of San Diego

The City of San Diego is separated into unique communities and neighborhoods that are physically defined by the canyons and foothills that create natural barriers that form separate, smaller mesas. The sloping topography of the City of San Diego is shown in **Figure 3.B-1**.While development has occurred in Mission Valley and portions of other drainages, efforts to provide open space and reduce land use intensity in the San Dieguito River Valley, Los Peñasquitos Canyon, San Clemente Canyon, and the Otay River Valley allows the City of San Diego an opportunity to retain and/or develop unique communities with distinct physical separation.

The urbanization of San Diego began around 1869 when Alonzo Horton moved the center of commerce and government from Old Town (Old San Diego) to New Town (Downtown). Development spread from Downtown based on a variety of factors, including the availability of potable water and transportation corridors. Factors such as views and access to public facilities affected land values, which in turn affected the character of neighborhoods that developed. Neighborhoods were developed around small parcels, incrementally and over a long period of time, so that many neighborhoods have a distinctive character defined by their buildings, colors, materials, and landscaping.

The City provides citywide urban design recommendations, in the Urban Design Element of the City's General Plan (2008), to maintain the character of the built environment. Some of the more recognizable architectural styles in the City are Spanish Colonial, Pre-Railroad New England, National Vernacular, Victorian Italianate, Stick, Queen Anne, Colonial Revival, Neoclassical, Shingle, Folk Victorian, Mission, Craftsman, Monterey Revival, Italian Renaissance, Spanish Eclectic, Egyptian Revival, Tudor Revival, Modernistic, International, Modern, and Contemporary. While historic development has traditionally occurred on vacant land, development is currently trending towards infill projects, including the redevelopment of a parcel or multiple parcels, as little vacant and developable land remains within the City.

These neighborhoods and communities are connected by the interstate and highway system, major arterial freeways, highways, surface streets, public transportation routes, bikeways and open space trails. Local connectivity is also provided by public transit, including buses and regional light rail, with interstate and international connectivity provided through trains, interstate freeways, and the federal ports of entry to the Republic of Mexico.

TABLE 3.B-1
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

Community	Identified Public Vantage Point	Description
Barrio Logan / Harbor 101	Harbor Drive Bridge over Switzer Creek	Views to the San Diego Bay
	Chollas Creek	Views to the San Diego Bay
	28th Street and Harbor Drive	Views toward I-5, SR-15 freeway interchanges (major sculptural feature)
	Logan Avenue	Centre City skyline and major industrial waterfront features
	National Avenue	Centre City skyline and major industrial waterfront features
	Northern portion of community	Centre City skyline and major industrial waterfront features
Black Mountain Ranch	Northern portion of community	Views overlooking the canyon and open space
Carmel Mountain Ranch	I-15	Views into the southern portion of the community
	Communitywide	Views facing outside the community from open space areas in the south central portion of the community
Carmel Valley	Views not in current community plan	
Clairemont Mesa	Designated open spaces west of Clairemont Drive	Views facing west to Mission Bay and Pacific Ocean
	Communitywide	Many neighborhoods along the mesa overlook Mission Bay and the Pacific Ocean to the west, Fortuna Mountain and Cowles Mountain to the east and the open space canyon system
College Area	Views not in current community plan	
Del Mar Mesa	Views not in current community plan	
Elliott	Views not in current community plan	
Fairbanks Ranch Country Club	Views not in current community plan	
Golden Hill	Citywide	Structures should be designed to protect views of Golden Hill's natural scenic amenities, especially San Diego Bay, the Coronado Bay Bridge, Balboa Park, Switzer Canyon and the 32nd Street and 34th Street canyons
Greater North Park	Views not in current community plan	
Kearny Mesa	I-805, SR-52 & I-15	Create attractive views toward the community
La Jolla	Torrey Pines City Park	Viewshed overlooking coast
	La Jolla Farms Road	Scenic Overlook and Intermittent or Partial Vista looking west towards the coast
	Scripps Natural Reserve	Viewshed overlooking coast
	Bluff - top easement at La Jolla Shores Lane	View Cone overlooking coast
	Ellentown Road	Scenic Overlook looking west towards the coast
	La Jolla Shores Drive from Torrey Pines Road	Intermittent or Partial Vista looking west towards the coast
	La Jolla Shores Drive looking south from the vicinity of Scripps Institute of Oceanography	Viewshed overlooking coast, Scenic Overlook, Intermittent or Partial Vista, and a road from which coastal body of water can be seen
	Allen Field	Viewshed looking west towards the coast
	Bordeaux Avenue (western half)	Scenic Overlook looking west towards the coast
	El Paseo Grande (after it turns east)	View corridor and a road from which coastal body of water can be seen.
	Camino del Oro (after it turns east)	Road from which coastal body of water can be seen
	Whale Watch Way	Intermittent or Partial Vista looking west towards the coast

TABLE 3.B-1 (Continued)
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

Community	Identified Public Vantage Point	Description
La Jolla (cont.)	Cliffridge Park	Viewshed looking west towards the coast
	Kellogg Park	Viewshed overlooking coast and beach
	Calle Frescota	View corridor looking west towards the coast
	Prestwick Drive	Intermittent or Partial Vista looking west towards the coast
	Vallecitos	View corridor looking west towards the coast
	Avenida de la Playa	View corridor looking west towards the coast
	Calle del Cielo	Views looking west towards coast
	Pottery Canyon Park	Scenic Overlook looking west towards the coast
	Costabelle Drive	Scenic Overlook looking west towards the coast
	Spindrift Drive (south of the Marine Room Restaurant)	Viewshed looking west towards coast
	Charlotte Park (at the foot of Charlotte Street)	View Cone and View Corridor overlooking coast
	Coast Boulevard, Children's Pool, Shell Beach, Ellen B. Scripps Park and La Jolla Cove	Viewshed along coast looking north, east and west
	Prospect Street and Cave Street	View Cone and View Corridor overlooking coast
	Coast Walk	View Cone overlooking coast
	Park Row (north end)	View Corridor looking north towards the coast
	Torrey Pines Road	Road from which coastal body of water can be seen looking north towards the coast
	Public open space on Torrey Pines Road between St. Louis Terrace and Calle de la Plata	Intermittent or Partial Vista looking north towards the coast
	Azure Coast Drive	Views looking west towards coast
	Hidden Valley Road	Intermittent or Partial Vista looking west towards the coast
	Ardath Road	Road from which coastal body of water can be seen looking west towards
	Girard Avenue	the coast
	Jenner Street	Scenic Overlook northwest towards the coast
	View corridor easement through 7963 Prospect Place to ocean	View Corridor looking northwest towards the coast
	Easement across from John Coal Book Store from Prospect Street and Recreation Center	Scenic Overlook west towards the coast
	Hillside Drive (portions)	Scenic Overlook west towards the coast
	Caminito Avola/Via Avola	Scenic Overlook west towards the coast
	Via Siena at Hillside Drive	View Cone looking north, east and west towards the coast
	Rue Denise	View Cone looking north, east and west towards the coast
	La Jolla Scenic Drive South (portions)	Scenic Overlook northwest towards the coast
	Mt. Soledad (north of Ardath Rd)	Scenic Overlook northwest towards the coast
	Rue Adriane	View Cone looking east towards canyons
	Rue Michael	Scenic Overlook towards the coast
	Senn Way	Scenic Overlook towards the coast
	Rue de Roark	Scenic Overlook towards the coast
	Coast Boulevard Park and South Coast Boulevard	Scenic Overlook towards the coast
	View corridor at southwest side of Scripps Hotel site, from Prospect Street	Viewshed south and west along the coast

TABLE 3.B-1 (Continued)
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

Community	Identified Public Vantage Point	Description
La Jolla (cont.)	La Jolla Community Center Park, Cuvier Street	View corridor west towards the coast
	From top of Cuvier Street at Prospect	View Cone looking west towards the coast
	Via Capri (portions)	View corridor northwest towards the coast
	Mount Soledad	Viewshed panoramic views north, south, west, and east
	Country Club Drive	Scenic Overlook towards the coast
	Marine Street (Jones Beach)	View corridor west towards the coast
	Sea Lane	View corridor west towards the coast
	Belvedere Street	View corridor west towards the coast
	West Muirlands Drive	Scenic Overlook towards the coast
	Neptune Place and La Jolla Strand Park	Road from which coastal body of water can be seen looking west towards the coast
	Westbourne Street	View corridor west towards the coast
	Nautilus Street	View corridor west towards the coast and road from which coastal body of water can be seen looking west towards the coast
	Muirlands Drive between Nautilus and La Jolla Mesa Drive	Intermittent or Partial Vista looking west towards the coast
	Soledad Mountain Rd	Intermittent or Partial Vista looking south towards downtown and the coast
	Windandsea Park	View Cone looking west along the coast
	El Camino del Teatro	Scenic Overlook towards the coast
	Portions of La Jolla Scenic Drive South	Road from which coastal body of water can be seen looking south and west towards the coast
	Bonair Street	View corridor west towards the coast
	Plaza del Norte and Playa del Sur	Intermittent or Partial Vista west along the coast
	Gravilla Street	View corridor west towards the coast
	Kolmar Street	View corridor west towards the coast
	Rosemont Street	View corridor west towards the coast
	Palomar Street	View corridor west towards the coast
	Fay Avenue	Bike Path Views of open space, canyons
	Inspiration Drive	Scenic Overlook towards the coast
	Hermosa Terrace Park	Viewshed south and west along the coast
	Newkirk Drive	Scenic Overlook towards the coast
	Rodeo Drive	Scenic Overlook towards the coast
	Via Espana	Scenic Overlook towards the coast
	Camino de la Costa (includes Cortez Place, Costa Place)	Viewshed south and west along the coast
	Desert View Drive	Intermittent or Partial Vista towards the coast
	La Jolla Rancho Road	Scenic Overlook towards the coast
	Ravenswood Road	Intermittent or Partial Vista towards the coast
	La Jolla Hermosa Park	Viewshed north and west along the coast
	La Jolla Mesa Drive (from Cottontail Lane to Skylark Street)	Road from which coastal body of water can be seen looking south and west towards the coast
	Moss Lane, off Dolphin Place	View Cone at the coast
	Bird Rock Avenue	View corridor west towards the coast
	Dolphin Place	Intermittent or Partial Vista towards the coast
	Coral Lane	View corridor west towards the coast
	Chelsea Place	Intermittent or Partial Vista towards the coast
	Forward Street	Viewshed looking south towards the coast

TABLE 3.B-1 (Continued)
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

Community	Identified Public Vantage Point	Description
La Jolla (cont.)	Midway Street	Viewshed looking south towards the coast
	Colima Street (end of road closest to the ocean)	Scenic Overlook towards the coast
	Calumet Park	Viewshed south and west along the coast
	San Colla Street	Scenic Overlook towards the coast
	Ricardo Place	Scenic Overlook towards the coast
	Bandera Street	View corridor west towards the coast
	Sea Ridge Drive	Intermittent or Partial Vista towards the coast
	Linda Way	View corridor south towards the coast
	Tourmaline Surfing Park	View corridor and view cone west towards the coast
	La Canada Canyon	Viewshed west towards the coast
	Princess Street	View Cone north overlooking the coast
Linda Vista	Tecolote Canyon	Protect public views from the canyon
Mid-City	Communitywide	Framed views of existing aesthetic resources such as parks and community landmarks
	Communitywide	Panoramic views of the bay, open spaces, and mountains from street rights-of-way and other public areas
Midway/Pacific Highway Corridor	Pacific Highway between Sassafras Street and Laurel Street	Preserve scenic vistas to the bay and other coastal areas and utilize building design along view corridors to enhance views to the waterfront from public rights-of-way
Mira Mesa	Los Penasquitos Canyon Preserve	Provide view of canyon with scenic overlooks
Miramar Ranch North	Miramar Lake	Views from and of these areas across the lake
	Western escarpment of community	Maintain views to the ocean while providing a high quality visual experience to onlookers form the mesas below to the west
Mission Beach	Views not in current community plan	
Mission Valley	Communitywide	Views should be provided from public streets into the river corridor
	Communitywide	Aerial views from the hillsides into the river area from public areas such as
Navajo	Views not in current community plan	
Old Town	Views not in current community plan	
Otay Mesa	Communitywide	Preserve privacy and views
Otay Mesa - Nestor	Palm Avenue Transit Center/Park-and-Ride	Provide a viewpoint overlooking the valley, north of the trolley station parking lot. Provide physical access, via a stairway, into the valley
	Midway Baptist Church	Encourage the Church to provide a public viewpoint overlooking the valley
	Palm Avenue	This site is the only area between I-5 and I-805 that provides direct views into the valley from Palm Avenue. Preserve visual access and provide a public viewpoint from Palm Avenue. Provide public trail and vehicular access along the existing unimproved road alignment from Palm Avenue into the valley.
	Montgomery High School	Provide pedestrian access through the school campus to the sites north of the ball fields and stadium. Improve this area of natural bluffs overlooking the valley as a passive recreation and viewing area

TABLE 3.B-1 (Continued)
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

Community	Identified Public Vantage Point	Description
Otay Mesa – Nestor (cont.)	Cochran Avenue	This site is proposed as a mini park. Provide a public viewpoint overlooking the valley, including landscaping and seating. Design of this area should prevent vehicular access north of Lindberg Street, and should discourage and prevent trash dumping over the cliff
	Finney Elementary School	Provide pedestrian access through the school campus to the north of the ball field and playground. Improve this area of natural bluffs overlooking the valley and finger canyons as a passive viewing area
	Murrieta Circle	An existing utility easement road provides access from Murrieta Circle down to the valley. Work with SDG&E to provide public access to this trailhead and viewpoint overlooking the valley.
	Servando Avenue	Provide viewpoints along the alignments of Valentino Street and Bluehaven Court by clearing non-sensitive vegetation along the south side of this street, adjacent to the Tijuana River Valley. The viewpoints will provide aesthetic enjoyment for local residents and assist the U.S. Border Patrol in their operations
Pacific Beach	Loring Street	View corridor facing west toward the ocean
	Law Street	View corridor facing west toward the ocean
	Chalcedony Street	View corridor facing west toward the ocean
	Missouri Street	View corridor facing west toward the ocean
	Diamond Street	View corridor facing west toward the ocean
	Emerald Street	View corridor facing west toward the ocean
	Felspar Street	View corridor facing west toward the ocean
	Mission Boulevard	Intermittent public view of the ocean
	Bayard Street (south)	Intermittent public view of the ocean
	Pacific Beach Drive	Intermittent public view of the ocean
	Lamont Street	View facing south to Mission Bay
	Grand Avenue (west and central portion community)	Intermittent public view of the ocean and bay
	I-5 (southern portion of the community)	View facing south to Mission Bay
	Riviera to Crown Point Drive	Views of the bay
Pacific Highlands Ranch	Gonzales Canyon and east-west urban amenity	Open space overlook
	Near elementary school/park overlooking	Overlooking McGonigle Canyon
	McGonigle Canyon	
	South terminus of eastern neighborhood parkway	Open space overlook
	Community-wide	Utilize public view opportunities on the edge of the MHPA
Peninsula	Catalina Boulevard (southern portion)	Coastal vistas facing east and west
	Shelter Island Drive	Bay and downtown view facing north, west and south
	Rosecrans Street	Facing southeast
	Talbot Street	Facing east toward the San Diego Bay
	Canon Street	Facing southeast toward the San Diego Bay
	Garrison Street	Facing southeast toward the San Diego Bay
	Chatsworth Boulevard	Facing northeast

TABLE 3.B-1 (Continued)
COMMUNITY PLAN IDENTIFIED VANTAGE POINTS

Community	Identified Public Vantage Point	Description
Peninsula (cont.)	West Point Loma Boulevard	Facing south/southeast
	Famosa Boulevard	Facing south
	Santa Barbara Street	Facing northwest toward the coast
	Point Loma Avenue	Facing northwest toward the coast
	Sunset Cliffs Boulevard	Coastal vistas facing west
	Sunset Cliffs Shoreline Park	Unobstructed ocean view
	Former NTC site	Southeastern view corridors from Womble Street to Sims Rd
Rancho Bernardo	Views not in current community plan	
Rancho Penasquitos	Communitywide	Public access to canyon rims and views should be provided at suitable locations in the form of paths, scenic overlooks and streets
	Communitywide	Encourage retention of wildlife habitat value in connected open space systems by providing visual access where possible by overlooks
Sabre Springs	Four viewpoints and passive areas along Chicarita Creek and Penasquitos Creek	
San Pasqual Valley	Views not in current community plan	
San Ysidro	Views not in current community plan	
Scripps Miramar Ranch	Miramar Reservoir	Public viewpoints overlooking the reservoir
	Pomerado Road	Overlooking Carroll Canyon
	SDG&E Easement (Area "E")	View toward open space
Serra Mesa	Views not in current community plan	
Skyline - Paradise Hills	Communitywide	Views of undeveloped hillsides, canyons, and mountains toward the east, should be protected
Sorrento Hills	Views not in current community plan	
Southeast	Communitywide	Care should be taken to maintain and enhance views to designated open space areas from public rights-of-way. These views should be considered in the review of discretionary permits
Tierrasanta	Communitywide	Public views toward open space including Mission Trails Regional Park and Admiral Baker Field
Tijuana River Valley	Views not in current community plan	
Torrey Highlands	Views not in current community plan	
Torrey Pines	Views not in current community plan	
University	Communitywide	Visual access to open space areas from public roadways
Uptown	Adams Avenue at Campus Avenue	Viewshed facing northwest
	10th Avenue and Johnson Avenue	Viewshed facing north/northeast
	Northern edge of 3rd Avenue	Viewshed overlooking Mission Valley
	Northern edge of Stephens Street at West Arbor Drive	Viewshed facing north toward Mission Valley
	Pringle Street at Neale Street	Viewshed facing southwest
	Laurel Street at 1Street	Viewshed facing west
Via de la Valle	San Andres Drive and Via Campestre	View facing north overlooking golf course
	West of San Andres Drive and East of Highland Drive	View facing southeast
	South of San Andres Drive and North of Via de la Valle	Views facing south

SOURCE: General Plan Final PEIR, 2007.

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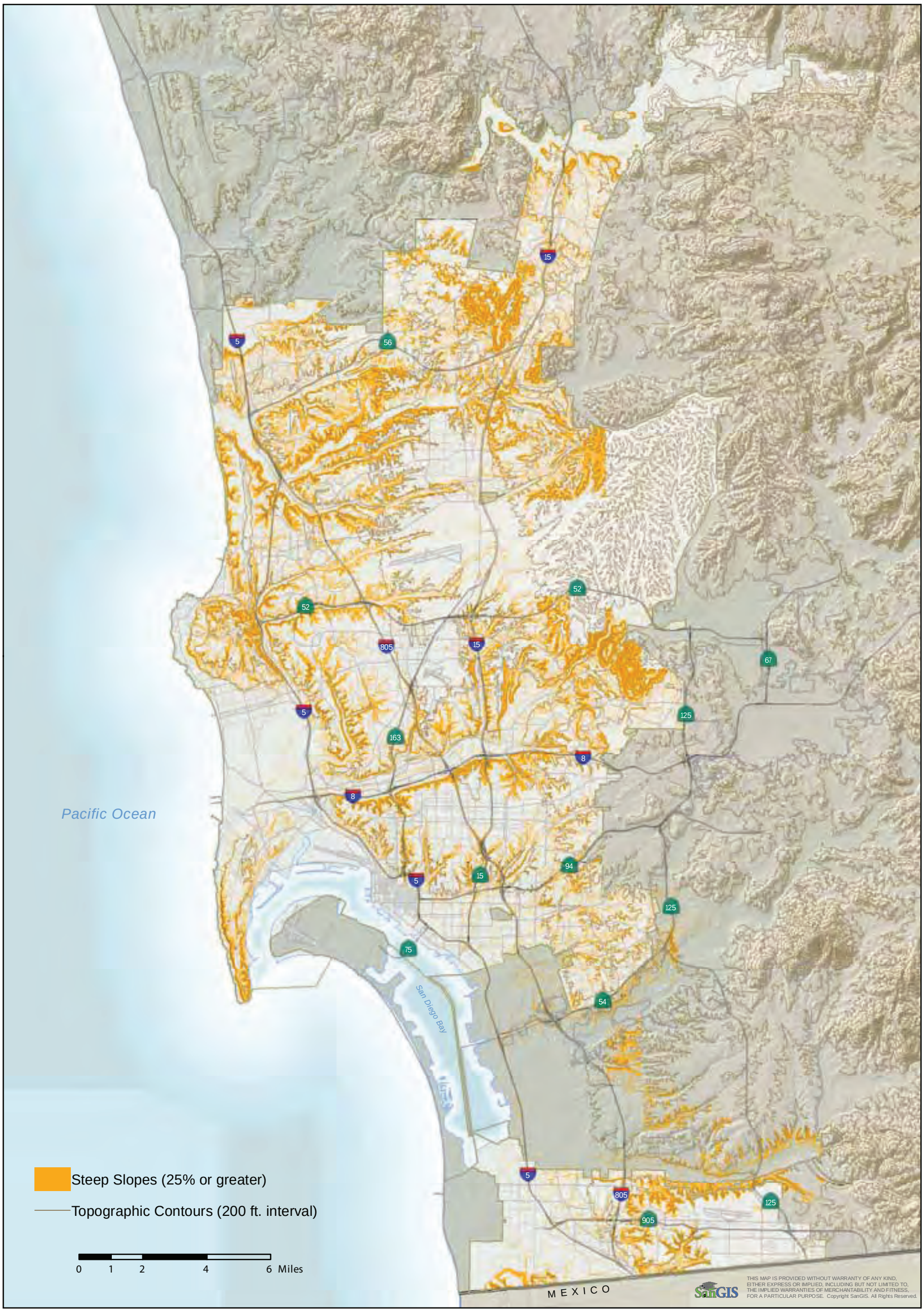

SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

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Figure 3.B-1
Hillsides

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B.3 Regulatory Setting

Federal

There are no federal regulations that pertain to visual resources.

State

California Scenic Highway Program

Many State highways are located in areas of outstanding natural beauty. California's Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The State laws governing the Scenic Highway Program are found in the Streets and Highways Code, (Section 260 et seq.) The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or are currently designated. These highways are identified in Section 263 of the Streets and Highways Code.

A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. When a city or county nominates an eligible scenic highway for official designation, it must identify and define the scenic corridor of the highway. Because a scenic corridor is the land generally adjacent to and visible from the highway, it is identified using a motorist's line of vision. A reasonable boundary is selected when the view extends to the distant horizon.

The corridor protection program does not preclude development, but seeks to encourage quality development that does not degrade the scenic value of the corridor. Jurisdictional boundaries of the nominating agency are also considered. The agency must also adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. These ordinances make up the scenic corridor protection program.

Senate Bill 226

The passage of SB 226 added section 21080.35 to the Public Resources Code, and created a new exemption under CEQA for the installation of solar energy systems, including associated equipment, on the roof of an existing building or at an existing parking lot. The SB 226 exemption applies to those systems that occupy less than 500 square feet of ground space, and includes all associated equipment that enable the generation and use of solar electricity or solar-heated water, except for substations.

Local

The General Plan provides policies which help reduce the potential for impacts to public views. The General Plan addresses the natural environment, preserving open space systems and targeting new growth into compact villages through urban form and design policies. More specifically, the Urban Design and Conservation Elements contain policies which address development adjacent

to natural features and reduce visual impacts to scenic areas or viewsheds. Relevant policies from the General Plan are listed below.

General Urban Design

UD-A.1 Preserve and protect natural landforms and features.

a. Protect the integrity of community plan designated open spaces (see also Conservation Element, Policy CE-B.1).

b. Continue to implement the Multiple Species Conservation Program (MSCP) to conserve San Diego's natural environment and create a linked open space system. Preserve and enhance remaining naturally occurring features such as wetlands, riparian zones, canyons, and ridge lines.

UD-A.2 Use open space and landscape to define and link communities.

a. Link villages, public attractions, canyons, open space and other destinations together by connecting them with trail systems, bikeways, landscaped boulevards, formalized parks, and/or natural open space, as appropriate.

b. Preserve and encourage preservation of physical connectivity and access to open space.

c. Recognize that sometimes open spaces prevent the continuation of transportation corridors and inhibit mobility between communities. Where conflicts exist between mobility and open space goals, site-specific solutions may be addressed in community plans.

UD-A.3 Design development adjacent to natural features in a sensitive manner to highlight and complement the natural environment in areas designated for development.

a. Integrate development on hillside parcels with the natural environment to preserve and enhance views, and protect areas of unique topography.

b. Minimize grading to maintain the natural topography, while contouring any landform alterations to blend into the natural terrain.

c. Utilize variable lot sizes, clustered housing, stepped-back facades, split-level units or other alternatives to slab foundations to minimize the amount of grading.

d. Consider terraced homes, stepped down with the slope for better integration with the topography to minimize grading in sensitive slope areas.

e. Utilize a clustered development pattern, single-story structures or single-story roof elements, or roofs sloped toward the open space system or natural features, to ensure that the visibility of new developments from natural features and open space areas are minimized.

f. Provide increased setbacks from canyon rims or open space areas to ensure that the visibility of new development is minimized.

g. Screen development adjacent to natural features as appropriate so that development does not appear visually intrusive, or interfere with the experience within the open space system. The provision of enhanced landscaping adjacent to natural features could be used to soften the appearance of or buffer development from the natural features.

h. Use building and landscape materials that blend with and do not create visual or other conflicts with the natural environment in instances where new buildings abut natural areas. This guideline must be balanced with a need to clear natural vegetation for fire protection to ensure public safety in some areas.

i. Ensure that the visibility of new development from natural features and open space areas is minimized to preserve the landforms and ridgelines that provide a natural backdrop to the open space systems. For example, development should not be visible from canyon trails at the point the trail is located nearest to proposed development. Lines-of-sight from trails or the open space system could be used to determine compliance with this policy.

j. Design and site buildings to permit visual and physical access to the natural features from the public right-of-way.

k. Encourage location of entrances and windows in development adjacent to open space to overlook the natural features.

l. Protect views from public roadways and parklands to natural canyons, resource areas, and scenic vistas.

m. Preserve views and view corridors along and/or into waterfront areas from the public right-of-way by decreasing the heights of buildings as they approach the shoreline, where possible.

n. Provide public pedestrian, bicycle, and equestrian access paths to scenic viewpoints, parklands, and where consistent with resource protection, in natural resource open space areas.

o. Provide special consideration to the sensitive environmental design of roadways that traverse natural open space systems to ensure an integrated aesthetic design that respects open space resources. This could include the use of alternative materials such as “quiet pavement” in noise sensitive locations, and bridge or roadway designs that respect the natural environment.

p. Design structures to be ignition and fire-resistant in fire prone areas or at-risk areas as appropriate. Incorporate fire-resistant exterior building materials and architectural design features to minimize the risk of structure damage or loss due to wildfires.

UD-A.4 Use sustainable building methods in accordance with the sustainable development policies in the Conservation Element.

UD-A.5i Maximize natural ventilation, sunlight, and views.

UD-A.8e Landscape materials and design should complement and build upon the existing character of the neighborhood.

UD-A.9 Incorporate existing and proposed transit stops or stations into project design (see also Mobility Element, Policies ME-B.3 and ME-B.9).

a. Provide attractively designed transit stops and stations that are adjacent to active uses, recognizable by the public, and reflect desired neighborhood character (see also Land Use Element, Policy LU-I.11).

b. Design safe, attractive, accessible, lighted, and convenient pedestrian connections from transit stops and stations to building entrances and street network (see also Land Use Element, Policy LU-I.10).

c. Provide generous rights-of-way for transit, transit stops or stations.

d. Locate buildings along transit corridors to allow convenient and direct access to transit stops/stations.

UD-A.10 Design or retrofit streets to improve walkability, bicycling, and transit integration; to strengthen connectivity; and to enhance community identity. Streets are an important aspect of Urban Design as referenced in the Mobility Element (see also Mobility Element, Sections A, B, C, and F).

UD-A.12 Reduce the amount and visual impact of surface parking lots (see also Mobility Element, Section G).

a. Encourage placement of parking along the rear and sides of street-oriented buildings.

b. Avoid blank walls facing onto parking lots by promoting treatments that use colors, materials, landscape, selective openings or other means of creating interest. For example, the building should protrude, recess, or change in color, height or texture to reduce blank facades.

c. Design clear and attractive pedestrian paseos/pathways and signs that link parking and destinations.

d. Locate pedestrian pathways in areas where vehicular access is limited.

e. Avoid large areas of uninterrupted parking especially adjacent to community public view sheds.

f. Build multiple small parking lots in lieu of one large lot.

g. Retrofit existing expansive parking lots with street trees, landscape, pedestrian paths, and new building placement.

h. Promote the use of pervious surface materials to reduce runoff and infiltrate storm water.

i. Use trees and other landscape to provide shade, screening, and filtering of storm water runoff in parking lots (see also Conservation Element, Policy CE-A.12).

j. Design surface parking lots to allow for potential redevelopment to more intensive uses. For example, through redevelopment, well-placed parking lot

aisles could become internal project streets that provide access to future parking structures and mixed land uses.

UD-B.5d Emphasize the provision of high quality pedestrian and bikeway connections to transit stops/stations, village centers, and local schools.

UD-B.6 Utilize alleys to provide improved and alternative pedestrian access to sites. This would include consideration of a promenade or paseo design for alleys with enhanced landscaping, and residential units or uses that face the alleys to activate them as alternative pedestrian streets. This could provide an alternative function for alleys that is non-vehicular, but still provides linkages to other sites and uses and adds to a neighborhood's connectivity.

UD-C.1 "In villages and transit corridors identified in community plans, provide a mix of uses that create vibrant, active places in villages.

a. Encourage both vertical (stacked) and horizontal (side-by-side) mixed-use development.

b. Achieve a mix of housing types, by pursuing innovative designs to meet the needs of a broad range of households.

c. Encourage placement of active uses, such as retailers, restaurants, cultural facilities and amenities, and other various services, on the ground floor of buildings in areas where the greatest levels of pedestrian activity are sought.

d. Encourage the provision of approximately ten percent of a project's net site area as public space, with adjustments for smaller (less than ten acres) or constrained sites. Public space may be provided in the form of plazas, greens, gardens, pocket parks, amphitheaters, community meeting rooms, public facilities and services, and social services (see also UD-C.5 and UD-E.1).

1. When public space is provided in the form of public parks in accordance with Recreation Element, Policy RE-A.9, and the public park space may be used to meet population-based park requirements.

2. Where multiple property owners are involved in a village development, develop incentives or other mechanisms to help provide well-located public spaces.

e. Utilize existing or create new Land Development Code zone packages or other regulations as needed for mixed-use development.

1. Provide standards that address the particular design issues related to mixed-use projects, such as parking, noise attenuation and security measures, and minimize negative impacts on the community.

2. Provide standards that address bulk, mass, articulation, height, and transition issues such as the interface with surrounding or adjacent development and uses, and minimize negative impacts on the community.

f. Encourage location of mixed-use projects in transition areas and areas where small-scale commercial uses can fit into a residential neighborhood context."

UD-C.4 Create pedestrian-friendly village centers (see also Mobility Element, Sections A and C)

a. Respect pedestrian-orientation by creating entries directly to the street and active uses at street level.

b. Design or redesign buildings to include pedestrian-friendly entrances, outdoor dining areas, plazas, transparent windows, public art, and a variety of other elements to encourage pedestrian activity and interest at the ground floor level.

c. Orient buildings in village centers to commercial local streets, or to internal project drives that are designed to function like a public street, in order to create a pedestrian oriented shopping experience, including provision of on-street parking.

d. Provide pathways that offer direct connections from the street to building entrances.

e. Break up the exterior facades of large retail establishment structures into distinct building masses distinguished by offsetting planes, rooflines and overhangs or other means.

f. Where feasible, use small buildings in key locations to create a human scale environment in large retail centers. Incorporate separate individual main entrances directly leading to the outside from individual stores.

UD-C.6 Design project circulation systems for walkability.

a. Extend existing street grid patterns into development within existing fine-grained neighborhoods.

b. Design a grid or modified-grid internal project street system, with sidewalks and curbs, as the organizing framework for development in village centers.

c. Diagonal or “on-street” parallel parking may be appropriate along driveways in order to contribute to a “main street” appearance.

d. Provide pedestrian shortcuts through the developments to connect destinations where the existing street system has long blocks or circuitous street patterns.

e. Use pedestrian amenities, such as curb extensions and textured paving, to delineate key pedestrian crossings.

f. Design new connections, and remove any barriers to pedestrian and bicycle circulation in order to enable people to walk or bike, rather than drive, to neighboring destinations (see also Mobility Element, Sections A and F).

g. Lay out streets to take advantage of and maximize vistas into public view sheds.

h. Share and manage commercial, residential, and public parking facilities where possible to manage parking for greater efficiency (see also Mobility Element, Section G).

i. Incorporate design features that facilitate transit service along existing or proposed routes, such as bus pullout areas, covered transit stops, and multi-modal pathways through projects to transit stops.

UD-C.7 Enhance the public streetscape for greater walkability and neighborhood aesthetics (see also UD-A.10 and Section F.).

a. Preserve and enhance existing main streets.

b. Establish build-to lines, or maximum permitted setbacks on designated streets.

c. Design or redesign buildings to include architecturally interesting elements, pedestrian friendly entrances, outdoor dining areas, transparent windows, or other means that emphasize human-scaled design features at the ground floor level.

d. Implement pedestrian facilities and amenities in the public right-of-way including wider sidewalks, street trees, pedestrian-scaled lighting and signs, landscape, and street furniture.

e. Relate the ground floor of buildings to the street in a manner that adds to the pedestrian experience while providing an appropriate level of privacy and security

f. Design or redesign the primary entrances of buildings to open onto the public street.

Open Space and Landform Preservation

CE-B.1 Protect and conserve the landforms, canyon lands, and open spaces that: define the City's urban form; provide public views/vistas; serve as core biological areas and wildlife linkages; are wetlands habitats; provide buffers within and between communities; or provide outdoor recreational opportunities.

a. Utilize Environmental Growth Funds and pursue additional funding for the acquisition and management of MHPA and other important community open space lands. Support the preservation of rural lands and open spaces throughout the region.

c. Protect urban canyons and other important community open spaces including those that have been designated in community plans for the many benefits they offer locally, and regionally as part of a collective citywide open space system (see also Recreation Element, Sections C and F; Urban Design Element, Section A).

d. Minimize or avoid impacts to canyons and other environmentally sensitive lands, by relocating sewer infrastructure out of these areas where possible, minimizing construction of new sewer access roads into these areas, and redirecting of sewage discharge away from canyons and other environmentally sensitive lands.

e. Encourage the removal of invasive plant species and the planting of native plants near open space preserves.

f. Pursue formal dedication of existing and future open space areas throughout the City, especially in core biological resource areas of the City's adopted MSCP Subarea Plan.

g. Require sensitive design, construction, relocation, and maintenance of trails to optimize public access and resource conservation.

Environmentally Sensitive Lands (ESLs) Regulations

Aside from policies in the General Plan which address topography and sensitive development, the City relies on ESL regulations to identify environmental resources at a site specific level. The City's ESL regulations help protect, preserve, and restore lands containing steep hillsides, sensitive biological resources, coastal beaches, sensitive coastal bluffs, or Special Flood Hazard Areas. The ESL regulations provide supplemental development regulations to the underlying zone to assure that development occurs in a manner that protects the natural and topographical character of these areas. The ESL regulations address permit requirements for development that would affect wetlands and State- and federally-listed species habitat, buffer requirements for wetlands within and outside of the Coastal Overlay Zone, development in the Multi-Habitat Planning Area (MHPA) which delineates 52,727 acres of core biological resource areas, and corridors targeted for conservation.

Proposition D

In 1972, voters approved Proposition D, which restricts the building height in areas generally west of I-5 to 30 feet. Prior to the adoption of Proposition D, multiple dwelling unit developments in San Diego were built to accommodate a range of densities at varying heights. Since the adoption of Proposition D, the bulk and scale of buildings has become more uniform as property owners seek to maximize development potential within the 30-foot height limit.

B.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds, a significant impact with regard to visual effects and neighborhood character could occur if implementation of the CAP results in the following:

- A substantial obstruction of any vista or scenic view from a public viewing area as identified in the community plan;
- The creation of a negative aesthetic site or project;
- Project bulk, scale, materials, or style would be incompatible with surrounding development;
- Substantial alteration to the existing or planned character of the area, such as could occur with the construction of a subdivision in a previously undeveloped area;

- The loss of any distinctive or landmark tree(s), or stand of mature trees as identified in the community plan;
- Substantial change in the existing landform; or
- Substantial light or glare which would adversely affect daytime or nighttime view in the area.

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, the proposed CAP actions that could have an impact on visual resources and neighborhood character include the following:

- **Action 2.1 Community Choice Aggregation Program or Similar Program.** Supporting measures and steps that support implementation of this action could result in installation of small scale and large scale renewable energy generation, transmission, and storage systems. These could affect scenic views, result in new sources of light or glare, or could have bulk and scale that would alter or be incompatible with existing neighborhood character.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** These actions would facilitate the implementation of the City of Villages strategy and the shift to greater emphasis on mass transit and other modes of transportation. These actions could therefore result in new construction and other physical changes that could alter or block scenic views, create new sources of light or glare, or result in changes to or incompatibilities with existing neighborhood character.
- **Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas; Action 3.3 Implement the City's Bicycle Master Plan; and Action 3.5 Implement a Roundabouts Master Plan**. These actions would make generally minor changes to improve or add pedestrian and bicycle facilities, primarily in and around the TPAs, and would result in the installation of up to 24 roundabouts to facilitate traffic flow. These changes could alter or block scenic views and vistas, and could be incompatible with existing neighborhood character.
- **Action 5.1 Urban Tree Planting Program.** Street and landscaping trees have the potential to alter or block scenic views and vistas, and to alter neighborhood character.

These potential impacts are examined in detail below. The potential for proposed CAP actions to change the appearance of historical structures is considered in Section 3.E, Historical Resources.

Issue 1: Would implementation of the CAP affect the visual quality of the planning area, particularly with respect to views from public viewing areas, vistas, or open spaces?

Several of the CAP strategies include actions that when implemented will result in physical changes to the environment. Some of these changes may have the potential for adverse effects on the visual quality of the area in which they are situated, and in particular, may result in alteration or obstruction of scenic views from public viewing areas, vistas, or open spaces.

Action 2.1 would involve implementation of a community choice aggregation program or other renewable energy program that would likely result in installation of both small scale and large

scale renewable energy facilities. Small scale facilities, such as rooftop photovoltaic panels, generally do not involve construction that substantially changes roof lines or adds massive or tall new features that would have the potential to substantially alter or obstruct views. Therefore, visual impacts of small scale renewable energy systems, implemented as an indirect consequence of adoption of the CAP and implementation of Action 2.1, would not be expected to result in a significant impact to scenic views. Furthermore, pursuant to Senate Bill (SB) 226, CEQA now includes a statutory exemption (Section 21080.35) that exempts solar projects installed on the roof of an existing building or parking lot. Therefore, projects of this kind are not required to undergo CEQA review.

Large scale renewable energy projects, such as solar and wind farms, could involve new, large or extensive facilities that could alter or block public views, within and outside the City. This could occur if, for example, a wind farm introduced a new, incompatible visual element to a scenic view from a public view point, vista, or open space. Depending on the affected vista and the degree of change, this could cause a significant impact. For facilities located outside of the City, the jurisdiction with land use authority would likely be the lead agency for environmental review pursuant to CEQA.

Proposed CAP Action 3.2: Implement the City's Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City's Bicycle Master Plan, and Action 3.5 Implement a Roundabouts Master Plan involve generally minor changes to existing streetscapes. In general these improvements are low-lying, and do not involve construction of massive or tall structures. While these improvements may alter the visual quality of a neighborhood, these alterations would not generally result in a degradation of visual quality. Neither would these improvements have the potential to block or alter scenic views. Implementation of proposed CAP Actions 3.2, 3.3, and 3.5 would therefore be less than significant.

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas are intended to facilitate implementation of major changes to the urban landscape already planned for in the General Plan, Sustainable Communities Strategy, and other planning documents. These changes would result in the development of more dense, built-up, and transit and alternative transportation-oriented development, particularly within the TPAs. More detailed, neighborhood-specific planning is occurring through updating of the Community Plans and may involve changes to land use designation and zoning. These changes may allow taller or more massive buildings, reduced set-backs, and altered streetscapes, all of which could introduce new elements to the urban landscape that could alter or block existing scenic views from public viewpoints, vistas, and open space, or that could adversely affect existing visual resources.

The General Plan and community plans contain numerous policies intended to protect scenic views and visual resources, including identification of scenic vantage points. The General Plan also provides design objectives to minimize visual impacts and screen new development from open space areas.

The Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR) notes that, while the General Plan policies are designed to minimize impacts to public views, there is no guarantee that all future implementation actions and development projects will adequately implement General Plan policies. As a result, in areas where public views of scenic resources exist, direct impacts could occur. The General Plan PEIR further notes that any development that is incompatible in shape, form, or intensity such that public views are impacted, will be analyzed and addressed in project-specific environmental reviews pursuant to CEQA, and that identification of appropriate project-level mitigation measures would be determined at that time. The General Plan PEIR states that General Plan policies and future compliance with established development standards would serve to reduce impacts to a degree, but cannot guarantee that all future project level impacts will be avoided or mitigated to a level less than significant. However, because the degree of impact and applicability, feasibility, and success of these measures could not be accurately predicted for each specific future project, the program level impacts related to blocked public views were considered significant and unavoidable. The CAP would facilitate implementation of the City of Villages strategy, which could result in potentially significant impacts as set forth in the General Plan PEIR. Because the potential for such impacts has already been identified in the General Plan PEIR, these impacts are not considered a consequence of CAP adoption and implementation.

CAP Action 5.1 Urban Tree Planting Program is part of CAP Strategy 5: Climate Resiliency. This strategy has the goal of increasing urban tree canopy coverage, specifically to achieve 15 percent urban tree canopy coverage by 2020 and 35 percent by 2035. Implementation of this action would result in extensive planting of many trees throughout the City. While trees themselves add aesthetic value, and selection of appropriate species would not be expected to conflict with or detract from existing visual quality, trees may, as they grow, have the potential to block or alter scenic views. By adhering to policies contained in the General Plan, community plans, and Urban Forest Management Plan (currently in draft form), the City would ensure that implementation of Action 5.1 would not adversely affect public views. An example of a policy for the plans would be limiting or disallowing the planting of tall trees in the scenic corridors identified in Table 3.B-1. Furthermore, trees that grow to the point that they do obstruct scenic views can be pruned, topped, or removed, which would mitigate the impact. In sum, while there is some potential for CAP Action 5.1 to result in adverse impacts to scenic views, good management of the urban tree planting program, including selection of planting locations and species, and good tree care practices, would ensure that this impact would be less than significant.

Significance of Impact

As described above, most of the proposed CAP actions do not have the potential to alter or block scenic views. Impacts from implementation of the City of Villages strategy have already been analyzed in the General Plan EIR. However, the development of large-scale renewable energy facilities within the City limits, which may result from implementation of CAP Action 2.1 could result in a significant impact to visual resources.

Mitigation Framework

Implementation of Mitigation Measure LU-1 (see Section 3.A, Land Use) would ensure that large-scale renewable energy projects are compatible and not in conflict with existing land use and zoning designations, and that any such facilities would not result in conflicts with adjacent land uses.

Significance after Mitigation

With implementation of Mitigation Measure LU-1, most potentially significant impacts to scenic views and visual quality from siting of most large-scale renewable energy facilities would be avoided. However, because the degree of impact and applicability, feasibility, and success of Mitigation Measure LU-1 cannot be accurately predicted for visual quality and scenic views for each specific project at this time, the program-level impact to visual effects and neighborhood character is considered significant and unavoidable.

Issue 2: Would implementation of the CAP introduce incompatible uses with surrounding development in terms of bulk, scale, materials, or style that would result in adverse visual impacts?

Issue 2 examines the potential for CAP actions to result in changes to the physical environment that would be fundamentally incompatible with the character of the surrounding community. In particular, Issue 2 explores whether CAP actions would result in construction of new developments or facilities, or alterations to existing structures, that use materials, styles, or designs, or that involve massing or materials that would be visually incompatible with existing neighborhood character. Issue 1 already examined the potential for CAP actions to affect the visual quality of the area, with particular reference to the potential to block or alter scenic views.

Action 2.1 would involve implementation of a community choice aggregation program or other renewable energy program that would likely result in installation of both small scale and large scale renewable energy facilities. Small scale facilities may introduce a new visual element to a neighborhood, including solar roof panels, but solar panels are already becoming common, and do not represent a major alteration in building design or character. Therefore, these small-scale facilities would not be expected to be substantially incompatible with the existing character of the surrounding area.

Large scale renewable energy projects, such as solar and wind farms, could involve new, large or extensive facilities with distinct visual characteristics. These facilities have an essentially industrial visual quality. Wind farms, in particular, involve tall, moving structures that are visually prominent. If located in or adjacent to a residential or mixed use neighborhood, large scale facilities may appear incompatible with the surrounding urban environment. Depending on the affected vista and the degree of change, this could cause a significant impact.

Proposed CAP Action 3.2: Implement the City’s Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City’s Bicycle Master Plan, and Action 3.5 Implement a Roundabouts Master Plan involve generally minor changes to existing streetscapes, such as changes in signage, street marking, addition of bicycle lanes and paths, and wider sidewalks. Roundabouts add a new

element to the streetscape, but they are not tall or massive, and can be designed and landscaped to create a compatible and pleasing visual element. In summary, while changes related to proposed CAP actions 3.2, 3.3, and 3.5 may introduce new or altered visual elements to an existing neighborhood, they are generally minor changes. If their design follows design guidelines contained in the General Plan and community plans, they would not be expected to result in a substantial incompatibility with surrounding areas, and their impact would therefore be less than significant.

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas would result in the development of more dense, built-up, and transit and alternative transportation-oriented development, particularly within the TPAs. Since there is little remaining vacant land in the City available for development, implementation of the City of Villages strategy would largely occur through infill and redevelopment occurring in selected built areas. These developments have the potential to substantially alter the existing urban environment, and create a new, different urban landscape that may be out of keeping with the scale of the existing landscape, and their design may be different from the surrounding neighborhood.

The General Plan PEIR notes that, as changes occur in established neighborhoods, the applicable policies in the General Plan related to neighborhood character will provide design guidelines to improve the transition between new and old structures. In addition, the General Plan influences the implementation of community plans as it establishes goals and policies for the pattern and scale of development and the character of the built environment. Individual community plans are intended to provide additional recommendations for how new development will occur. It is intended that the urban design policies of the General Plan be further supplemented with site-specific community plan recommendations. As community plans are updated, community and neighborhood character will be addressed more specifically.

While the policies, guidelines, and community plan update process are designed to minimize future impacts to community character, implementation of the City of Villages strategy, as facilitated by CAP Actions 3.1 and 3.6, may result in significant impacts associated with substantially altering the existing character of the City's neighborhoods. The General Plan PEIR concludes that there is no guarantee that all future implementation actions and development projects will adequately implement General Plan policies. The CAP does not include measures that would mitigate the potential for impacts of this kind. Therefore, the program-level impact related to community character identified in the General Plan PEIR would remain significant. Since, however, the potential for such impacts has already been identified in the General Plan PEIR, these impacts are not considered a consequence of CAP adoption and implementation.

CAP Action 5.1 Urban Tree Planting would result in extensive planting of many trees throughout the City. Trees add aesthetic value to urban landscapes, and selection of appropriate species would not be expected to conflict with or detract from existing visual quality, or to introduce incompatible visual elements into existing landscapes, and this impact would be less than significant.

Significance of Impact

As described above, most of the proposed CAP actions do not have the potential to result in substantial visual incompatibilities with existing landscapes. Impacts from implementation of the City of Villages strategy have already been analyzed in the General Plan EIR. However, the development of large-scale renewable energy facilities within the City limits, which may result from implementation of CAP Action 2.1, could result in such incompatibilities. This could result in a significant impact to visual quality and neighborhood character.

Mitigation Framework

Implementation of Mitigation Measure LU-1 (see Section 3.A, Land Use) would ensure that large-scale renewable energy projects are compatible and not in conflict with existing land use and zoning designations, and that any such facilities would not result in conflicts with adjacent land uses.

Significance after Mitigation

With implementation of Mitigation Measure LU-1, most potentially significant visual quality and neighborhood character impacts from siting of most large-scale renewable energy facilities would be avoided. However, because the degree of impact and applicability, feasibility, and success of Mitigation Measure LU-1 cannot be accurately predicted for visual compatibility with existing neighborhoods for each specific project at this time, the program-level impact to visual effects and neighborhood character is considered significant and unavoidable.

Issue 3: Would implementation of the CAP create substantial light or glare which would adversely affect daytime or nighttime views in the area?

New or remodeled construction associated with implementation of several of the proposed CAP Actions would have the potential to create new sources of nighttime light or daytime glare. These include renewable energy facilities associated with Action 2.1 Community Choice Aggregation Program, and the actions intended to facilitate implementation of the City of Villages strategy, i.e., Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.

Other CAP Actions considered for visual and neighborhood character impacts, including Action 3.2: Implement the City’s Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City’s Bicycle Master Plan, Action 3.5 Implement a Roundabouts Master Plan, and Action 5.1 Urban Tree Planting Program, would not create extensive new reflective surfaces or nighttime lighting, and would therefore not have an impact related to light or glare.

Action 2.1 would result in widespread installation of small scale, distributed energy generation facilities, such as rooftop solar. Solar panels are designed to absorb light, not reflect it, and therefore are not a source of glare. Rooftop solar installations are not lit, and so would not create a new source of nighttime artificial light. Larger renewable energy facilities may also be developed within the City with implementation of Action 2.1. Like small-scale rooftop systems, solar panels in large solar farms are not highly reflective. Other types of facilities, such as wind

farms, transmission facilities, and storage facilities, generally use materials and coatings that are not highly reflective. Therefore, these larger facilities would not be expected to create a substantial new source of glare. Large renewable energy facilities may be lit at night, primarily for security and safety reasons. Lighting is typically minimal. Adherence to City design standards, such as use of down-cast landscape lighting, would minimize the potential for substantial new sources of artificial nighttime lighting. Therefore, Action 2.1 is not expected to result in a significant impact related to light and glare.

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas would facilitate extensive new in-fill development and redevelopment within the TPAs, as discussed in the General Plan EIR. Adherence to General Plan and community plan design standards is anticipated to minimize impacts related to glare from reflective surfaces and new sources of nighttime lighting. Environmental review of individual projects requiring discretionary approval would provide additional opportunity to identify and mitigate site-specific and development-specific impacts of this kind. Mitigation measures, such as lighting design and use of non-reflective materials and architectural coatings, are generally effective at reducing such impacts to less than significant. Therefore, there is little potential for CAP Actions 3.1 and 3.6 to result in a substantial new source of light or glare, and the impact is less than significant.

Significance of Impact

As discussed above, implementation of the CAP would not be expected to result in a significant new source of light or glare. The impact is therefore less than significant.

Mitigation Framework

No mitigation is required.

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C. Air Quality

C.1 Introduction

This section analyzes potential air quality impacts that could result from implementation of the City of San Diego (City) Climate Action Plan (CAP).

C.2 Environmental Setting

Physical Setting

The San Diego Air Basin (SDAB) lies in the southwest corner of California and comprises the entire San Diego region. However, population and emissions are concentrated mainly in the western portion of the county. The air basin covers 4,200 square miles, includes about eight percent of the state's population, and produces about five percent of the state's criteria pollutant emissions (CARB, 2013a).The City of San Diego covers approximately 330 square miles, or eight percent, of the SDAB.

Air quality in the SDAB is impacted not only by local emissions, but also by pollutants transported from other areas, in particular, ozone and ozone precursor emissions transported from the South Coast Air Basin and the Republic of Mexico. Although the impact of transport is particularly important on days with high ozone concentrations, transported pollutants and emissions cannot be blamed entirely for the ozone problem in the San Diego area. Studies show that emissions from the SDAB are sufficient, on their own, to cause ozone violations (SDAPCD, 2007).

Topography and Climate

The topography in the San Diego region varies greatly, from beaches on the west to mountains and desert on the east, defined by mesa tops intersected by canyon areas. The topography in the San Diego region, along with local meteorology, influences the dispersal and movement of pollutants in the basin. The mountains to the east prohibit dispersal of pollutants beyond them and help trap the pollutants in inversion layers.

The weather of the San Diego region is influenced by the Pacific Ocean and its semi-permanent high-pressure systems that result in dry, warm summers and mild, occasionally wet winters. The average temperature ranges from the mid-40s to the high 90s. Most of the county's precipitation falls from November to April, with infrequent (approximately ten percent) precipitation during the summer. The average seasonal precipitation along the coast is approximately ten inches; the amount increases with elevation as moist air is lifted over the mountains.

The interaction of ocean, land, and the Pacific High Pressure Zone maintains clear skies for much of the year and drives the prevailing winds. Local terrain is often the dominant factor inland, and winds in inland mountainous areas tend to blow through the valleys during the day and down the hills and valleys at night.

In conjunction with the two characteristic onshore/offshore wind patterns, there are two types of temperature inversions (reversals of the normal decrease of temperature with height) which occur within the region that affect atmospheric dispersive capability and that act to degrade local air quality. In the summer, an inversion at about 1,100 to 2,500 feet is formed over the entire coastal plain when the warm air mass over land is undercut by a shallow layer of cool marine air flowing offshore. The prevailing sunny days in this region further exacerbate the smog problem by inducing additional adverse photochemical reactions. During the winter, a nightly shallow inversion layer (usually at about 800 feet) forms between the cooled air at the ground and the warmer air above, which can trap vehicular pollutants. The days of highest CO concentrations occur during the winter months.

The predominant onshore/offshore wind pattern is sometimes interrupted by so-called Santa Ana conditions, when high pressure over the Nevada-Utah area overcomes the prevailing westerly winds, sending strong, steady, hot and dry winds from the east over the mountains and out to sea. Strong Santa Ana winds tend to blow pollutants out over the ocean, producing clear days. However, at the onset or breakdown of these conditions or if the Santa Ana is weak, prevailing northwesterly winds reassert themselves and send a cloud of contamination from the Los Angeles Basin ashore in the SDAB.

Existing Air Quality

Regional Air Quality

As in other parts of California, overall air quality in the SDAB has improved, despite high growth rates, in part due to the benefits of cleaner technologies. In 2002, motor vehicles and other mobile sources were determined to emit 76 percent of the harmful pollutants that degrade the air quality of the San Diego region, and industrial sources emitted 14 percent (SDAQMD, 2002). As of 2013 San Diego County's air quality is the best it has been since the mid 1950's when air pollutant measuring began. Even so, pollutants from mobile sources still make up approximately 75 percent of the total pollutant emissions within the region (SDAQMD, 2013a).

Significant progress has been realized in the region's air quality since the early 1970s when SANDAG and the San Diego Air Pollution Control District (SDAPCD) began working together to reduce regional emissions. SANDAG is responsible for developing a "Transportation Control Measures (TCM) Plan" to help achieve air quality objectives for the region, which is developed with input from the City of San Diego. The SDAPCD adopts the TCM Plan as part of the RAQS, which is updated on a triennial basis and outlines measures for achieving state and national air quality standards. The SDAPCD is also responsible for stationary source tactics to reduce air pollution resulting from industry.

Criteria Air Pollutants

The Federal Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (U.S. EPA) to identify National Ambient Air Quality Standards (NAAQS), or (national standards) to protect public health and welfare. National standards have been established for ozone, carbon monoxide,

nitrogen dioxide, sulfur dioxide, respirable particulate matter (PM_{10} and $PM_{2.5}$) [1], and lead. These pollutants are called "criteria" air pollutants because standards have been established for each of them to meet specific public health and welfare criteria set forth in the CAA. California has adopted more stringent ambient air quality standards for the criteria air pollutants (referred to as State Ambient Air Quality Standards, or state standards) and has adopted air quality standards for some pollutants for which there is no corresponding national standard. The national and state standards for criteria pollutants are provided above in the Regulatory Setting section.

Emissions of NOx and ROG in the SDAB have been following statewide trends for each pollutant since 2000. These trends are largely due to motor vehicle controls and reductions in evaporative emissions. Mobile sources (both on-road and other) are by far the largest contributors to NOx, and ROG in the SDAB. The majority of the PM_{10} emissions are from area-wide sources (CARB, 2013a).

CARB and the SDAPCD collect ambient air quality data locally through a network of air monitoring stations. These data are summarized annually and are published in CARB's California Air Quality Data Summaries. Active monitoring stations in San Diego County are located at 11 stations, shown on **Figure 3.C-1**. Air quality monitoring data for the five stations within the City of San Diego is shown in **Table 3.C-1**, which identifies the most recent available data for federal and state ambient air quality standards for the relevant air pollutants, along with the ambient pollutant concentrations of the three air pollutants that were measured at these stations and for which the SDAB remains "nonattainment" - ozone, PM_{10}, and $PM_{2.5}$.

While the data gathered at these monitoring stations may not necessarily reflect the unique air quality environment of all areas of the city and county, nor the proximity of site-specific stationary and street sources, they do present the nearest available benchmark and provide the reader with a reference point as to the pollutants of greatest concern in the region and the degree to which the area is out of attainment with specific air quality standards. In summary, the SDAB is non-attainment for the ozone (state and federal), PM_{10} (state), and $PM_{2.5}$ (state and federal) standards.

Ozone

Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. Besides causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema. Ozone, the main component of photochemical smog, is primarily a summer and fall pollution problem. Ozone is not emitted directly into the air but is formed through a complex series of chemical reactions involving other compounds that are directly emitted. These directly emitted pollutants (also known as ozone precursors) include ROG and NOx. The time period required for ozone formation allows the reacting compounds to spread over a large area, producing a regional pollution problem. Ozone problems are the cumulative result of regional development patterns rather than the result of a few significant emission sources. Once

[1] PM_{10} and $PM_{2.5}$ consist of particulate matter that is ten microns or less in diameter and 2.5 microns or less in diameter, respectively (a micron is one-millionth of a meter).

formed, ozone remains in the atmosphere for one or two days. Ozone is then eliminated through a chemical reaction with plants (reacts with chemicals on the leaves of plants); rainout (attaches to water droplets as they fall to earth); and, washout (absorbed by water molecules in clouds and later falls to earth with rain).

On-road motor vehicle emissions account for approximately 45 percent of smog (ROG + NO_X) in the San Diego region as of 2010 (CARB, 2013a). The NO_X and ROG emissions have been decreasing overall since 2000, mostly due to decreased emissions from motor vehicles, brought about by stricter motor vehicle emission standards. Over the last 35 years, stationary and area-wide source emissions of ROG have remained mostly unchanged due to stricter standards offsetting emissions from industry and population growth (CARB, 2013a).

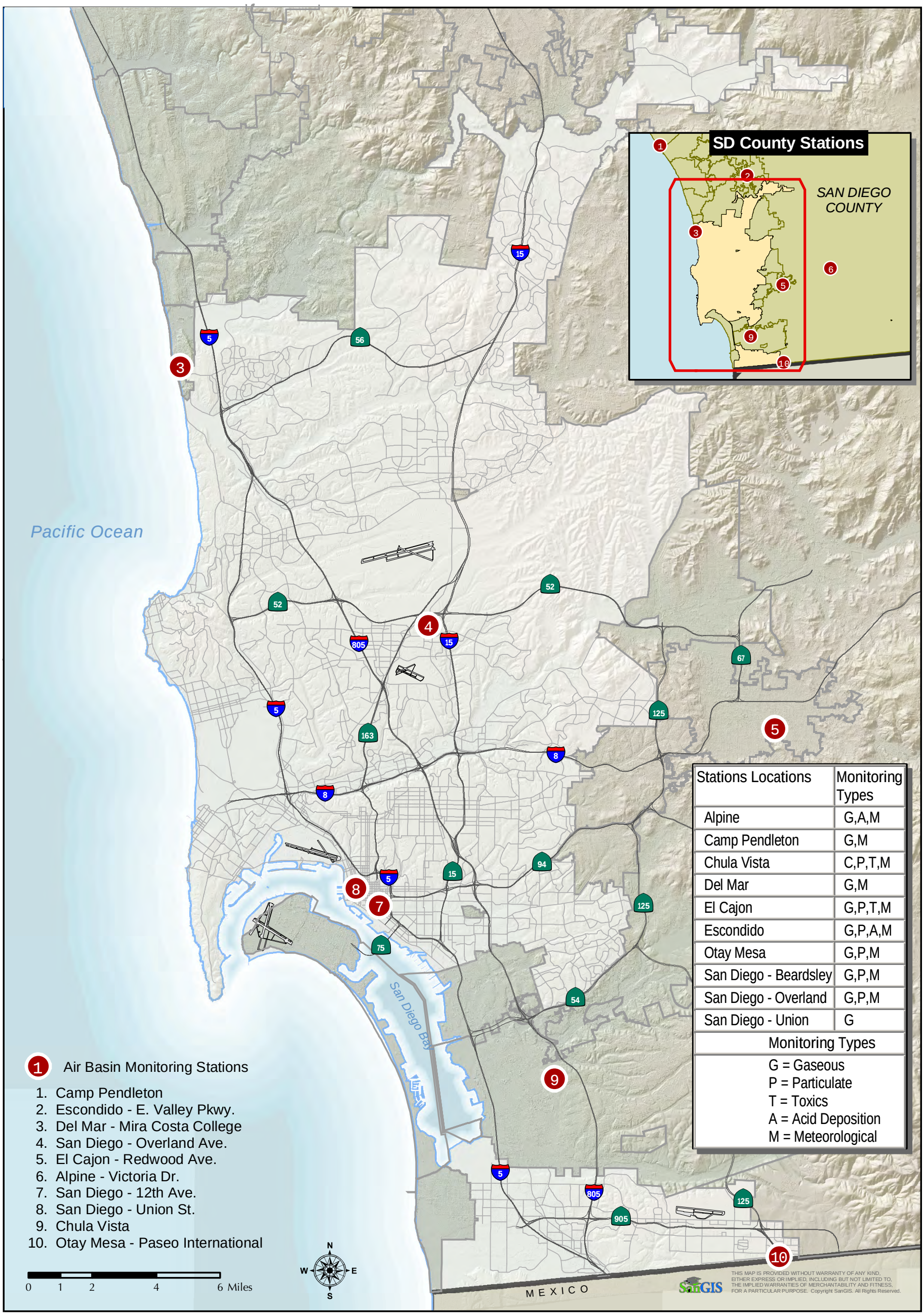
The federal one-hour ozone standard is attained when each monitoring site in the region has no more than three days in a three-year period within a maximum hourly average concentration exceeding the standard. The standard has now been attained and the SDAB has been redesignated as an attainment area by United States Environmental Protection Agency (U.S. EPA). San Diego still has not met the more restrictive state one-hour ozone standard, or the federal eight-hour ozone standard. In 2005, the U.S. EPA replaced the one-hour federal ozone standard with a more protective eight-hour standard to address the adverse health effects of prolonged exposure.

Table 3.C-1 shows SDAB exceedances for monitoring stations within the City of San Diego from 2009 to 2013. The Del Mar-Mira Costa College station recorded exceedances of the eight-hour state standard on three days in 2009 and at the San Diego-Overland Avenue station in 2009, 2010, and 2011. All other stations recorded exceedances of two times or less, with several years reporting no exceedance of either station or federal one or eight hour standards.

Carbon Monoxide

Ambient carbon monoxide concentrations normally are considered a local effect and typically correspond closely to the spatial and temporal distributions of vehicular traffic. Wind speed and atmospheric mixing also influence carbon monoxide concentrations. Under inversion conditions, carbon monoxide concentrations may be distributed more uniformly over an area that may extend some distance from vehicular sources. When inhaled at high concentrations, carbon monoxide combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia, as well as for fetuses.

Improvements from the transportation sector, primarily resulting from advances in technology such as emissions control systems, have resulted in major reductions in CO emissions in the SDAB, following the statewide trend, of declining from 3,338 tons per day in 1975 to 953 tons per day in 2005 and an estimated 558 tons per day in 2020 (CARB, 2009a). The SDAB was reclassified as an attainment area for CO in 2004 and currently maintains its attainment status (SDAPCD, 2013a). The U.S. EPA approved the CO Maintenance Plan in 1998. As of 2011, the national CO standard had been attained statewide.



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

San Diego CAP . 140651

Figure 3.C-1
Air Quality Monitoring Stations

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TABLE 3.C-1
SAN DIEGO AIR BASIN - SUMMARY OF AIR QUALITY MONITORING DATA (2009–2013)

Station	Applicable Standard	Number of Days Standards Were Exceeded and Maximum Concentrations Measured[a]				
		2009	2010	2011	2012	2013
Del Mar-Mira Costa College						
Ozone						
- Days 1-hour State Std. Exceeded	>0.09 ppm[b]	1	0	0	0	0
- Max. 1-hour Conc. (ppm)		**0.097**	0.085	0.091	0.088	0.076
- Days 8-hour National Std. Exceeded	>0.075 ppm[c]	1	0	0	2	0
- Days 8-hour State Std. Exceeded	>0.07 ppm[b]	3	2	1	2	0
- Max. 8-hour Conc. (ppm)		**0.084**	**0.072**	**0.075**	**0.079**	0.070
Otay Mesa-Paseo International						
Ozone						
- Days 1-hour State Std. Exceeded	>0.09 ppm[b]	1	0	1	0	0
- Max. 1-hour Conc. (ppm)		**0.098**	0.076	**0.095**	0.081	0.073
- Days 8-hour National Std. Exceeded	>0.075 ppm[c]	0	0	1	0	0
- Days 8-hour State Std. Exceeded	>0.07 ppm[b]	0	0	1	0	0
- Max. 8-hour Conc. (ppm)		0.068	0.068	**0.076**	0.062	0.063
PM_{10}						
- Estimated Days Over 24-hour National Std.[d]	>150 µg/m^3 [c]	0	0	0	-	-
- Estimated Days Over 24-hour State Std.[d]	>50 µg/m^3 [b]	146.4	136.0	138.5	-	-
- Max. 24-hour Conc. National/State (µg/m^3)		126.0/**123.0**	108.0/**108.0**	125.0/**126.0**	126.0/**126.0**	-
- State Annual Average (µg/m^3)	>20 µg/m^3 [b]	**53.0**	**47.0**	**46.2**	**-**	**-**
Carbon Monoxide						
- Max. 1-hour Conc. (ppm) National/State	>35 ppm/ >20 ppm	4.6	3.1	-	-	-
- Max. 8-hour Conc. (ppm) National and State	>9 ppm	3.1	2.2	-	-	-
Nitrogen Dioxide						
- Max. 1-hour Conc. (ppm) National/State	>10 ppm/ >0.18 ppm	0.091	0.091	0.10	0.077	0.091
- Annual Average (ppm) National/State	>0.053ppm/ >0.03ppm	0.020	0.020	0.020	0.020	0.019
Sulfur Dioxide						
- Max. 1-hour Conc. (ppm) National/State	>0.25 ppm/ >0.75 ppm	0.029	0.027	0.018	-	-
- Max. 24-hour Conc. (ppm) National/State	>0.14 ppm/ >0.04 ppm	0.008	0.007	0.006	**-**	**-**
- Annual Average (ppm)	>0.030 ppm	0.003	0.001	0.002	-	-
San Diego-1110 Beardsley Street						
Ozone						
- Days 1-hour State Std. Exceeded	>0.09 ppm[b]	0	0	0	0	0
- Max. 1-hour Conc. (ppm)		0.085	0.078	0.082	0.071	0.063
- Days 8-hour National Std. Exceeded	>0.075 ppm[c]	0	0	0	0	0
- Days 8-hour State Std. Exceeded	>0.07 ppm[b]	0	0	0	0	0
- Max. 8-hour Conc. (ppm)		0.063	0.066	0.061	0.065	0.061

TABLE 3.C-1 (Continued)
SAN DIEGO AIR BASIN - SUMMARY OF AIR QUALITY MONITORING DATA (2009–2013)

Station	Applicable Standard	Number of Days Standards Were Exceeded and Maximum Concentrations Measured[a]				
		2009	2010	2011	2012	2013
San Diego-1110 Beardsley Street (cont.)						
PM_{10}						
- Estimated Days Over 24-hour National Std.[d]	>150 µg/m^3 [c]	0	0	0	0	0
- Estimated Days Over 24-hour State Std.[d]	>50 µg/m^3 [b]	18.2	0	0	0	6
- Max. 24-hour Conc. National/State (µg/m^3)		59.0/**60.0**	40.0/40.0	48.0/49.0	45.0/47.0	90.0/**92.0**
- State Annual Average (µg/m^3)	>20 µg/m^3 [b]	**29.4**	**23.4**	**24.0**	**22.2**	**25.4**
$PM_{2.5}$						
- Estimated Days Over 24-hour National Std.[d]	>35 µg/m^3 [c]	3.4	0	0	1.0	1.1
- Max. 24-hour Conc. (µg/m^3)		**52.1**	29.7	34.7	**39.8**	**37.4**
- Annual Average (µg/m^3)	>12 µg/m^3 [b]	11.8	10.4	10.9	11.1	10.4
Carbon Monoxide						
- Max. 1-hour Conc. (ppm) National/State	>35 ppm/ >20 ppm	4.0	2.8	2.8	2.6	3.0
- Max. 8-hour Conc. (ppm) National and State	>9 ppm	2.8	2.2	2.4	1.9	2.1
Nitrogen Dioxide						
- Max. 1-hour Conc. (ppm) National/State	>10 ppm/ >0.18 ppm	0.078	0.077	0.067	0.065	0.072
- Annual Average (ppm) National/State	>0.053ppm/ >0.03ppm	0.017	0.014	0.014	0.013	0.014
Sulfur Dioxide						
- Max. 1-hour Conc. (ppm) National/State	>0.25 ppm/ >0.75 ppm	0.021	0.008	0.013	-	-
- Max. 24-hour Conc. (ppm) National/State	>0.14 ppm/ >0.04 ppm	0.005	0.002	0.002	-	-
- Annual Average (ppm)	>0.030 ppm	0.001	0.000	0.001		
San Diego-Kearny Villa Road						
Ozone						
- Days 1-hour State Std. Exceeded	>0.09 ppm[b]	-	0	0	1	0
- Max. 1-hour Conc. (ppm)		-	0.073	0.093	**0.099**	0.081
- Days 8-hour National Std. Exceeded	>0.075 ppm[c]	-	0	1	1	0
- Days 8-hour State Std. Exceeded	>0.07 ppm[b]	-	0	2	3	1
- Max. 8-hour Conc. (ppm)		-	0.061	**0.084**	**0.077**	**0.071**
PM_{10}						
- Estimated Days Over 24-hour National Std.[d]	>150 µg/m^3 [c]	-	-	-	-	0
- Estimated Days Over 24-hour State Std.[d]	>50 µg/m^3 [b]	-	-	-	-	0
- Max. 24-hour Conc. National/State (µg/m^3)		-	-	-	35.0/35.0	39.0/38.0
- State Annual Average (µg/m^3)	>20 µg/m^3 [b]	-	-	-	-	20.0
$PM_{2.5}$						
- Estimated Days Over 24-hour National Std.[d]	>35 µg/m^3 [c]	-	-	-	-	0
- Max. 24-hour Conc. (µg/m^3)		-	-	-	20.1	22.0
- Annual Average (µg/m^3)	>12 µg/m^3 [b]	-	-	-	22.0	22.0

TABLE 3.C-1 (Continued)
SAN DIEGO AIR BASIN - SUMMARY OF AIR QUALITY MONITORING DATA (2009–2013)

Station	Applicable Standard	Number of Days Standards Were Exceeded and Maximum Concentrations Measured[a]				
		2009	2010	2011	2012	2013
San Diego-Kearny Villa Road (cont.)						
Nitrogen Dioxide						
- Max. 1-hour Conc. (ppm) National/State	>10 ppm/ >0.18 ppm	0.060	0.073	0.073	0.057	0.067
- Annual Average (ppm) National/State	>0.053ppm/ >0.03ppm	0.013	0.013	0.012	0.011	0.010
San Diego-Overland Avenue						
Ozone						
- Days 1-hour State Std. Exceeded	>0.09 ppm[b]	2	2	1	0	-
- Max. 1-hour Conc. (ppm)		**0.105**	**0.100**	**0.097**	0.050	-
- Days 8-hour National Std. Exceeded	>0.075 ppm[c]	1	0	1	0	-
- Days 8-hour State Std. Exceeded	>0.07 ppm[b]	3	3	3	0	-
- Max. 8-hour Conc. (ppm)		**0.82**	**0.074**	**0.087**	0.047	**-**
PM_{10}						
- Estimated Days Over 24-hour National Std.[d]	>150 µg/m^3 [c]	0	0	0	-	-
- Estimated Days Over 24-hour State Std.[d]	>50 µg/m^3 [b]	0	0	0	-	-
- Max. 24-hour Conc. National/State (µg/m^3)		50.0/50.0	33.0/32.0	47.0/47.0	22.0/22.0	-
- State Annual Average (µg/m^3)	>20 µg/m^3 [b]	**24.9**	18.7	20.3	**-**	**-**
$PM_{2.5}$						
- Estimated Days Over 24-hour National Std.[d]	>35 µg/m^3 [c]	0	0	0	0	-
- Max. 24-hour Conc. (µg/m^3)		25.1	18.7	29.9	20.0	**-**
- Annual Average (µg/m^3)	>12 µg/m^3 [b]	10.5	8.7	8.9	-	**-**

NOTES:

Bold values are in excess of applicable standard. "NA" indicates that data is not available.
conc. = concentration; ppm = parts per million; ppb=parts per billion;
µg/m3 = micrograms per cubic meter

[a] Number of days exceeded is for all days in a given year, except for particulate matter. PM10 and PM2.5 are monitored every six days.
[b] State standard, not to be exceeded.
[c] Federal standard, not to be exceeded.
[d] Particulate matter sampling schedule of one out of every six days, for a total of approximately 60 samples per year. Estimated days exceeded mathematically estimates how many days concentrations would have been greater than the level of the standard had each day been monitored.

SOURCE: CARB, 2013b. SDAPCD, 2013b.

Suspended Particulate Matter (PM10 and PM2.5)

PM_{10} and $PM_{2.5}$ represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. Some sources of particulate matter, such as wood burning in fireplaces, demolition, and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates also can damage materials and reduce visibility. Large dust particles (diameter greater than ten microns) settle out rapidly and are easily filtered by human breathing passages. This large dust is of more concern as a soiling nuisance rather than a health hazard. The remaining fraction, PM_{10} and $PM_{2.5}$, are a health concern particularly at levels above the federal and state ambient air quality standards. $PM_{2.5}$ (including diesel exhaust particles) is thought to have greater effects on health, because these particles are so small and thus are able to penetrate to the deepest parts of the lungs. Scientific studies have suggested links between fine particulate matter and numerous health problems including asthma, bronchitis, acute and chronic respiratory symptoms such as shortness of breath and painful breathing.

Recent studies have shown an association between morbidity and mortality and daily concentrations of particulate matter in the air. Children are more susceptible to the health risks of PM_{10} and $PM_{2.5}$ because their immune and respiratory systems are still developing.

The concentration of PM_{10} recorded at stations within the City of San Diego did not exceed national 24-hour standards at any of the stations. The 1110 Beardsley Street station exceeded the 24-hour state standard on 18.2 days in 2009 and six days in 2013. The Otay Mesa-Paseo International station recorded the highest number of days exceeding the state 24-hour standard at 146.4 days in 2009, 136 days in 2010, and 138.5 days in 2011 (CARB, 2013b).

Nitrogen Dioxide (NO_2)

NO_2 is a reddish brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Aside from its contribution to ozone formation, nitrogen dioxide can increase the risk of acute and chronic respiratory disease and reduce visibility. NO_2 may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels. NO_2 emissions in the SDAB follow the statewide trend of declining from 1985 to 2020. Although the maximum one-hour concentrations occasionally exceeded the ambient air quality standards in the 1980s, ambient concentrations are now well below the levels of both the state and national standards and the SDAB is considered in attainment (SDAPCD, 2013a).

Sulfur dioxide (SO_2)

SO_2 is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO_2 is also a precursor to the formation of atmospheric sulfate, particulate matter and contributes to potential atmospheric sulfuric acid formation that can precipitate downwind as acid rain. The maximum SO_2 concentrations recorded in the county are well below federal and state standards.

Accordingly, the county is in attainment status with both federal and state SO_2 standards. The SDAB has been in attainment for SO_2 for several years (SDAPCD, 2013a). The low level of SO_2 in the basin could be attributed to use of low-sulfur fuels in the region's electrical generators, a primary source of this pollutant in other areas of the country (SDAPCD, 2007).

Lead

Ambient lead concentrations meet both the federal and state standards in the county. Lead has a range of adverse neurotoxin health effects, and was formerly released into the atmosphere primarily via leaded gasoline products. The phase-out of leaded gasoline in California resulted in dramatically reduced levels of atmospheric lead. The SDAB is presently in attainment for lead, and the region no longer monitors for it (SDAPCD, 2013a). As the project would not produce lead, lead is not discussed further in this analysis.

Non-Criteria Air Pollutants

Toxic Air Contaminants (TACs)

Non-criteria air pollutants or TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects. TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, diesel engines, dry cleaners, industrial operations, and painting operations. TACs are regulated differently than criteria air pollutants at both federal and state levels. At the federal level, these airborne substances are referred to as Hazardous Air Pollutants (HAPs). The state list of TACs identifies 243 substances and the federal list of HAPs identifies 189 substances.

CARB identified diesel particulate matter (DPM) as a toxic air contaminant in 1998, primarily based on evidence demonstrating cancer effects in humans. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Mobile sources such as trucks and buses are among the primary sources of diesel emissions, and concentrations of DPM are higher near heavily traveled highways and rail lines with diesel locomotive operations. The cancer risk from diesel particulate matter as determined by the CARB declined from 900 persons in one million in 1990 to 540 persons in one million in 2000 (CARB, 2009a). This calculated cancer risk value from ambient air exposure can be compared against the lifetime probability of being diagnosed with cancer in the United States, from all causes, which is approximately 40 percent, or greater than 400,000 in one million, according to the National Cancer Institute (National Cancer Institute, 2014).

Odorous Emissions

Odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting and headache). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and

is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor and recognition may only occur with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors. Generally, increasing the distance between the receptor and the odor source will mitigate odor impacts. However, because offensive odors rarely cause any physical harm and no requirements for their control are included in state or national air quality regulations, the SDAPCD has no rules or standards related to odor emissions, other than its nuisance rule (Rule 51).

Sensitive Receptors

Some individuals are considered to be more sensitive than others to air pollution. Reasons for greater sensitivity can include existing health problems, duration of exposure to air pollutants, or certain peoples' increased susceptibility to pollution-related health problems due to factors such as age.

Land uses such as day care centers, primary and secondary schools, hospitals, and convalescent homes are considered to be sensitive receptors to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality related health problems than the general public. Residential uses are considered sensitive because people in residential areas are often at home for extended periods of time; thus, they can be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on the human respiratory function.

C.3 Regulatory Setting

Regulation of air pollution is achieved through both national and state ambient air quality standards and through emissions limits on individual sources of air pollutants. Local Air Quality Management Districts (AQMDs) and Air Pollution Control Districts (APCDs) are responsible for demonstrating attainment with state air quality standards through the adoption and enforcement of Attainment Plans.

Federal

Criteria Air Pollutants

The Federal Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (U.S. EPA) to identify National Ambient Air Quality Standards (NAAQS), or (national standards) to protect public health and welfare. National standards have been established for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, respirable particulate matter (PM_{10} and $PM_{2.5}$), and lead. These pollutants are called "criteria" air pollutants because standards have been established for each of them to meet specific public health and welfare criteria set forth in the CAA. California has adopted more stringent ambient air quality standards for the criteria air pollutants (referred to as State Ambient Air Quality Standards, or state standards) and has adopted air quality standards for some pollutants for which there is no corresponding national standard. **Table 3.C-2** presents current

TABLE 3.C-2
STATE AND NATIONAL CRITERIA AIR POLLUTANT STANDARDS, EFFECTS, AND SOURCES

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 hour	0.09 ppm	---	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when reactive organic gases (ROG) and nitrogen oxides (NO_X) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
	8 hours	0.07 ppm	0.075 ppm		
Carbon Monoxide	1 hour	20 ppm	35 ppm	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm		
Nitrogen Dioxide	1 hour	0.18 ppm	100 ppb	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	Annual Avg.	0.030 ppm	0.053 ppm		
Sulfur Dioxide	1 hour	0.25 ppm	75 ppb	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hours	---	0.5 ppm		
	24 hours	0.04 ppm	0.14 ppm		
	Annual Avg.	---	0.030 ppm		
Respirable Particulate Matter (PM10)	24 hours	50 ug/m^3	150 ug/m^3	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Avg.	20 ug/m^3	---		
Fine Particulate Matter (PM2.5)	24 hours	---	35 ug/m^3	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO_X, sulfur oxides, and organics.
	Annual Avg.	12 ug/m^3	12.0 ug/m^3		
Lead	Monthly Ave.	1.5 ug/m^3	---	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction.	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	---	1.5 ug/m^3		
Hydrogen Sulfide	1 hour	0.03 ppm	No National Standard	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations)	Geothermal Power Plants, Petroleum Production and refining
Sulfates	24 hour	25 ug/m^3	No National Standard	Breathing difficulties, aggravates asthma, reduced visibility	Produced by the reaction in the air of SO2.
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	No National Standard	Reduces visibility, reduced airport safety, lower real estate value, and discourages tourism.	See PM2.5.

ppm = parts per million; ug/m^3 = micrograms per cubic meter.

SOURCE: CARB, 2013c.

national and state ambient air quality standards and provides a brief discussion of the related health effects and principal sources for each pollutant.

Pursuant to the 1990 Federal CAA Amendments (FCAAA), the U.S. EPA classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether or not the NAAQS had been achieved. **Table 3.C-3** shows the current attainment status of the San Diego Air Basin.

TABLE 3.C-3
SAN DIEGO AIR BASIN ATTAINMENT STATUS

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – one hour	No Federal Standard[1]	Nonattainment
Ozone – eight hour	Nonattainment	Nonattainment
PM10	Unclassified	Nonattainment
PM2.5	Unclassified/Attainment	Nonattainment
CO	Unclassified/Attainment	Attainment
Nitrogen Dioxide	Unclassified/Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Unclassified/Attainment	Unclassified/Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified

[1] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

SOURCE: CARB. 2013d; USEPA 2015.

The Federal CAA requires each state to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The CAA added requirements for states containing areas that violate the NAAQS to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The U.S. EPA has responsibility to review all state SIPs to determine if they conform to the mandates of the CAA and will achieve air quality goals when implemented. If the U.S. EPA determines a SIP to be inadequate, it may prepare a Federal Implementation Plan (FIP) for the nonattainment area and may impose additional control measures.

Failure to submit an approvable SIP or to implement the plan within mandated timeframes can result in sanctions being applied to transportation funding and stationary air pollution sources in the air basin.

Toxic Air Contaminants

TACs are regulated under both state and federal laws. Federal laws use the term "Hazardous Air Pollutants" (HAPs) to refer to the same types of compounds that are referred to as TACs under state law. Both terms encompass essentially the same compounds. The 1977 FCAAA required the U.S. EPA to identify National Emission Standards for Hazardous Air Pollutants (NESHAPs) to protect public health and welfare. These substances include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 FCAAA, 189 substances are regulated as HAPs.

State

Criteria Air Pollutants

CARB, a department of the California Environmental Protection Agency, oversees air quality planning and control throughout California. CARB is responsible for coordination and oversight of state and local air pollution control programs in California and for implementation of the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, requires CARB to establish the California Ambient Air Quality Standards (CAAQS). CARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. Applicable CAAQS are shown in Table 3.C-2.

The CCAA requires all local air districts in the state to endeavor to achieve and maintain the CAAQS by the earliest practical date. The act specifies that local air districts shall focus particular attention on reducing the emissions from transportation and area-wide emission sources, and provides districts with the authority to regulate indirect sources.

Among CARB's other responsibilities are overseeing compliance by local air districts with California and federal laws; approving local air quality plans; submitting SIPs to USEPA; monitoring air quality; determining and updating area designations and maps; and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

Toxic Air Contaminants

Air quality regulations also focus on TACs. In general, for those TACs that may cause cancer, there is no concentration that does not present some risk. In other words, there is no safe level of exposure. This contrasts with the criteria air pollutants, for which acceptable levels of exposure can be determined and for which the ambient standards have been established. Instead, USEPA and CARB regulate HAPs and TACs, respectively, through statutes and regulations that generally require the use of the MACT or best available control technology (BACT) for toxics and to limit emissions. These statutes and regulations, in conjunction with additional rules set forth by the districts, establish the regulatory framework for TACs.

TACs in California are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807 [Chapter 1047, Statutes of 1983]) and the Air Toxics Hot Spots Information and Assessment Act (Hot Spots Act) (AB 2588 [Chapter 1252, Statutes of 1987]). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted USEPA's list of HAPs as TACs. Most recently, diesel PM was added to the CARB list of TACs. Once a TAC is identified, CARB then adopts an airborne toxics control measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate BACT to minimize emissions.

The Air Toxics Hot Spots Information and Assessment Act requires existing facilities emitting toxic substances above a specified level to prepare a toxic-emission inventory, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

CARB published the Air Quality and Land Use Handbook: A Community Health Perspective (Handbook), which provides guidance concerning land use compatibility with TAC sources (CARB, 2005). Although it is not a law or adopted policy, the Handbook offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs, such as freeways and high-traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities, to help keep children and other sensitive populations out of harm's way.

San Diego Air Pollution Control District

SDAPCD is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws and policies. Included in SDAPCD's tasks are the monitoring of air pollution, the preparation of San Diego County's portion of the SIP, and the promulgation of rules and regulations. The SIP includes strategies and tactics to be used to attain and maintain acceptable air quality in the County; this list of strategies is called the San Diego Regional Air Quality Strategy (RAQS) (SDAPCD, 2009). The rules and regulations include procedures and requirements to control the emission of pollutants and prevent significant adverse impacts.

The following SDAPCD rules and regulations apply to new construction:

- **Regulation IV: Prohibitions; Rule 51: Nuisance.** Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or damage to any business or property.

- **Regulation IV: Prohibitions; Rule 55:** Fugitive Dust. Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, open storage piles, and inactive disturbed areas, as well as track-out and carry-out onto paved roads beyond a project site.

- **Regulation IV: Prohibitions; Rule 67.0:** Architectural Coatings. Requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce volatile organic compound (VOC) emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

The RAQS contains six Transportation Control Measures that are consistent with program commitments made in the 2007 Regional Transportation Plan (RTP) and the 2006 Regional Transportation Improvement Program (RTIP) adopted and implemented by SANDAG. The six RAQS Transportation Control Measures relate to: (1) Transit Improvements; (2) Vanpools; (3) High-Occupancy Vehicle (HOV) Lanes; (4) Park-and-Ride Facilities; (5) Bicycle Facilities; and (6) Traffic Signal Improvements. SDAPCD's Indirect Source Program, adopted by the District Board in December 1997, consists of ongoing outreach and assistance to local governments, land developers, and neighborhood groups to reduce vehicle trips and associated emissions through voluntary land use and street design improvements (i.e., "smart growth") (SDAPCD, 2009).

SDAPCD provides ongoing technical assistance to SANDAG on programs to encourage smart growth. SDAPCD also provided technical assistance to the City of San Diego in revising their General Plan, Pedestrian Mater Plan and traffic calming programs to reflect greater reliance on transit and non-motorized transportation modes. SDAPCD has also conducted public workshops and other forms of public outreach focused on improving the conditions for pedestrians, bicyclists, and transit.

San Diego General Plan

The City's General Plan, updated in 2008, sets out a long-range vision and comprehensive policy framework for how the City should grow and develop, provide public services, and maintain the qualities that define San Diego over the next 20 to 30 years.

Relevant General Plan Policies

The following policies of the Conservation Element of the General Plan specifically address air quality:

CE-F.1 Develop and adopt a fuel efficiency policy to reduce fossil fuel use by City departments, and support community outreach efforts to achieve similar goals in the community.

CE-F.2 Continue to upgrade energy conservation in City buildings and support community outreach efforts to achieve similar goals in the community.

CE-F.3 Continue to use methane as an energy source from inactive and closed landfills.

CE-F.4 Preserve and plant trees, and vegetation that are consistent with habitat and water conservation policies and that absorb carbon dioxide and pollutants.

CE-F.5 Promote technological innovations to help reduce automobile, truck, and other motorized equipment emissions.

CE-F.6 Encourage and provide incentives for the use of alternatives to single-occupancy vehicle use, including using public transit, carpooling, vanpooling, teleworking,

bicycling, and walking. Continue to implement programs to provide City employees with incentives for the use of alternatives to single-occupancy vehicles.

CE-F.7 Influence the development of state, federal, and local actions to increase the use of alternative fuels.

CE-F.8 Influence the development of state, federal, and local efforts to increase fuel efficiency and reduce greenhouse gas emissions.

C.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego, 2011), a significant impact with regard to air quality could occur if implementation of the CAP would:

- Result in a conflict with or obstruct implementation of the applicable air quality plan;
- Result in a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people;
- Exceed 100 pounds per day of Particulate Matter (PM)(dust); or
- Result in the substantial alteration of air movement in the area of the project.

The Significance Determination Thresholds note that San Diego is designated "non-attainment" for ozone and particulate matter, and that CEQA review should include measures to reduce project-related ozone and particulate matter emissions to ensure that new developments do not contribute to San Diego's non-attainment status for these pollutants. The Significance Determination Thresholds provides the following screening criteria for projects that have the potential for increasing air emissions. Projects that do not meet these criteria (that is, that are smaller or would result in lower emissions) may be considered not to have significant emissions:

1. 950 Single-Family Units/9,500 Average Daily Trips (ADT);
2. 500 Single-Family Units/5,000 ADT, if the units include wood-burning fireplaces;
3. Level of Service Degradation for Roads;
4. 100 Pounds per Day PM10 (Airborne Dust) Criteria;
5. Stationary Sources.

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, several of the CAP strategies, actions, and supporting measures could have an impact on air quality. Many of these could encourage the construction of new or remodeled facilities that could result in construction-related air emissions.

The following proposed CAP Actions only have the potential to impact air quality from construction related emissions:

- **Action 1.5 Outdoor Landscaping Ordinance.** Supporting measures and steps that support implementation of this action could result in the construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, monitoring systems, etc.
- **Action 2.2 Municipal Zero Emissions Vehicles.** These actions could result in construction activities associated with development of electrical charging and other fueling infrastructure which could have an effect on air quality.
- **Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel.** These actions could result in construction activities associated with development fueling infrastructure which could have an effect on air quality.
- **Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas.** These actions would result in renovations and retrofits of existing sidewalks, cross-walks, and pedestrian trails as well of construction of new pedestrian facilities that may result in short-term construction related impacts, and changes to circulation that could affect air quality.
- **Action 3.3 Implement the City's Bicycle Master Plan.** These actions would result in renovations and retrofits of existing bike lanes and construction of new bike lanes and facilities that may result in short-term construction impacts and long-term effects on traffic and circulation that could affect air quality.
- **Action 3.5 Implement a Roundabouts Master Plan.** These actions would lead to short-term construction impacts and operational changes to traffic circulation that may affect air quality.

The following proposed CAP Actions could impact air quality in other ways, as summarized below and discussed under Issue 2:

- **Action 2.1 Community Choice Aggregation Program or Similar Program and Action 4.2 Capture Methane from Wastewater Treatment.** These actions could directly or indirectly lead to the construction and operation of large-scale renewable energy facilities, such as biomass or biogas conversion facilities, that have the potential for emissions of criteria pollutants, odors, and TACs.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** These actions would facilitate implementation of the City of Villages strategy and focus development in Transit Priority Areas. While this is intended to reduce vehicle miles travelled and to promote use of mass transit, walking, and bicycling, it may also result in short-term construction-related emission and long-term creation of localized pollution hotspots and exposure of sensitive receptors to nearby pollution sources.
- **Action 4.1 Divert Solid Waste and Capture Landfill Emissions.** This Action may result in new or expanded recycling and organics collection and processing programs and facilities, which could result in increased emissions of criteria pollutants, dust, and odors.

- **Action 5.1 Present to City Council for consideration a city-wide Urban Tree Planting Program.** The goal of this action is to achieve 15 percent urban canopy cover by 2020 and 35 percent urban canopy cover by 2035.

Issue 1: Would implementation of the CAP affect the ability of the RAQS to meet the federal and state clean air standards, or conflict with implementation of other regional air quality plans?

The SDAPCD RAQS is the regional air quality plan that is applicable to the City of San Diego. The RAQS contains rules and regulations that are implemented by the SDAPCD to help the region meet the clean air standards required by federal and state law. The RAQS relies on projected growth in the County as well as mobile, area and other sources of emissions, as obtained from CARB and SANDAG to project future emissions within the County. Based on these emissions, reduction strategies are determined to reduce emissions in order to achieve or maintain attainment with State and Federal standards. CARB mobile source emissions projections and SANDAG growth projections are based on information provided by city and County general plans. Therefore, projects that propose development that is consistent with the applicable general plan would be consistent with the RAQS. If the project's growth exceeds the projections anticipated in the general plan then the project would conflict with the RAQS and the SIP. The CAP does not include any proposed strategies or actions that would increase growth beyond that anticipated in the City's General Plan.

The purpose of the CAP is to reduce GHG emissions and mitigate for the negative effects of global climate change. Strategies in the CAP would involve activities to reduce energy consumption, increase renewable energy generation, reduce vehicle use and vehicle miles traveled, increase alternative fuel vehicle use, and increase solid waste vehicle fuel efficiency. These activities would have a beneficial effect on air quality by reducing the use of sources of air pollution and improving ambient air quality overall.

As the CAP includes reduction strategies that would reduce air emission, it would have a beneficial impact on air quality in the City compared to conditions without the Project. Implementation of the CAP would not affect the ability of the RAQS to meet the federal and state clean air standards, or conflict with implementation of other regional air quality plan. The CAP supports the land use patterns and transportation improvements in the SANDAG RTP/SCS and the City's General Plan. In doing so, the CAP supports the primary goals of the RAQS and therefore would not conflict with or obstruct implementation of the primary goals of an applicable air quality plan.

Significance of Impact

Overall, the implementation of the CAP provides beneficial impact.

Mitigation Framework

No mitigation is required.

Issue 2: Would implementation of the CAP result in air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations?

As noted above, several proposed CAP actions have the potential to result in construction emissions, operational emissions, or both. Emissions associated with proposed CAP actions may be mobile emissions (from increased vehicle use or use of mobile construction equipment), stationary sources (such as may occur from operation of energy generation facilities and waste processing facilities), and area sources, such as fugitive dust emissions from construction sites. The following discussion examines the potential for proposed CAP actions to result in significant air emissions during construction and operation.

Construction

As noted above, implementation of several of the proposed CAP actions which entail new or remodeled construction could result in short-term construction-related air emissions. Some proposed CAP actions and supporting measures under Strategy 1, Energy and Water Efficient Buildings, involve minor construction activities, such as energy and water efficiency upgrades to existing buildings that are not expected to result in substantial construction emissions. The proposed CAP actions that are likely to result in construction emissions are Actions 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.5, 3.6, and 4.2.

Several of these actions, if implemented, could result in relatively large construction projects, such as development of large-scale renewable energy facilities under Action 2.1; in-fill development and redevelopment within Transit Priority Areas, facilitated by Actions 3.1 and 3.6; and new or expanded wastewater and solid waste processing facilities under Actions 4.1 and 4.2.

Construction activities result in short-term increases in emissions of ozone-precursor pollutants (i.e., ROG and NO_X) and emissions of PM. Emissions of ozone precursors result from the operation of on-road and off-road motorized vehicles and equipment associated with construction activities. Emissions of airborne PM are largely associated with ground-disturbing activities, such as those occurring during site preparation. Localized concentrations of construction-generated TAC emissions, including emissions of DPM from diesel-powered equipment, can increase health risk for nearby sensitive receptors.

The Significance Determination Thresholds (City of San Diego, 2011) notes that the 100 pounds per day PM_{10} screening criteria may be associated with construction projects that involve grading of four acres per day without dust controls. Demolition of existing structures also has the potential for high dust potential.

Proposed CAP actions expected to result in construction activities that would disturb less than four acres per day, not involve substantial demolition of existing structures, only have a temporary effect on intersection level of service, and involve limited use of diesel-powered equipment include proposed CAP Action 2.2 Municipal Zero Emissions Vehicles, Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel, Action 3.2 Implement the City’s Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City’s Bicycle

Master Plan, Action 3.5 Implement a Roundabouts Master Plan, and small-scale, distributed renewable energy facilities developed as an indirect result of Action 2.1 Community Choice Aggregation. Each project undertaken pursuant to these proposed CAP actions would not result in significant construction-related emissions. However, it is possible that several small-scale construction activities could be underway simultaneously in the City that together may involve grading of four or more acres of land. Therefore, the potential exists for a significant air quality impact from implementation of these CAP actions.

The only proposed CAP actions likely to involve individual construction projects of sufficient scale to involve grading of at least four acres per day, substantial demolition of existing structures, substantial reduction of roadway level of service, and substantial use of diesel-powered equipment are those that facilitate implementation of the City of Villages strategy (Actions 3.1 and 3.6); and those that may involve construction or expansion of major infrastructure projects (Actions 1.5, 2.1, 4.1, and 4.1). Depending on the scale and intensity of construction activities taking place as a result of implementation of these actions, they could result in significant construction-related air emissions.

Operations

Implementation of several proposed CAP actions could result in operations-related emissions. These include Actions 2.1, 3.1, 3.6, 4.1, and 4.2. While the intent of the City of Villages strategy is to reduce reliance on the automobile and therefore reduce emissions, it would also result in concentrated, mixed-use development close to transit facilities. This may result in locating residences and other sensitive receptors close to existing emissions sources, and for localized increases in traffic-related emissions. Proposed CAP actions 3.1 and 3.6 would facilitate implementation of the City of Villages strategy, and may result in development that would exceed one or more of the significance screening criteria noted in the Significance Thresholds discussion, above, including more than 950 Single-Family Units/9,500 ADT, or 500 Single-Family Units with wood-burning fireplaces/5,000 ADT; specified Level of Service Degradation for Roads; and Stationary Sources. As noted in the Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR), implementation of the City of Villages strategy may result in significant air emissions. Other proposed CAP actions would increase use of alternative modes of transportation, including bicycling and walking, and would improve traffic flow through timing of traffic lights and installation of traffic roundabouts. These would tend to reduce emissions associated with implementation of the City of Villages strategy.

Proposed CAP Action 2.1 Community Choice Aggregation Program may result in development of large-scale renewable energy facilities. These may include combustion (biomass, biogas) facilities that would be considered stationary sources, and which may therefore result in significant operational air emissions. Large-scale solar and wind power facilities would not be considered a stationary source and are not associated with substantial operational emissions. Typically operational activities associated with these facilities include occasional maintenance and washing of solar panels. Operation of renewable energy facilities that do not entail stationary sources would not have the potential for a significant operational air emissions impact.

Proposed CAP Action 4.1 Divert Solid Waste and Capture Landfill Emissions and Action 4.2 Methane Capture from Wastewater Treatment Plants both may involve operation of new or expanded facilities, including composting facilities, methane or biogas generation, capture, and combustion facilities that may emit criteria pollutants and TACs, and solid waste processing facilities that have the potential to produce dust and odors. These facilities would likely be considered stationary sources and therefore would have the potential for significant air emissions impacts.

Proposed CAP Action 4.1 Divert Solid Waste and Capture Landfill Emissions, may result in specific measures that would change solid waste collection and handling in the City. Supporting measures for this action include change to weekly collection of recycling and greenwaste, and addition of food scraps to the greenwaste collection program. These would result in the increase in the number of weekly collections serving each household or business, and a substantial increase in VMT by collection vehicles, and therefore the potential for increased air emissions. Proposed CAP Action 2.3 Conversion of Waste Collection Vehicles to Alternative Fuel would reduce emissions rates for collection vehicles, and would partially or completely offset the increase in collection vehicle VMT. However, the conversion would not be complete until 2035. Furthermore, this action only addresses collection vehicles. Proposed CAP Action 4.1 may also result in the use of new or different waste processing facilities, such as composting facilities, anaerobic digesters, and material recovery facilities. In some instances, the haul distance to these facilities from local transfer stations may be longer than the current haul distance. This could result in increased VMT by diesel powered long-haul trucks and increased air emissions. This could also result in significant air emissions.

Proposed CAP Action 5.1 Present to City Council an Urban Tree Planting Program would result in greater urban tree canopy in the City. Trees absorb CO_2 as well as other air pollutants, including PM, ozone, Nitrogen Dioxide, and Sulfur Dioxide (Nowak, 2002). Proposed CAP Action 5.1 would improve ambient air quality in the City by removing air pollutants.

Significance of Impact

As described above, construction associated with implementation of most of the proposed CAP actions individually does not have the potential to result in substantial air emissions. However, simultaneous implementation of multiple small projects pursuant to CAP actions, and implementation of actions involving large-scale construction, could result in significant construction-related emissions.

In addition, the potential for proposed CAP Action 4.1 Divert Solid Waste and Capture Landfill Emissions has the potential to result in a significant impact from increased VMT by waste collection and waste hauling vehicles.

As discussed above, implementation of the City of Villages strategy, as facilitated by the CAP, has the potential to result in significant impacts to air quality. However, because the City of Villages strategy is already City policy, and because it was already the subject of environmental

review (the General Plan PEIR), potential impacts associated with implementation of the City of Villages have already been addressed in the General Plan PEIR.

Also as noted above, development of large-scale renewable energy facilities, water recycling facilities, and waste processing facilities could potentially result in significant air impacts during construction and operation. The CAP contains no specific plans for developing such facilities, but only anticipates that they may be developed in the future, and such impacts would be site- and project-specific. The City's process for the evaluation of discretionary projects includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects' consistency with the goals, policies, and recommendations of the General Plan. As future environmental analysis would be required for specific public utilities projects necessary to implement the CAP, air quality impacts associated with construction and operation of new or substantially altered facilities would be addressed at the project-level. Furthermore, new or revised stationary sources, such as those that may occur with implementation of proposed CAP Action 2.1 Community Choice Aggregation, Action 4.1 Divert Solid Waste and Capture Landfill Emissions, and Action 4.2 Methane Capture from Wastewater Treatment Plants, would be subject to permitting by the SDAPCD. The permitting process requires detailed emissions modeling and establishes emission limits for each pollutant. Stationary source permits are issued if the new or revised source will not result in emissions that will interfere with achievement of the RAQS.

Mitigation Framework

Mitigation Measure AIR-1: Best Available Control Measures for Construction Emissions

This mitigation measure incorporates the Mitigation Framework for construction-related air impacts contained in the General Plan PEIR, which states the following:

For projects that may exceed daily construction emissions established by the City of San Diego, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the City of San Diego. Project proponents must prepare and implement a Construction Management Plan which includes but is not limited to Best Available Control Measures. Appropriate control measures will be determined on a project-by-project basis, and are specific to the pollutant for which the daily threshold may be exceeded. Control measures may include:

- Minimizing simultaneous operation of multiple construction equipment units;
- Use of low pollutant emitting equipment;
- Use of catalytic reduction for gasoline-powered equipment;
- Watering the construction area to minimize fugitive dust; and
- Minimizing idling time by construction vehicles.

Mitigation Measure AIR-2: Reduce Emissions from Expanded Recycling and Organics Collection Programs

To ensure that increased VMT resulting from implementation of CAP Action 4.1 does not result in significant air emissions, collection vehicles shall be converted to alternative fuels,

such as natural gas, during roll-out of the expanded program, such that combined emissions fall below the significance threshold for daily and annual NOx emissions. This will be confirmed using generally accepted air emissions modeling, such as the CalEEMod model. In addition, to the extent that new programs increase VMT for long-haul vehicles, these vehicles shall also be converted to alternative fuels, such as natural gas, such that any increase falls below the significance threshold for daily and annual NOx emissions.

Significance after Mitigation

Implementation of the Mitigation Measure AIR-1 for construction activities associated with CAP actions involving small-scale construction would be sufficient to reduce construction emissions to less than significant. Mitigation Measure AIR-2 would reduce emissions associated with increased VMT from waste collection and waste hauling vehicles. This measure would reduce the impact of proposed CAP Action 4.1 to less than significant.

Air quality impacts associated with construction and operation of large facilities that could be proposed as a part of CAP Action 2.1 would remain significant even with implementation of Mitigation Measure AIR-1. Because the degree of air quality impacts associated with construction and operation of large facilities cannot be accurately predicted, and because the applicability, feasibility, and success of AIR-1 cannot be accurately predicted for large facilities, the program-level impact related to air quality is considered significant and unavoidable.

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D. Greenhouse Gases

D.1 Introduction

This section analyzes potential greenhouse gas related impacts that could result from implementation of the City of San Diego (City) Climate Action Plan (CAP).

D.2 Environmental Setting

Greenhouse Gases and Climate Change

"Global warming" and "global climate change" are the terms used to describe the observed increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal (IPCC, 2013), with global surface temperature increasing approximately 1.33 degrees Fahrenheit (°F) over the last 100 years. Continued warming is projected to increase global average temperature between two and 11°F over the next 100 years.

GHGs play a critical role in determining the Earth's surface temperature. Solar radiation enters the Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. Earth re-radiates this energy back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation (that otherwise would have escaped back into space) is now retained in the atmosphere, and results in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on Earth. Without the greenhouse effect, the Earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), chlorofluorocarbons (CFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Much of the scientific literature suggests that human-caused emissions of these GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and have led to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming. While there is some debate regarding this issue, it is unlikely that global climate change of the past 50 years can be explained without contribution from human activities (IPCC, 2013).

CO_2 equivalent (CO_2e) is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. Expressing emissions in CO_2e takes the contributions to the greenhouse effect of all GHG emissions and converts them to the equivalent effect that would occur if only CO_2 were being emitted. This measurement, known as the global warming potential (GWP) of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. For example, as described in Appendix ~~B~~A, ~~Calculation References~~ Methods for Estimating Greenhouse Gas

Reductions, of the General Reporting Protocol of the California Climate Action Registry, one ton of CH_4 has the same contribution to the greenhouse effect as approximately 25 tons of CO_2 (IPCC, 2007). Therefore, CH_4 is a much more potent GHG than CO_2.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one year to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO_2 emissions, approximately 54 percent is sequestered through ocean uptake, uptake by northern hemisphere forest regrowth, and other terrestrial sinks within one year, whereas the remaining 46 percent of human-caused CO_2 emissions remains stored in the atmosphere (Seinfeld and Pandis, 1998).

Similarly, impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and toxic air contaminants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, it is clear that the quantity is enormous, and no single project would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

Greenhouse Gas Emission Sources

According to the majority of the scientific literature on this topic, emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural sectors (CARB, 2014a). Emissions of CO_2 are a largely a byproduct of fossil fuel combustion. Methane, a highly potent GHG, results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Nitrous oxide is also largely attributable to agricultural practices and soil management. Carbon dioxide sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution, respectively, two of the most common processes of CO_2 sequestration.

Impacts of Climate Change

Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more frequent and long-lasting droughts. Secondary effects are likely to include the displacement of thousands of coastal businesses and residences, reduced potable water supply, lower crop yields, changes in disease vectors, and impacts to habitat and biodiversity. As the California Air Resources Board (CARB) *Climate Change Scoping Plan* noted, the legislature in enacting Assembly Bill (AB) 32 found that global warming would cause detrimental effects to

some of the state's largest industries, including agriculture, winemaking, tourism, skiing, commercial and recreational fishing, forestry, and the adequacy of electrical power generation. The *Climate Change Scoping Plan* states as follows: "The impacts of global warming are already being felt in California. The Sierra snowpack, an important source of water supply for the state, has shrunk ten percent in the last 100 years. It is expected to continue to decrease by as much as 25 percent by 2050. World-wide changes are causing sea levels to rise – about eight inches of increase has been recorded at the Golden Gate Bridge over the past 100 years – threatening low coastal areas with inundation and serious damage from storms" (CARB, 2008).

Ecosystem and Biodiversity Impacts

Climate change is expected to impact a broad range of ecosystems, from alpine to deep-sea habitat (U.S. EPA, 2014). As temperatures and precipitation change, seasonal shifts in vegetation would occur; this could affect the distribution of associated flora and fauna species. As the range of species shifts, habitat fragmentation could occur, with acute impacts on the distribution of certain sensitive species. The IPCC states that "20 percent to 30 percent of species assessed may be at risk of extinction from climate change impacts within this century if global mean temperatures exceed two to three degrees celsius (3.6 to 5.4°F) relative to pre-industrial levels" (IPCC, 2007). Shifts in existing biomes could also make ecosystems vulnerable to encroachment by invasive species. Wildfires, which are an important control mechanism in many ecosystems, may become more severe and more frequent, making it difficult for native plant species to repeatedly re-germinate. In general terms, climate change is expected to put a number of stressors on ecosystems, with potentially catastrophic effects on biodiversity.

Human Health Impacts

Climate change may increase the number of heat-related illnesses and deaths, and warmer temperatures could increase the concentrations of unhealthy air and water pollutants. Changes in temperature, precipitation patterns, and extreme events could enhance the spread of some diseases, particularly vector-borne infectious diseases found in tropical areas and spread by insects such as malaria, dengue fever, West Nile Virus, and encephalitis (U.S. EPA, 2013). While these health impacts would largely affect tropical areas in other parts of the world, effects would also be felt in California. Warming of the atmosphere would be expected to increase smog and particulate pollution, which could adversely affect individuals with heart and respiratory problems, such as asthma. Extreme heat events would also be expected to occur with more frequency and could adversely affect the elderly, children, and the homeless. Finally, the water supply impacts and seasonal temperature variations expected as a result of climate change could affect the viability of existing agricultural operations, making the food supply more vulnerable.

Greenhouse Gas Emissions Estimates

Global Emissions

Worldwide emissions of GHGs in 2004 were 30 billion tons of CO_2e per year (UNFCCC, 2012). This includes both ongoing emissions from industrial and agricultural sources, but excludes emissions from land use changes. In 2011, the atmospheric concentration of CO_2 was estimated at

approximately 390 parts per million (ppm), or about 40 percent greater than in 1750 (IPCC, 2013).

U.S. Emissions

In 2009, the United States emitted about 6.7 billion tons of CO_2e or about 21 tons per year per person. Of the four major sectors nationwide — residential, commercial, industrial, and transportation — transportation accounts for the highest fraction of GHG emissions (approximately 33 percent); these emissions are entirely generated from direct fossil fuel combustion (U.S. EPA, 2011).

State of California Emissions

California is the 12th to 16th largest emitter of CO_2 in the world (CEC, 2006). California produced approximately 459 million gross metric tons of CO_2e in 2012 (CARB, 2014a). Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2012, accounting for 36 percent of total GHG emissions in the state. This sector was followed by the electric power section (including both in-state and out-of-state sources) (21 percent) and the industrial sector (19 percent) (CARB, 2014a).

City of San Diego Emissions

In response to the State's efforts and to ensure the City of San Diego contributes its fair share to statewide GHG reductions, the City prepared the CAP that identifies measures to effectively meet GHG reduction targets for 2020, as well as 2035 which serves as an "interim" target toward meeting the state's longer term 2050 target. The CAP contains five chapters: Background, Reducing Emissions, Implementation and Monitoring, Social Equity and Job Creation, and Adaptation.

The GHG emissions inventory evaluated energy and other emissions-related activities within the City of San Diego in the baseline year 2010 for five major sectors, including residential buildings, nonresidential buildings and facilities, transportation, water, solid waste, and municipal operations. Emissions were associated with a variety of sources, including direct combustion of fossil fuels, purchased electricity, transportation (gasoline and diesel), solid waste, potable water, and materials. These sources are described in greater detail in Appendix ~~C~~A of the CAP. The CAP estimates the GHG emissions for the City of San Diego in the baseline year 2010 to be around 13.0 million metric tons of carbon dioxide equivalent (MMT CO_2e), of which the largest contributing sector was transportation (54 percent), followed by electricity use (24 percent), natural gas use (16 percent), and solid waste and wastewater collection, disposal, and treatment (5 percent).

D.3 Regulatory Setting

The following sections summarize federal, state and local regulations regarding energy, GHGs and global climate change. A variety of agencies work jointly as well as individually to understand and regulate the effects of greenhouse gas emissions and resulting climate change through legislation, planning, policy-making, education, and programs.

Federal

Federal Clean Air Act

The federal CAA requires the U.S. EPA to define national ambient air quality standards to protect public health and welfare in the U.S. The CAA does not specifically regulate GHG emissions; however, on April 2, 2007, the U.S. Supreme Court in *Massachusetts v. U.S. Environmental Protection Agency*, determined that GHGs are pollutants that can be regulated under the CAA. Currently, there are no federal regulations that establish ambient air quality standards for GHGs.

On December 7, 2009, U.S. EPA adopted its Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases under the CAA (Endangerment Finding). The Endangerment Finding is based on Section 202(a) of the CAA, which states that the U.S. EPA Administrator should regulate and develop standards for "emission[s] of air pollution from any class or classes of new motor vehicles or new motor vehicle engines, which in [its] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." The rule addresses Section 202(a) in two distinct findings. The first addresses whether the concentrations of the six key GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) in the atmosphere threaten the public health and welfare of current and future generations. The second addresses whether the combined emissions of GHGs from new motor vehicles and motor vehicle engines contribute to atmospheric concentrations of GHGs and, therefore, contribute to the threat of climate change.

The U.S. EPA Administrator determined that atmospheric concentrations of GHGs endanger the public health and welfare within the meaning of Section 202(a) of the CAA. The evidence supporting this finding consists of human activity resulting in "high atmospheric levels" of GHG emissions, which are likely responsible for increases in average temperatures and other climatic changes. Furthermore, the observed and projected results of climate change (e.g., higher likelihood of heat waves, wild fires, droughts, sea level rise, higher intensity storms) are a threat to the public health and welfare. Therefore, GHGs were found to endanger the public health and welfare of current and future generations.

The U.S. EPA Administrator also found that GHG emissions from new motor vehicles and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. The findings do not in and of themselves impose any emission reduction requirements but, rather, allow USEPA to finalize the GHG standards proposed earlier in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation.

Energy Policies and Programs

At the federal level, the U.S. Department of Transportation, U.S. Department of Energy, and USEPA have substantial influence over energy policies and programs. Generally, federal agencies influence transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure projects. In addition, the Federal Energy Regulatory Commission (FERC) is an independent

agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects. Licensing of hydroelectric facilities under the authority of FERC includes input from State and Federal energy and power generation, environmental protection, fish and wildlife, and water quality agencies. The California Energy Commission's Systems Assessment and Facilities Siting Division coordinates with FERC to ensure that needed energy facilities are authorized in an expeditious, safe, and environmentally acceptable manner.

The National Energy Policy, developed in May 2001, proposes recommendations on energy use and on the repair and expansion of the nation's energy infrastructure. The policy is based on the finding that growth in U.S. energy consumption is outpacing the current rate of production. Based on this policy document, during the years 2000 to 2020, consumption of oil is predicted to increase by 33 percent, natural gas by over 50 percent, and electricity by 45 percent. While federal policy promotes further improvements in energy use through conservation, it focuses on increased development of domestic oil, gas, and coal and the use of hydroelectric and nuclear power resources. To address the over-reliance on natural gas for new electric power plants, the federal policy proposes research in clean coal technology and expanding generation to include energy derived from landfill gas, wind, and biomass sources.

State of California

California Air Resources Board

CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in California.

There are currently no state regulations in California that establish ambient air quality standards for GHGs. However, California has passed laws directing CARB to develop actions to reduce GHG emissions, and several state legislative actions related to climate change and GHG emissions have come into play in the past decade.

California Energy Commission

The California Energy Commission (CEC) is California's primary energy policy and planning agency. Created by the California Legislature in 1974, the CEC has five major responsibilities: 1) forecasting future energy needs and keeping historical energy data; 2) licensing thermal power plants 50 MW or larger; 3) promoting energy efficiency through appliance and building standards; 4) developing energy technologies and supporting renewable energy; and 5) planning for and directing State response to energy emergencies. Under the requirements of the California Public Resources Code, the CEC in conjunction with the California Department of Conservation (DOC) Division of Oil, Gas, and Geothermal Resources is required to assess electricity and natural gas resources on an annual basis or as necessary.

The State of California regulates energy consumption under Title 24 of the California Code of Regulations. The Title 24 Building Energy Efficiency Standards were developed by the CEC and

apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. The CEC updates these standards periodically.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) is a State agency created by a constitutional amendment to regulate privately-owned utilities providing telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation services, and in-State moving companies. The CPUC is responsible for assuring that California utility customers have safe, reliable utility services at reasonable rates, while protecting utility customers from fraud. The CPUC regulates the planning and approval for the physical construction of electric generation, transmission, or distribution facilities; and local distribution pipelines of natural gas.

Assembly Bill 1493

In 2002, then-Governor Gray Davis signed AB 1493, which required CARB to develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state."

To meet the requirements of AB 1493, CARB approved amendments to the California Code of Regulations (CCR) in 2004, adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to Title 13 CCR, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1), require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight rating of less than 10,000 pounds and which is designed primarily for the transportation of persons), beginning with model year 2009. For passenger cars and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 pounds or less, the GHG emission limits for model year 2016 are approximately 37 percent lower than the limits for the first year of the regulations, model year 2009. For light-duty trucks with an LVW of 3,751 pounds to a gross vehicle weight of 8,500 pounds, as well as for medium-duty passenger vehicles, GHG emissions will be reduced approximately 24 percent between 2009 and 2016.

Because the Pavley standards (named for the bill's author, state Senator Fran Pavley) would impose stricter standards than those under the federal CAA, California applied to the U.S. EPA for a waiver under the federal CAA, which was granted in 2009.

Executive Order S-3-05

Executive Order S-03-05, which was signed by Governor Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

The Executive Order directed the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary will also submit biannual reports to the governor and state legislature describing progress made toward reaching the emission targets, impacts of global warming on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the Secretary of CalEPA created the California Climate Action Team (CCAT) made up of members from various state agencies and commissions. CCAT released its first report in March 2006. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government, and community actions, as well as through state incentive and regulatory programs.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

In September 2006, Governor Arnold Schwarzenegger signed the California Global Warming Solutions Act (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished by enforcing a statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. CARB has discretionary authority to seek greater reductions in the more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions.

Scoping Plan Provisions

On December 11, 2008, CARB adopted its *Climate Change Scoping Plan*, outlining measures to meet the 2020 GHG reduction goals. In order to meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. According to the 2008 Scoping Plan, the 2020 target of MMT CO_2e required the reduction of 169 MMT CO_2e, or approximately 28.4 percent, from the state's projected 2020 business-as-usual (BAU) emissions level of 596 MMT CO_2e. In August 2011, the Scoping Plan was re-approved by the Board and includes the Final Supplement to the Scoping Plan Functional Equivalent Document. This document includes expanded analysis of project alternatives as well as updates the 2020 emission projections in light of the current economic forecasts.

Considering the updated 2020 BAU estimate of 507 MMT CO_2e, a 16 percent reduction below the estimated BAU levels would be necessary to return to 1990 levels by 2020. The document also excludes one measure identified in the 2008 Scoping Plan that has been adopted and one measure that is no longer under consideration by CARB (CARB, 2011).

The *Climate Change Scoping Plan Update* (CARB, 2014b) details progress towards meeting the 2020 reduction goal since the adoption of AB 32, as well as the GHG reduction framework to meet the 80 percent below 1990 levels by 2050. The primary focus areas identified in the *Climate Change Scoping Plan Update* to meet the long-term reduction goal are associated with energy, transportation, agriculture, water, waste management, natural and working lands, short-lived climate pollutants, green buildings, and cap-and-trade.

Cap-and-Trade Program

The Scoping Plan identified cap-and-trade as a key strategy for helping California reduce its GHG emissions (CARB, 2008). A cap-and-trade program sets the total amount of GHG emissions allowable for facilities under the cap and allows covered sources, including producers and consumers of energy, to determine the least expensive strategies to comply. AB 32 required CARB to adopt the cap-and-trade regulation by January 1, 2011, and the program itself began in November 2012.

Carbon offset credits are created through the development of projects, such as renewable energy generation or carbon sequestration projects, that achieve the reduction of emissions from activities not otherwise regulated, covered under an emissions cap, or resulting from government incentives. Offsets are verified reductions of emissions whose ownership can be transferred to others. As required by AB 32, any reduction of GHG emissions used for compliance purposes must be real, permanent, quantifiable, verifiable, enforceable, and additional. In January 2014, California connected its cap-and-trade program with that of Quebec, which increased the options for emission reductions and represents a step forward in California's efforts to collaborate with global partners to reduce GHGs (CARB, 2014b).

Executive Order S-1-07

Executive Order S-1-07, which was signed by Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of statewide emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least ten percent by 2020. This order also directs CARB to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

On April 23, 2009, CARB approved the proposed regulation to implement the LCFS. The LCFS will reduce GHG emissions from the transportation sector in California by about 16 million MMT in 2020. The LCFS is designed to reduce California's dependence on petroleum, create a lasting market for clean transportation technology, and stimulate the production and use of alternative, low-carbon fuels in California. The LCFS is designed to provide a durable framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework

establishes performance standards that fuel producers and importers must meet each year beginning in 2011. One standard is established for gasoline and the alternative fuels that can replace it. A second similar standard is set for diesel fuel and its replacements.

Senate Bill 97

SB 97, signed August 2007 (Chapter 185, Statutes of 2007; PRC Sections 21083.05 and 21097), acknowledges that climate change is a prominent environmental issue that requires analysis under CEQA. The bill directs the California Office of Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency, guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, by July 1, 2009. The Natural Resources Agency was required to certify or adopt those guidelines by January 1, 2010. On April 13, 2009, OPR submitted to the Secretary for Natural Resources its proposed amendments to the *CEQA Guidelines* for GHG emissions, as required by SB 97. On February 16, 2010, the Office of Administrative Law (OAL) approved the amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The amendments became effective on March 18, 2010.

Senate Bills 1078 and 107 and Executive Orders S-14-08 and S-21-09

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

In November 2008, then-Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Portfolio Standard to 33 percent renewable power by 2020. In September 2009, then-Governor Schwarzenegger continued California's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs CARB under its AB 32 authority to enact regulations to help the state meet its Renewable Portfolio Standard goal of 33 percent renewable energy by 2020.

The 33-percent-by-2020 goal was codified in April 2011 with Senate Bill X1-2, which was signed by Governor Edmund G. Brown, Jr. This new Renewable Portfolio Standard preempts CARB 33 percent Renewable Electricity Standard and applies to all electricity retailers in the state, including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. All of these entities must adopt the new Renewable Portfolio Standard goals of 20 percent of retail sales from renewables by the end of 2013 and 25 percent by the end of 2016, with the 33 percent requirement being met by the end of 2020.

Senate Bill 375

SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in

that MPO's regional transportation plan (RTP). CARB, in consultation with MPOs, has provided each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects may not be eligible for funding programmed after January 1, 2012.

This law also extends the minimum time period for the regional housing needs allocation cycle from five years to eight years for local governments located within an MPO that meet certain requirements. City or county land use policies (including general plans) are not required to be consistent with the regional transportation plan (and associated SCS or APS). However, new provisions of CEQA would incentivize (through streamlining and other provisions) qualified projects that are consistent with an approved SCS or APS, categorized as "transit priority projects."

OPR's 2008 Technical Advisory

On June 19, 2008, OPR published a technical advisory on CEQA and Climate Change. The advisory provided OPR's perspective on the emerging role of CEQA in addressing climate change and GHG emissions, while recognizing that approaches and methodologies for calculating GHG emissions and addressing environmental impacts through CEQA review are rapidly evolving. The advisory recognized that OPR would develop amendments to the State CEQA Guidelines pursuant to SB 97 as was done in 2010. The Natural Resources Agency would then adopt these amendments. The technical advisory pointed out that neither CEQA nor the CEQA Guidelines prescribe quantitative thresholds of significance or particular methodologies for performing an impact analysis by stating, "This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable" (OPR, 2008). This deference to lead agencies was memorialized in the CEQA Guidelines Section 15064.4 as discussed below. OPR recommended, at the time, that "the global nature of climate change warrants investigation of a statewide threshold of significance for GHG emissions" (OPR, 2008).

Until such a standard is established, OPR advises that each lead agency should develop its own approach to performing analyses for projects that generate greenhouse gas emissions (OPR, 2008). Agencies should then assess whether the emissions are "cumulatively considerable" even though a project's GHG emissions may be individually limited. OPR states, "Although climate change is ultimately a cumulative impact, not every individual project that emits GHGs must necessarily be found to contribute to a significant cumulative impact on the environment" (OPR, 2008). Based on this, individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice (OPR, 2008).

If the lead agency determines emissions are a cumulatively considerable contribution to a significant cumulative impact, then the lead agency must investigate and implement ways to mitigate the emissions (OPR, 2008). OPR states that "Mitigation measures will vary with the type

of project being contemplated, but may include alternative project designs or locations that conserve energy and water, measures that reduce vehicle miles traveled (VMT) by fossil-fueled vehicles, measures that contribute to established regional or programmatic mitigation strategies, and measures that sequester carbon to offset the emissions from the project" (OPR, 2008). OPR concludes that "a lead agency is not responsible for wholly eliminating all GHG emissions from a project; the CEQA standard is to mitigate to a level that is "less than significant" (OPR, 2008). The technical advisory includes a list of mitigation measures that can be applied on a project-by-project basis.

CEQA Guidelines Revisions

In 2007, the State Legislature passed SB 97, which required amendment of the State CEQA Guidelines to incorporate analysis of, and mitigation for, GHG emissions from projects subject to CEQA. The California Natural Resources Agency adopted these amendments on December 30, 2009, and they took effect on March 18, 2010, after review by the Office of Administrative Law and filing with the Secretary of State for inclusion in the California Code of Regulations.

The Guidelines revisions include a new section (Sec. 15064.4) that specifically addresses the potential significance of GHG emissions. Section 15064.4 calls for a "good-faith effort" to "describe, calculate or estimate" GHG emissions; Section 15064.4 further states that the analysis of the significance of any GHG impacts should include consideration of the extent to which the project would increase or reduce GHG emissions; exceed a locally applicable threshold of significance; and comply with "regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions." The new Guidelines also state that a project may be found to have a less-than-significant impact on GHG emissions if it complies with an adopted plan that includes specific measures to sufficiently reduce GHG emissions (Sec. 15064(h)(3)). Importantly, however, the Guidelines do not require or recommend a specific analytical methodology or provide quantitative criteria for determining the significance of GHG emissions.

No quantitative significance threshold is included in the Amendments. The *CEQA Guidelines* afford the customary deference provided to lead agencies in their analysis and methodologies. OPR emphasizes the necessity of having a consistent threshold available to analyze projects, and the analyses should be performed based on the best available information. For example, if a lead agency determines that GHGs may be generated by a proposed project, the agency is responsible for assessing GHG emissions by type and source. The CEQA Guidelines Amendments provide the following recommendations for determining the significance of GHG emissions under Section 15064.4:

(a) The determination of the significance of GHG emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of GHG emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

(1) Use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; and/or

(2) Rely on a qualitative analysis or performance based standards.

(b) A lead agency may consider the following when assessing the significance of impacts from GHG emissions on the environment:

(1) The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

The Amendments also include a new Subdivision 15064.7(c) which clarifies that in developing thresholds of significance, a lead agency may appropriately review thresholds developed by other public agencies, or recommended by other experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.

In addition, the Amendments include a new Section 15183.5 that provides for tiering and streamlining the analysis of GHG emissions. Project-specific environmental documents may rely on an EIR containing a programmatic analysis of GHG emissions in the region over a specified time period.

Finally, the Amendments add a new set of environmental checklist questions (VII. Greenhouse Gas Emissions) to the CEQA Guidelines Appendix G, which are provided below under Thresholds of Significance.

California Green Buildings Standard Code

In January 2010, the State of California adopted the 2010 California Green Building Standards (CALGreen) Code, which became effective in January 2011. Building off of the initial 2008 California Green Building Code, the 2010 CALGreen Code represents a more stringent building code that requires, at a minimum, that new buildings and renovations in California meet certain sustainability and ecological standards. The 2010 CALGreen Code has mandatory Green Building provisions for all new residential buildings that are three stories or fewer (including hotels and motels) and all new non-residential buildings of any size that are not additions to existing buildings. As of January 2011, California requires that new buildings reduce water

consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant emitting finish materials. CALGreen's mandatory measures establish a minimum for green construction practices, and incorporate environmentally responsible buildings into California cities. CALGreen allows jurisdictions to adopt stricter requirements than the mandatory minimum requirements in CALGreen.

In early 2013, the California Building Standards Commission adopted the 2013 California Building Standards Code that also included the latest 2013 CALGreen Code, which became effective on January 1, 2014. The mandatory provisions of the code are anticipated to reduce three MMT of GHG emissions by 2020, reduce water use by 20 percent or more, and divert 50 percent of construction waste from landfills. The 2013 California Energy Code (Title 24, Part 6), which is also part of the CALGreen Code (Title 24, Part 11, Chapter 5.2), became effective on July 1, 2014.

Executive Order B-30-15

On April 29, 2015, Governor Brown issued an executive order to establish a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030. The executive order does all of the following:

- Establishes a new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050;
- Directs all state agencies with jurisdiction over sources of greenhouse gas emissions to implement measures to achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets;
- Directs CARB to update the *Climate Change Scoping Plan* to express the 2030 target in terms of million metric tons of carbon dioxide equivalent;
- Directs the California Natural Resources Agency to update every three years the state's climate adaptation strategy, *Safeguarding California*, and ensure that its provisions are fully implemented;
- Directs all State agencies to take climate change into account in their planning and investment decisions, and to employ full life-cycle cost accounting to evaluate and compare infrastructure investments and alternatives;
- Directs State agencies' planning and investment to give priority to actions that both build climate preparedness and reduce greenhouse gas emissions; take flexible and adaptive approaches to prepare for uncertain climate impacts; protect the state's most vulnerable populations; and prioritize natural infrastructure solutions;
- Requires the state's Five-Year Infrastructure Plan to take current and future climate change impacts into account in all infrastructure projects;
- Directs the Governor's Office of Planning and Research to establish a technical advisory group to help state agencies incorporate climate change impacts into planning and investment decisions; and

- Directs the state to continue its climate change research program focused on understanding the impacts of climate change and how best to prepare and adapt to such impacts.

~~City of San Diego Draft Screening Criteria for Greenhouse Gas Emissions~~

~~As a companion document to the CAP, the City has prepared screening criteria for GHG emissions. The purpose of the screening criteria is to provide guidance to City staff conducting CEQA review to ensure a consistent and objective evaluation of the potential for significant effects from proposed projects that will result in the emission of GHGs. This "bright-line" numeric screening criterion for annual operational emissions will be used to assess whether a project conflicts with existing California legislation adopted to reduce statewide anthropogenic GHG emissions, based on substantial evidence demonstrating that a defined level of project emissions would make a considerable contribution to the cumulative impact on GHG emissions. A screening criterion would be used to determine if modeled emissions would have a less than significant cumulative impact. Emissions above the screening criterion would need to complete the CAP Consistency Checklist to determine if the impact is significant. The City's Draft Greenhouse Gas Emission Screening Criteria includes a table of development types that would fall below this numeric screening criterion (City of San Diego, 2015b).~~

D.4 Impacts and Mitigation Measures

Significance Criteria

Based on Appendix G of the CEQA Guidelines, impacts related to GHG emissions may be considered significant if the proposed project would:

- Generate GHG emissions, either directly or indirectly, that may have a cumulatively significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs (e.g., CARB's AB 32 Scoping Plan).

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, several of the CAP strategies, actions, and supporting measures could result in GHG emissions that would contribute to the cumulative effect of GHGs on climate; or they could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. These actions include:

- **Action 1.5 Outdoor Landscaping Ordinance.** Supporting measures and steps that support implementation of this action could result in the construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, monitoring systems, etc. which could result in temporary increased GHG emissions.
- **Action 2.1 Community Choice Aggregation Program or Similar Program.** Supporting measures and steps that support implementation of this action could result in installation of

small scale and large scale renewable energy generation, transmission, and storage systems that could result in increased GHG emissions.

- **Action 2.2 Municipal Zero Emissions Vehicles.** These actions could result in construction activities associated with development of electrical charging and other fueling infrastructure which could result in increased GHG emissions.
- **Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel.** These actions could result in construction activities associated with development of fueling infrastructure which could result in increased GHG emissions.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas.** These actions would facilitate the implementation of the City of Villages strategy and the shift to greater emphasis on mass transit and other modes of transportation. These actions could, therefore, result in new construction and other physical changes that could result in increased GHG emissions.
- **Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas.** These actions would result in renovations and retrofits of existing sidewalks, cross-walks, and pedestrian trails as well of construction of new pedestrian facilities that may result in short-term construction related impacts, and changes to circulation that could result in increased GHG emissions.
- **Action 3.3 Implement the City's Bicycle Master Plan.** These actions would result in renovations and retrofits of existing bike lanes and construction of new bike lanes and facilities that may result in short-term construction impacts and long-term effects on traffic and circulation that could result in increased GHG emission.
- **Action 3.5 Implement a Roundabouts Master Plan.** These actions would lead to short-term construction impacts and operational changes to traffic circulation that could result in increased GHG emission
- **Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** These actions would result in new development at a higher density than existing development, especially near transit corridors. Short-term construction impacts and long-term changes to traffic and circulation could result in increased GHG emissions.
- **Action 4.1 Divert Solid Waste and Capture Landfill Emissions.** This action could lead to the implementation of landfill gas collection operational procedures in compliance with the California Air Resources Board's Landfill Methane Capture regulations, as well as new or expanded programs to divert solid waste from landfill disposal. Some of these programs could result in increased GHG emissions.
- **Action 4.2 Capture Methane from Wastewater Treatment.** Associated actions could result in new or expanded wastewater treatment facilities, such as anaerobic digesters, that could increase increased GHG emissions.

While many of the proposed CAP actions would result in long-term reductions in GHG emissions, several involve construction of new or remodeled buildings and facilities that could result in short-term construction-related GHG. Several others may lead to construction of new facilities or programs that may have the potential to produce operational GHG emissions. These potential impacts are examined in detail below.

Issue 1: Would implementation of the CAP generate GHG emissions, either directly or indirectly, that may have a cumulatively significant impact on the environment?

As shown in Table 2-1 in the Project Description, the CAP estimates that the City's baseline GHG emissions in the year 2010 at around 13.0 MMT CO_2e. Of this, the largest contributing sector was transportation (~~54~~ 55 percent), followed by electricity use (24 percent), natural gas use (16 percent), and solid waste and wastewater collection, disposal, and treatment (5 percent). The CAP estimates that the City's unmitigated (i.e., "business as usual") emissions would reach 14.1 MMT CO_2e by 2020 and around 16.7~~4~~ MMT CO_2e by 2035.

Implementation of the CAP would reduce per capita GHG emissions. Implementation of the CAP would also result in an overall decrease in GHG emissions citywide.

Strategies in the CAP rely on implementation of State legislation as well as local policies for emissions reductions. State actions designed to reduce emissions from energy use include: California's Renewable Portfolio Standard (RPS), which establishes the goal to procure 33 percent of electricity sales from renewable sources by 2020 and 50 percent by 2035, utility energy efficiency programs directed by the California Public Utilities Commission, Assembly Bill 1103 which established the Commercial Energy Use Disclosure Requirement, and Solar Programs offered by the State. State actions that reduce emissions from transportation include: California's Pavley I/CAFÉ standards, the Low Carbon Fuel Standard, electric vehicle policies and programs, and CARB's Tire Pressure Program and Heavy Duty Vehicle Aerodynamics Program. The CAP also includes reductions from improved transportation and land use planning that result from SANDAG's Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), as required by SB 375.

Implementation of the strategies in the CAP would result in an estimated reduction of ~~422,633~~ 423,116 MT CO_2e by 2020, ~~2.1~~ 1.3 MMT CO_2e by 2030, and ~~3.5~~ 2.5 MMT CO_2e by 2035. This, along with the above described state and federal actions, would decrease the BAU emissions from 14.1 MMT CO_2e to around 9.8 MMT CO_2e in 2020, from 15.8~~7~~ MMT CO_2e to around 7.6 MMT CO_2e in 2030, and from 16.7~~4~~ MMT CO_2e to 6.3~~4~~ MMT CO_2e in 2035. The City would implement a monitoring plan to ensure the strategies in the CAP achieve the anticipated GHG reductions.

Implementation of several of the proposed CAP actions which entail new or remodeled construction could result in short-term construction-related GHG emissions. Several proposed CAP actions have this potential, but do not have the potential for increased GHG emissions associated with operation of the program authorized by the CAP Action. Several other proposed CAP actions and supporting measures under Strategy 1, Energy and Water Efficient Buildings, involve minor construction activities, such as energy and water efficiency upgrades to existing buildings that are not expected to result in substantial construction-related GHG emissions. The proposed CAP actions that are likely to result in construction-related GHG emissions include: Actions 2.1, 2.2, 2.3, 3.2, 3.3 and 3.5. These actions would result in relatively small-scale, localized, and short-duration construction activities.

Construction activities typically emit GHGs from combustion of fossil fuels in diesel and gasoline-powered equipment and vehicles, and from use of electricity that is generated partially from sources that emit GHGs. Because these proposed CAP actions would be limited in extent and duration, they would emit relatively small amounts of GHGs. Furthermore, each of these proposed actions is expected to result in long-term, substantial reductions in GHG emissions, by reducing water use, facilitating use of non-polluting modes of transportation, facilitating traffic flow, and converting municipal vehicles to low emission or zero emission models. Therefore, these proposed CAP actions are expected to reduce GHG emissions overall, and therefore not to make a considerable contribution to the cumulative effect of GHG emissions on climate change.

Implementation of several proposed CAP actions could result in both construction-related and operations-related GHG emissions. These include Actions 1.5, 2.1, 3.1, 3.6, 4.1 and 4.2. Several of these actions, if implemented, could result in relatively large construction projects, such as development of large-scale renewable energy facilities under Action 2.1; in-fill development and redevelopment within Transit Priority Areas, facilitated by Actions 3.1 and 3.6; and new or expanded wastewater and solid waste processing facilities under Actions 4.1 and 4.2. However, as indicated in the discussion of expected GHG emissions reduction from implementation of the CAP, these actions would also result in substantial long-term reductions in GHG emissions. Therefore, they would not be considered to have the potential to make a considerable contribution to cumulative GHG emissions.

Proposed CAP Action 4.1 Divert Solid Waste and Capture Landfill Emissions, may result in specific measures that change solid waste collection and handling in the City. Supporting measures for this action include a change to weekly collection of recycling and greenwaste and addition of food scraps to the greenwaste collection program. These would result in the increase in the number of weekly collections serving each household or business, and a substantial increase in VMT by collection vehicles, and therefore the potential for increased GHG emissions. Proposed CAP Action 2.3 Conversion of Waste Collection Vehicles to Alternative Fuel would reduce GHG emission rates for collection vehicles, and would offset the increase in collection vehicle VMT. However, the conversion would not be complete until 2035. Furthermore, this action only addresses collection vehicles. Proposed CAP Action 4.1 may also result in the use of new or different waste processing facilities, such as composting facilities, anaerobic digesters, and material recovery facilities. While these facilities would result in reduction of GHG emissions from waste processing relative to landfilling of the same materials, in some instances the haul distance to these facilities from local transfer stations may be longer than the current haul distance. This could result in increased VMT by diesel-powered long-haul trucks and a substantial increase in GHG emissions.

Significance of Impact

As described above, construction and operations associated with implementation of most of the proposed CAP actions may result in GHG emissions, but these emissions would be more than offset by the long-term reductions in GHG emissions that the actions would enable. Therefore, GHG emissions associated with implementation of these actions would not make a considerable contribution to cumulative GHG emissions, and the impact would be less than significant.

Action 4.1 Divert Solid Waste and Capture Landfill Emissions could result in increased GHG emissions from increased VMT by solid waste collection and long-haul vehicles. Action 4.1 would result in 75 percent waste diversion by 2020 and 90 percent waste diversion by 2035. Using the calculation method described in CAP Appendix ~~B~~A, this action would result in a reduction of 154,467 MMT CO_2e by 2020, ~~283,309 MMT CO_2e by 2030,~~ and 344,213 MMT CO_2e by 2035. Meanwhile, CAP Action 2.3 would convert the City's waste collection trucks to low emission fuels, which helps offset the potential increase in GHG emissions from the increased VMT by waste collection and long-haul vehicles. For example, if the City was to increase their recycling collection services from once every other week to every week to achieve 90% diversion (a reasonable assumption), then the collection fleet would consume approximately 1.3 million gallons of fuel per year compared to 1 million gallons of fuel per year under the existing waste collection scenario[1]. Without implementation of Action 2.3, this increased fuel use would consist entirely of diesel fuel and the resulting increase in GHG emissions would be 3,383 MT CO_2e per year over existing conditions for a total of 13,534 MT CO_2e annually. However, with the conversion of the entire collection fleet to low emission fuels, the GHG emissions increase due to enhanced collection services would be limited to approximately 9.6 MT of CO_2e annually, which offsets more than 99.7% of the emissions that would result from using diesel fuel.[2]

In conclusion, adoption and implementation of the CAP would result in a net decrease in GHG emissions, both compared to the 2010 baseline and to the BAU projections for 2020, 2030, and 2035. The CAP therefore would not generate GHG emissions that would have a cumulatively significant impact on the environment and the impact would be less than significant.

Mitigation Framework

No mitigation is required.

Issue 2: Would implementation of the CAP conflict with the GHG reduction targets and measures identified in Governor's Executive Order S-3-05, Executive Order B-30-15, and CARB's AB 32 Scoping Plan?

The CAP is designed to be consistent with the reduction measures and recommendations contained in CARB's AB 32 Scoping Plan. The Pavley Program, Renewable Portfolio Standard, Low Carbon Fuel Standard, SB 375 land use and transportation strategies, energy efficiency measures, solar PV measures, vehicle and fuel efficiency measures, landfill methane capture, and urban forestry practices are all measures in the CARB Scoping Plan that are also included in the CAP.

Following direction provided in the CARB Scoping Plan, as set forth in the CAP, BAU emissions would reach 14.1 MMT CO_2e by 2020, 15.8~~7~~ MMT CO_2e by 2030, and 16.7~~4~~ MMT CO_2e by 2035. One of the project objectives for the CAP is to conform to California laws and regulations.

1 See methodology description in CAP Appendix ~~B~~A, page ~~B-28 to B-29~~ A-39 to A-40.

2 This scenario is intended to illustrate to what extent switching to low-carbon fuels for the solid waste collection fleet may offset an increase in VMT to achieve enhanced waste diversion while also reducing total GHG emissions. The actual increase in VMT and GHG emissions associated with CAP Action 4.1 would be dependent on the combination of waste diversion strategies in the Zero Waste Plan that the City chooses to implement to achieve its 2020 and 2035 goals.

Consistent with AB 32, the CAP sets a GHG target for 2020 equivalent to ~~25~~ 15 percent below the City's 2010 baseline emissions, which is equivalent to 11.0~~1~~ MMT CO_2e. The CAP sets a 2030 target equivalent to 41 percent below the 2010 baseline to comply with Executive Order B-30-15. The CAP sets a 2035 target equivalent to 51~~0~~ percent below the 2010 baseline, as an interim target in line with the 2050 target established by Executive Order S-3-05, which call for an 80 percent reduction below 1990 levels. Accordingly, the City's 2035 target is approximately 6.5 MMT CO_2e. As shown in **Table 3.D-1**, implementation of the CAP is anticipated to enable the City to exceed its reduction target by 1.2~~3~~ MMT CO_2e in 2020, ~~176,528~~ 211,196 MT CO_2e in 2030, and ~~127,136~~ 205,462 MT CO_2e in 2035.

As outlined in the Project Description, the City would implement a monitoring plan to ensure that the strategies in the CAP achieve the anticipated GHG reductions.

TABLE 3.D-1
ESTIMATED GHG REDUCTION POTENTIAL OF CAP STRATEGIES

Reductions from	2020 MT CO2e	2030	2035 MT CO2e
2010 Baseline Emissions	~~13,019,591~~ 12,984,993	~~13,019,591~~ 12,984,993	~~13,019,591~~ 12,984,993
Total Projected Emissions (Business-as-Usual)	~~14,067,316~~ 14,124,690	~~15,667,449~~ 15,856,604	~~16,427,118~~ 16,716,020
Estimated GHG Reductions from CAP	~~(4,275,421)~~ (4,330,946)	~~(8,032,274)~~ (8,276,804)	~~(10,044,459)~~ (10,428,986)
GHG Emissions with Implementation of the CAP	~~9,791,894~~ 9,793,744	~~7,635,226~~ 7,579,800	~~6,382,659~~ 6,287,035
City Target Emissions Levels[1]	~~11,066,652~~ 11,037,244	~~7,811,754~~ 7,790,996	~~6,509,795~~ 6,492,497
Additional Reduction Below Target	*~~(1,274,758)~~* *(1,243,500)*	*~~(176,528)~~* *(211,196)*	*~~(127,136)~~* *(205,462)*

[1] To achieve its proportional share of the state reduction targets for 2020 (AB32), 2030 (EO B-30-15) and 2050 (EO S-3-05), the City would need to reduce emissions below the 2010 baseline by 15 percent in 2020,40 percent in 2030, and 50 percent by 2035. To meet these goals, the City must implement strategies that reduce emissions to approximately 11 MMT of CO_2e in 2020, 7.8 MMT CO_2e in 2030, and 6.5 MMT of CO_2e in 2035. Implementation of the CAP would accomplish this.

SOURCE: San Diego CAP, 2015

Significance of Impact

As described above, the CAP would not conflict with the GHG reduction targets established by Executive Order S-3-05, Executive Order B-30-15, and AB 32, or the reduction measures identified in CARB's AB 32 Scoping Plan ~~32~~; rather, the CAP is consistent with and would implement locally several of the GHG reduction measures contained in the CARB Scoping Plan. In addition, implementation of the CAP would result in the City attaining its share of GHG emissions reductions toward the achievement of the statewide GHG emissions reductions targets. This impact would therefore be less than significant.

Mitigation Framework

No mitigation is required.

E. Historical Resources

E.1 Introduction

This section analyzes potential impacts on historical resources that could result from implementation of the City of San Diego (City) Climate Action Plan (CAP).

E.2 Environmental Setting

Historic Overview

Hispanic Era

San Diego history can be divided into the Spanish Period (1769-1821), Mexican Period (1821-1846) and American Period (1846-Present). In spite of Juan Cabrillo's earlier landfall on Point Loma in 1542, the Spanish colonization of Alta California did not begin until 1769 with the founding of Mission San Diego de Alcalá by Father Junípero Serra. Concerns over Russian and English interests in California motivated the Spanish government to send an expedition of soldiers, settlers and missionaries to occupy and secure the northwestern borderlands of New Spain through the establishment of a Presidio, Mission, and Pueblo. The Spanish explorers first camped on the shore of the bay in the area that is now downtown San Diego. Lack of water at this location, however, led to moving the camp on May 14, 1769 to a small hill closer to the San Diego River and near the Kumeyaay village of Cosoy. Father Junípero Serra arrived in July of the same year to find the Presidio serving mostly as a hospital. The Spanish built a primitive mission and presidio structure on the hill near the river.

Bad feelings soon developed between the native Kumeyaay and the soldiers, resulting in construction of a stockade which, by 1772, included barracks for the soldiers, a storehouse for supplies, a house for the missionaries and the chapel, which had been improved. The log and brush huts were gradually replaced with buildings made of adobe bricks. Flat earthen roofs were eventually replaced by pitched roofs with rounded roof tiles. Clay floors were eventually lined with fired brick.

In August, 1774 the Spanish missionaries moved the Mission San Diego de Alcalá to its present location six miles up the San Diego River valley (modern Mission Valley) near the Kumeyaay village of Nipaguay. Begun as a thatched chapel and compound built of willow poles, logs and tules, the new Mission was sacked and burned in the Kumeyaay uprising of November 5, 1775. The first adobe chapel was completed in October 1776 and the present church was begun the following year. A succession of building programs through 1813 resulted in the final rectilinear plan that included the church, bell tower, sacristy, courtyard, residential complex, workshops, corrals, gardens and cemetery. Orchards, reservoirs and other agricultural installations were built to the south on the lower San Diego River alluvial terrace and were irrigated by a dam and aqueduct system. The initial Spanish occupation and mission system brought about profound changes in the lives of the Kumeyaay people. Substantial numbers of the coastal Kumeyaay were forcibly brought into the mission or died from introduced diseases.

As early as 1791, presidio commandants in California were given the authority to grant small house lots and garden plots to soldiers and their families and sometime after 1800, soldiers and their families began to move down the hill near the San Diego River. Historian William Smythe noted that Don Blas Aguilar, who was born in 1811, remembered at least 15 such grants below Presidio Hill by 1821, of which only five of these grant lands within the boundaries of what would become Old Town had houses in 1821. These included the retired commandant Francisco Ruiz adobe (now known as the Carrillo Adobe), another building later owned by Henry Fitch on Calhoun Street, the Ybanes and Serrano houses on Juan Street near Washington Street, and a small adobe house on the main plaza owned by Juan Jose Maria Marron.

Mexican Era

In 1822 the political situation changed as Mexico won its independence from Spain and San Diego became part of the Mexican Republic. The Mexican Government opened California to foreign trade; began issuing private land grants in the early 1820s, creating the rancho system of large agricultural estates; secularized the Spanish missions in 1833; and oversaw the rise of the civilian pueblo. By 1827, as many as 30 homes existed around the central plaza and in 1835, Mexico granted San Diego official pueblo (town) status. At this time the town had a population of nearly 500 residents, later reaching a peak of roughly 600. By 1835 the presidio, once the center of life in Spanish San Diego, had been abandoned and lay in ruins. Mission San Diego de Alcalá fared little better. The town and the ship landing area at La Playa were now the centers of activity in Mexican San Diego. However, the new Pueblo of San Diego did not prosper as did some other California towns during the Mexican Period.

The secularization in San Diego County triggered increased Native American hostilities against the Californios during the late 1830s. The attacks on outlying ranchos, along with unstable political and economic factors helped San Diego’s population decline to around 150 permanent residents by 1840. San Diego’s official Pueblo status was removed by 1838 and it was made a subprefecture of the Los Angeles Pueblo. When the Americans took over after 1846, the situation had stabilized somewhat, and the population had increased to roughly 350 non-Native American residents. The Native American population continued to decline, as Mexican occupation brought about continued displacement and acculturation of Native American populations.

The American Period began in 1846 when United States military forces occupied San Diego and this period continues today. When United States military forces occupied San Diego in July 1846, the town's residents split on their course of action. Many of the town’s leaders sided with the Americans, while other prominent families opposed the United States invasion. In December 1846, a group of Californios under Andres Pico engaged United States Army forces under General Stephen Kearney at the Battle of San Pasqual and inflicted many casualties. However, the Californio resistance was defeated in two small battles near Los Angeles and effectively ended by January 1847. The Americans assumed formal control with the Treaty of Guadalupe-Hidalgo in 1848 and introduced Anglo culture and society, American political institutions and especially American entrepreneurial commerce. In 1850, the Americanization of San Diego began to develop rapidly.

On February 18, 1850, the California State Legislature formally organized San Diego County. The first elections were held at San Diego and La Playa on April 1, 1850 for county officers. San Diego grew slowly during the next decade. San Diegans attempted to develop the town's interests through a transcontinental railroad plan and the development of a new town closer to the bay. The failure of these plans, added to a severe drought which crippled ranching and the onset of the Civil War, left San Diego as a remote frontier town. The troubles led to an actual drop in the town's population from 650 in 1850 to 539 in 1860. Not until land speculator and developer Alonzo Horton arrived in 1867 did San Diego begin to develop fully into an active American town.

American Era

Alonzo Horton's development of a New San Diego (modern downtown) in 1867 began to swing the community focus away from Old Town and began the urbanization of San Diego. Expansion of trade brought an increase in the availability of building materials. Wood buildings gradually replaced adobe structures. Some of the earliest buildings to be erected in the American Period were "Pre-fab" houses which were built on the east coast of the United States and shipped in sections around Cape Horn and reassembled in San Diego. Development spread from downtown based on a variety of factors, including the availability of potable water and transportation corridors. Factors such as views and access to public facilities affected land values, which in turn affected the character of neighborhoods that developed. During the Victorian Era of the late 1800s and early 1900s, the areas of Golden Hill, Uptown, Banker's Hill and Sherman Heights were developed. Examples of the Victorian Era architectural styles remain in these communities, as well as in Little Italy which developed at the same time. At the time downtown was being built, there began to be summer cottage/retreat development in what are now the Beach communities and La Jolla area. The early structures in these areas were not of substantial construction; they were primarily for temporary vacation housing.

Development also spread to the Greater North Park and Mission Hills areas during the early 1900s. The neighborhoods were built as small lots, a single lot at a time; there was not large tract housing development of those neighborhoods. It provided affordable housing away from the downtown area, and development expanded as transportation improved. Barrio Logan began as a residential area, but because of proximity to rail freight and shipping freight docks, the area became more mixed with conversion to industrial uses. This area was more suitable to industrial uses because land values were not as high; topographically the area is more level, and it is not as interesting in terms of views as are the areas north of downtown. Various ethnic groups settled in the area because of the availability of land ownership.

San Ysidro began to be developed at about the turn of the 20th century. The early settlers were followers of the Littlelanders movement. There, the pattern of development was designed to accommodate small plots of land for each homeowner to farm as part of a farming-residential cooperative community. Nearby Otay Mesa-Nestor began to be developed by farmers of Germanic and Swiss background. Some of the prime citrus groves in California were in the Otay Mesa-Nestor area; in addition, there were grape growers of Italian heritage who settled in the Otay River Valley and tributary canyons and produced wine for commercial purposes.

San Diego State University was established in the 1920s; development of the state college area began then and the development of the Navajo community was outgrowth from the college area and from the west. There was farming and ranching in Mission Valley until the middle portion of the 20th century when the uses were converted to commercial and residential. There were dairy farms and chicken ranches adjacent to the San Diego River where now there are motels, restaurants, office complexes and regional shopping malls. There was little development north of the San Diego River until Linda Vista was developed as military housing in the 1940s. The federal government improved public facilities and extended water and sewer pipelines to the area. From Linda Vista, development spread north of Mission Valley to the Clairemont Mesa and Kearny Mesa areas. Development in these communities was mixed use and residential on moderate size lots.

Tierrasanta, previously owned by the United States Navy was developed in the 1970s. It was one of the first planned unit developments with segregation of uses. Tierrasanta and many of the communities that have developed since, such as Rancho Penasquitos and Rancho Bernardo, represent the typical development pattern in San Diego in the last 25 to 30 years: uses are well segregated with commercial uses located along the main thoroughfares, and the residential uses are located in between. Industrial uses are located in planned industrial parks.

Summary of Historic Resources within San Diego

Historic Resources within San Diego span all eras described above, from the 1769 site of the Presidio of San Diego in Old Town, to the Veterans' War Memorial Building in Balboa Park, constructed in 1950, as well as many in between. They represent a wide variety of architectural styles from various eras in the City’s history. The San Diego Historical Resources Board has designated nearly 1,100 historical landmarks within the City, as well as 16 historic districts, including the Old Town Historical District, the Gaslamp Historical District, and the Naval Training Station Historical District. As of 2015, there are nearly 80 historical resources in San Diego that have been formally listed in the NRHP, and 8 National Historical Landmarks, most of which have overlapping designations with the City’s historical landmarks (City of San Diego, 2014).

Significant elements of San Diego’s historic built environment include railroad and maritime history, development in relationship to the automobile, the role of recreation in the development of specific industries, as well as the design and implementation of major regional planning and landscaping projects. The role of international fairs on architecture, landscape architecture and buildings, and the development of industrial and military technologies between the two world wars, are other significant elements of City history. The relationship between climate, terrain, native plant material and local gardening and horticultural practices; planning and subdivision practices from the turn of the century to the present day; and the post-war period of suburbanization are also historically important.

E.3 Regulatory Setting

Federal

The majority of applicable federal regulations concerning cultural resources are established by the National Historic Preservation Act of 1966 (NHPA) and the National Environmental Policy Act of 1969 (NEPA).

National Historic Preservation Act of 1966 (16 U.S.C. 470 et seq.)

A federal law enacted to avoid unnecessary harm to historic properties, NHPA includes regulations that apply specifically to federal land-holding agencies, but also includes regulations (Section 106) which pertain to all "undertakings" funded, permitted, or approved by any federal agency that have the potential to affect cultural resources. Provisions of NHPA establish the National Register of Historic Places (NRHP), the Advisory Council on Historic Preservation, State Historic Preservation Offices, and the federal grants-in-aid programs.

National Environmental Policy Act of 1969 (16 U.S.C. 4321, and 4331-4335, as amended)

The act establishes guidelines to "preserve important historic, cultural, and natural aspects of our national heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." All federal actions that are subject to NEPA are considered "undertakings" subject to compliance with Section 106 of the NHPA and all NEPA requirements concerning cultural resources.

Secretary of the Interior's Standards

The Secretary of the Interior is responsible for establishing professional standards and providing guidance related to the preservation and protection of all cultural resources listed in, or eligible for listing in, the NRHP. The Secretary of the Interior's Standards for the Treatment of Historic Properties apply to all grants-in-aid projects assisted through the National Historic Preservation Fund, and are intended to be applied to a wide variety of resources, including buildings, structures, sites, objects, and districts. The treatment standards, developed in 1992, are entitled "The Secretary of the Interior's Standards for the Treatment of Historic Properties" codified as 36 CFR 68. The standards address four treatments:

- **Preservation** means the act or process of applying measures necessary to sustain the existing form, integrity, and materials of a historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses on the ongoing maintenance and repair of historic materials and features, rather than extensive replacement and new construction.

- **Rehabilitation** means the act or process of making possible an efficient compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.

- **Restoration** means the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

- **Reconstruction** means the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

In addition, CEQA Section 15064.5(3)(b) states that, "Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historical resource."

Other Federal Legislation

Federal historic preservation legislation was initiated by the Antiquities Act of 1906 (16 U.S.C. 431-433) to protect historic and archaeological sites. The law established the procedure for issuing permits to conduct archaeological studies on federal land, as well as setting penalties for noncompliance. Permits are currently issued under this act and the Archeological Resources Protection Act of 1979 (ARPA) (16 U.S.C. 470aa-mm). The purpose of ARPA is to enhance preservation and protection of archaeological resources on public and Native American lands. The Historic Sites Act of 1935 (16 U.S.C. 461-467) states that it is national policy to "preserve for public use historic sites, buildings, and objects of national significance."

National Register of Historic Places

Archaeological and historical sites can be given a measure of protection if they are eligible for the *NRHP* (36CFR60.4 and 36CFR800). The criterion most often applied to archaeological sites is criterion (4), which addresses the potential of a site to yield information important in prehistory or history. The NRHP criteria and other information issued by the Advisory Council on Historic Preservation, present the legal measures of significance relevant to cultural resources. The NRHP criteria are the following:

> The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:
>
> - are associated with events that have made a significant contribution to the broad patterns of our history; or
> - are associated with the lives of persons significant in our past; or
> - embody the distinctive characteristics of a type, period, method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack distinction; or
> - have yielded, or may be likely to yield, information important to prehistory or history [36CFR60.4 (a-d)].

In addition to meeting one or more of NRHP criteria, a cultural resource must retain integrity. To retain historic integrity a property will always possess several, and usually most, of the seven aspects of integrity – Location, Design, Setting, Materials, Workmanship, Feeling and Association. The retention of specific aspects of integrity is paramount for a property to convey its significance. Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property is significant. In reference to archaeological sites, a cultural resource must have sufficient integrity so that available data can be recovered and analyzed in meaningful ways.

State

Cultural Resources

California Environmental Quality Act (Public Resources Code 21000 et seq.)(CEQA)

Under CEQA, a project that would cause a substantial adverse change in the significance of an "historical resource" is a project that may have a significant effect on the environment. (CEQA *Guidelines* Section 15064(b).) An "historical resource" is a resource that meets one of the following criteria (CEQA *Guidelines* Section 15064[a]):

- The resource is listed in or determined eligible for listing in the California Register of Historical Resources.
- The resource is included in a local register of historical resources, as defined in Section 5030.1[k] of the PRC,
- The resource is identified as significant in an historical resource survey meeting the requirements of Section 5024.1[g] of the PRC, unless the preponderance of evidence demonstrates that it is not historically or culturally significant; or
- The lead agency determines the resource to be significant as supported by substantial evidence in light of the whole record.

CEQA also requires consideration of impacts on "unique archeological sites." (CEQA *Guidelines* Section 15069.5(c)(3).) Most archeological sites that meet the definition of a unique archeological site also meet the definition of an "historical resource."

California Register of Historical Resources

On September 27, 1992, Assembly Bill 2881 (Statutes of 1992, Chapter 1075) was signed into law amending the Public Resources Code (PRC) as it affects historical resources (PRC Section 4850 *et seq*.) This legislation, which became effective on January 1, 1993, also created the CRHR. A historical resource must be significant at the local, state, or national level, under one or more of the following four CRHR criteria:

- It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
- It is associated with the lives of persons important to local, California, or national history;

- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Integrity is the authenticity of a historical resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. All resources nominated for listing on the CRHR must have integrity. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is proposed for eligibility. Alterations over time to a resource or historic changes in its use may themselves have historical, cultural, or architectural significance.

It is possible that historical resources may not retain sufficient integrity to meet the criteria for listing in the NRHP, but they may still be eligible for listing in the CRHR. A resource that has lost its historic character or appearance may still have sufficient integrity for the CRHR if it maintains the potential to yield significant scientific or historical information or specific data.

Section 15064.5 of the CEQA *Guidelines* states: "Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, shall be considered as mitigated to a level of less than a significant impact on the historical resource."

City of San Diego

The Historic Preservation Element of the City's General Plan (2008) contains a number of goals and policies that are intended to guide the preservation, protection, restoration, and rehabilitation of historical and cultural resources and maintain a sense of the City. These goals and policies are also intended to improve the quality of the built environment, encourage appreciation for the City's history and culture, maintain the character and identity of communities, and contribute to the City's economic vitality through historic preservation.

The Historical Resources Board (HRB) has been established by the City Council in accordance with the City Charter, Section 43. The Land Development Code sets forth HRB's authority, appointment and terms, meeting conduct, and powers and duties; the designation process including the nomination process, noticing and report requirements, appeals, recordation, amendments or rescission, and nomination of historical resources to state and national registers; and development regulations for historical resources. The purpose of these regulations is to protect, preserve, and, where damaged, restore the historical resources of San Diego. The historical resources regulations require that designated historical resources be preserved unless deviation findings can be made by the decision maker as part of a discretionary permit. Minor alterations consistent with the U.S. Secretary of the Interior's Standards are exempt from the

requirement to obtain a separate permit but must comply with the regulations and associated historical resources guidelines. Chapter 14 also requires review of construction and development permit applications impacting parcels containing structures 45 years old or older to determine whether or not a historical resource may exist on the parcel (SDMC 143.0212.) If a resource may be present and the project proposes a substantial alteration of the potential resource, a site-specific survey is required consistent with the City's Historical Resources Guidelines.

The Historical Resources Guidelines, located in the Land Development Manual, provide property owners, the development community, consultants and the general public explicit guidance for the management of historical resources located within the City's jurisdiction. These guidelines are designed to implement the City's Historical Resources Regulations contained in the Land Development Code (Chapter 14, Division 3, Article 2) in compliance with applicable local, state and federal policies and mandates, including, but not limited to, the City's Progress Guide and General Plan, CEQA, and Section 106 of the National Historic Preservation Act of 1966. The intent of the guidelines is to ensure consistency in the management of the City's historical resources, including identification, evaluation, preservation/mitigation and development.

According to the Land Development Manual, historical resources include all properties eligible or potentially eligible for the National Register of Historic Places, as well as those that may be significant pursuant to state and local laws and registration programs such as the California Register of Historical Resources or the City of San Diego Historical Resources Register. They include buildings, structures, objects, archaeological sites, districts or landscapes possessing physical evidence of human activities that are typically over 45 years old. Accordingly, a site-specific survey is required for any parcel containing a structure that is more than 45 years old for which a Construction Permit or Development permit is sought.

When significant historical resources are present within a given project area, mitigation to protect the resources is required prior to project implementation. The preferred alternative for mitigating impacts to historical resources is avoidance or preservation in place. If preservation is demonstrated to be infeasible, then alternative measures would be required. Preferred mitigation is to avoid affecting the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm to the resource should be taken. Depending upon project impacts, measures can include, but are not limited to:

a. Preparing a historic resource management plan;

b. Adding new construction which is compatible in size, scale, materials, color and workmanship to the historic resource (such additions, whether portions of existing buildings or additions to historic districts, shall be clearly distinguishable from historic fabric);

c. Repairing damage according to the Secretary of the Interior's Standards for Rehabilitation;

d. Screening incompatible new construction from view through the use of berms, walls and landscaping in keeping with the historic period and character of the resource;

e. Shielding historic properties from noise generators through the use of sound walls, double glazing and air conditioning; and

f. Removing industrial pollution at the source of production.

In addition to the City's Municipal Code, the Historic Preservation Element of the General Plan contains a number of goals and polies whose purpose is to guide the preservation, protection, restoration, and rehabilitation of historical and cultural resources and maintain a sense of the City. These goals and policies are also intended to improve the quality of the built environment, encourage appreciation for the City's history and culture, maintain the character and identity of communities, and contribute to the City's economic vitality through historic preservation.

E.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds, a significant impact with regard to historic resources could occur if implementation of the CAP results in the following:

- An alteration, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site;
- Any impact to existing religious or sacred uses within the potential impact area; or
- The disturbance of any human remains, including those interred outside of formal cemeteries.

A "substantial adverse change" to an historical resource is defined in Section 15064.5(b)(1) of the CEQA *Guidelines* as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." The significance of a historical resource is "materially impaired," according to Guidelines Section 15064(b)(2), when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that:

- convey its historic significance and that justify its inclusion in, or eligibility for inclusion in, the CRHR (including a determination by the lead agency that the resource is eligible for inclusion in the CRHR);
- account for its inclusion in a local register of historical resources adopted by local agency ordinance or resolution (in accordance with PRC Section 5020.1(k)); or
- account for its identification in a historical resources survey that meets the requirement of PRC Section 5024.1(g), including, among other things, that "the resource is evaluated and determined by the [State Office of Historic Preservation] to have a significance rating of Category 1 to 5 on DPR Form 523," unless the lead agency "establishes by a preponderance of evidence that the resource is not historically or culturally significant."

The State CEQA *Guidelines* indicate that projects that are consistent with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings

generally "shall be considered as mitigated to a level of less than a significant impact on the historical resource" (Section 15064.5(b)(3)).

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, the CAP strategies, actions, and supporting measures that could have an impact on historic resources include:

- **Action 1.1 Residential Energy Conservation and Disclosure Ordinance and Action 2.1 Community Choice Aggregation Program or Similar Program.** These actions could encourage retrofits of existing buildings to increase energy efficiency and install small-scale renewable energy facilities, such as rooftop solar. If this were to occur in historic buildings or districts, it could affect their integrity and ability to convey their historical significance.
- **Actions 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** These actions would result in in-fill development and redevelopment concentrated in identified Transit Priority Areas. This could result in the demolition or alteration of known historical resources and the accidental discovery and damage to previously unknown cultural resources.

Issue 1: Would implementation of the CAP cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5, or have other physical or aesthetic effects to a prehistoric or historic building, structure, object or site?

The demolition or substantial alteration of a resource listed on, or formally determined eligible for, the National Register of Historic Places or the California Register of Historical Resources, including contributors to National Register or California Register Historic Districts; or listed on the San Diego Historical Resources Register, including contributors to San Diego Register Historic Districts; or that meet the CEQA criteria for historical resources would represent a significant direct impact to historical resources. Additionally, grading, excavation and other ground disturbing activities associated with development projects that affect significant archaeological sites or traditional cultural properties would represent a significant direct impact to historical resources. While the CAP does not specifically propose demolition or substantial alteration of a resource or ground disturbing activities such as grading or excavation, it can be assumed that implementation of the CAP could have the potential to result in significant direct and/or indirect impacts to historical resources. Any significant impacts are most likely to occur through CAP Action 1.1 Residential Energy Conservation, Benchmarking, and Disclosure Ordinance, which may encourage residential energy efficiency retrofits; and CAP Action 2.1 Community Choice Aggregation Program, which may encourage distributed and large-scale renewable energy facilities. Implementation of the General Plan policies and compliance with the City's Historical Resources Regulations and guidelines outlined in Section E.3, Regulatory Setting, would serve to reduce impacts to a degree; however, existing legislation, including the California Solar Rights Act, currently limits the City's ability to require modifications to the placement or design of solar installations on historic and potentially historic resources; thereby increasing the likelihood that such resources may be adversely impacted as a result of solar installations and other retrofit actions.

Impacts to resources associated with the built environment may include substantial alteration, relocation, or demolition of historic buildings, structures, objects, landscapes, and sites. If important archaeological sites occur on property that is proposed for development, construction activities, such as grading and excavation, could result in significant impacts. Archaeological resources may be difficult to detect prior to construction activities, as they are generally located below the ground surface. Most archaeological sites have some surface expression and many have been found within inches of the ground surface. Therefore, the potential to affect important archaeological sites exists if a development activity requires even minimal grading and/or excavation. The likelihood of encountering archaeological resources is greatest on sites that have been minimally excavated in the past (e.g., undeveloped parcels, vacant lots and lots containing surface parking; undeveloped areas around historic buildings; under buildings with post, pier, slab, or shallow wall foundations without basements; etc.). Previously excavated areas are generally considered to have a low potential for archaeological resources, since the soil containing the archaeological resources has been removed. However, under certain circumstances, further evaluation would be required when previously excavated and/or graded project sites are located within areas of known archaeological sensitivity (e.g., recorded sites, designated sites, etc.), or are identified as traditional cultural properties. In addition, building demolition and surface clearance could result in impacts to archaeological resources.

Significance of Impact

Impacts to prehistoric or historic buildings, structures, objects, or sites associated with CAP Action 1.1 Residential Energy Conservation and Disclosure Ordinance (residential energy efficiency retrofits), as well as CAP Action 2.1 Community Choice Aggregation Program or Another Program (which may encourage distributed and large-scale renewable energy facilities), have the potential to be significant.

Mitigation Framework

The City of San Diego's General Plan, combined with federal, state, and local regulations, provide a regulatory framework for developing project-level historical resources mitigation measures for future discretionary projects. All development projects with the potential to affect historical resources—such as designated historical resources; historical buildings, districts, landscapes, objects, and structures; important archaeological sites; and traditional cultural properties—are subject to site-specific review in accordance with the City's Historical Resources Regulations and Historical Resources Guidelines, through the discretionary process. The following Mitigation Framework measure (HIST-1) would be required of all future development projects with the potential to impact significant archaeological resources.

> **Mitigation Measure HIST-1: Archaeological Resources**
>
> Prior to issuance of any permit for a future development project that could directly affect an archaeological resource, the City shall require the following steps be taken to determine: (1) the presence of archaeological resources and (2) the appropriate mitigation for any significant resources which may be impacted by a development activity. Sites may include, but are not limited to, residential and commercial properties, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse

socio-economic and ethnic backgrounds. Sites may also include resources associated with prehistoric Native American activities.

Initial Determination

The likelihood for the project site to contain historical resources shall be determined by reviewing site photographs and existing historic information (e.g. Archaeological Sensitivity Maps, the Archaeological Map Book, and the City's "Historical Inventory of Important Architects, Structures, and People in San Diego") and conducting a site visit. If there is any evidence that the site contains archaeological resources, then a historic evaluation consistent with the City's Historical Resources Guidelines (City Guidelines) would be required. All individuals conducting any phase of the archaeological evaluation program must meet professional qualifications in accordance with the City Guidelines.

Step 1: Based on the results of the Initial Determination, if there is evidence that the site contains historical resources, preparation of a historic evaluation is required. The evaluation report would generally include background research, field survey, archeological testing and analysis. Before actual field reconnaissance would occur, background research is required which includes a record search at the SCIC at San Diego State University and the San Diego Museum of Man. A review of the Sacred Lands File maintained by the NAHC must also be conducted at this time. Information about existing archaeological collections shall also be obtained from the San Diego Archaeology Center and any tribal repositories or museums.

In addition to the record searches mentioned above, background information may include, but is not limited to: examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), Sanborn Fire Maps, and historic cartographic and aerial photograph sources; reviewing previous archeological research in similar areas, models that predict site distribution, and archeological, architectural, and historical site inventory files; and conducting informant interviews. The results of the background information shall be included in the evaluation report.

Once the background research is complete, a field reconnaissance must be conducted by individuals whose qualifications meet the standards outlined in the City Guidelines. Consultants are encouraged to employ innovative survey techniques when conducting enhanced reconnaissance, including, but not limited to, remote sensing, ground penetrating radar, and other soil resistivity techniques as determined on a case-by-case basis. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or traditional cultural properties. If through background research and field surveys historical resources are identified, then an evaluation of significance must be performed by a qualified archaeologist.

Step 2: Once a historical resource has been identified, a significance determination must be made. Tribal representatives and/or Native American monitors will be involved in making recommendations regarding the significance of prehistoric archaeological sites during this phase of the process. The testing program may require reevaluation of the proposed project in consultation with the Native American representative which could result in a combination of project redesign to avoid and/or preserve significant resources as well as mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). An archaeological testing program will be required which includes evaluating the horizontal and vertical dimensions of a site, the

chronological placement, site function, artifact/ecofact density and variability, presence/absence of subsurface features, and research potential. A thorough discussion of testing methodologies, including surface and subsurface investigations, can be found in the City Guidelines.

The results from the testing program shall be evaluated against the Significance Thresholds found in the City Guidelines. If significant historical resources are identified within the Area of Potential Effect, the site may be eligible for local designation. At this time, the final testing report must be submitted to Historical Resources Board staff for eligibility determination and possible designation. An agreement on the appropriate form of mitigation is required prior to distribution of a draft environmental document. If no significant resources are found, and site conditions are such that there is no potential for further discoveries, then no further action is required. Resources found to be non-significant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate Department of Parks and Recreation (DPR) site forms and inclusion of results in the survey and/or assessment report. If no significant resources are found, but results of the initial evaluation and testing phase indicates there is still a potential for resources to be present in portions of the property that could not be tested, then mitigation monitoring is required.

Step 3: Preferred mitigation for historical resources is to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm shall be taken. For archaeological resources where preservation is not an option, a Research Design and Data Recovery Program is required, which includes a Collections Management Plan for review and approval. The data recovery program shall be based on a written research design and is subject to the provisions as outlined in CEQA, Section 21083.2. The data recovery program must be reviewed and approved by the City's Environmental Analyst prior to draft CEQA document distribution. Archaeological monitoring may be required during building demolition and/or construction grading when significant resources are known or suspected to be present on a site, but cannot be recovered prior to grading due to obstructions such as, but not limited to, existing development or dense vegetation.

A Native American observer must be retained for all subsurface investigations, including geotechnical testing and other ground-disturbing activities, whenever a Native American Traditional Cultural Property or any archaeological site located on City property or within the Area of Potential Effect of a City project would be impacted. In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of Public Resources Code Section 5097 must be followed. In the event that human remains are discovered during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 50987.98) and State Health and Safety Code (Section 7050.5), and in the federal, state, and local regulations described above shall be undertaken. These provisions are outlined in the Mitigation Monitoring and Reporting Program (MMRP) included in the environmental document. The Native American monitor shall be consulted during the preparation of the written report, at which time they may express concerns about the treatment of sensitive resources. If the Native American community requests participation of an observer for subsurface investigations on private property, the request shall be honored.

Step 4: Archaeological Resource Management reports shall be prepared by qualified professionals as determined by the criteria set forth in Appendix B of the City Guidelines. The discipline shall be tailored to the resource under evaluation. In cases involving complex resources, such as traditional cultural properties, rural landscape districts, sites involving a combination of prehistoric and historic archaeology, or historic districts, a team of experts will be necessary for a complete evaluation.

Specific types of historical resource reports are required to document the methods (see Section III of the City Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources; to document the appropriate curation of archaeological collections (e.g. collected materials and the associated records); in the case of potentially significant impacts to historical resources, to recommend appropriate mitigation measures that would reduce the impacts to below a level of significance; and to document the results of mitigation and monitoring programs, if required.

Archaeological Resource Management reports shall be prepared in conformance with the California Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format" (see Appendix C of the City Guidelines), which will be used by Environmental Analysis Section staff in the review of archaeological resource reports. Consultants must ensure that archaeological resource reports are prepared consistent with this checklist. This requirement will standardize the content and format of all archaeological technical reports submitted to the City. A confidential appendix must be submitted (under separate cover) along with historical resources reports for archaeological sites and traditional cultural properties containing the confidential resource maps and records search information gathered during the background study. In addition, a Collections Management Plan shall be prepared for projects which result in a substantial collection of artifacts and must address the management and research goals of the project and the types of materials to be collected and curated based on a sampling strategy that is acceptable to the City. Appendix D (Historical Resources Report Form) may be used when no archaeological resources were identified within the project boundaries.

Step 5: For Archaeological Resources: All cultural materials, including original maps, field notes, non-burial related artifacts, catalog information, and final reports recovered during public and/or private development projects must be permanently curated with an appropriate institution, one which has the proper facilities and staffing for insuring research access to the collections consistent with state and federal standards. In the event that a prehistoric and/or historic deposit is encountered during construction monitoring, a Collections Management Plan would be required in accordance with the project MMRP. The disposition of human remains and burial related artifacts that cannot be avoided or are inadvertently discovered is governed by state (i.e., Assembly Bill 2641 and California Native American Graves Protection and Repatriation Act of 2001) and federal (i.e., Native American Graves Protection and Repatriation Act) law, and must be treated in a dignified and culturally appropriate manner with respect for the deceased individual(s) and their descendants. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.

Arrangements for long-term curation must be established between the applicant/property owner and the consultant prior to the initiation of the field reconnaissance, and must be included in the archaeological survey, testing, and/or data recovery report submitted to the

City for review and approval. Curation must be accomplished in accordance with the California State Historic Resources Commission's Guidelines for the Curation of Archaeological Collection (dated May 7, 1993) and, if federal funding is involved, 36 Code of Federal Regulations 79 of the Federal Register. Additional information regarding curation is provided in Section II of the City Guidelines.

Significance after Mitigation

Implementation of the General Plan policies and compliance with the City's Historical Resources Regulations and guidelines outlined in the Regulatory Setting section would serve to reduce impacts to a degree, but cannot guarantee that all future project level impacts will be avoided or mitigated to a level less than significant. In addition, existing legislation, including the California Solar Rights Act, currently limits the City's ability to require modifications to the placement or design of solar installations on historic and potentially historic resources; thereby increasing the likelihood that such resources may be adversely impacted as a result of solar installations and other retrofit actions. Because the degree of impact and applicability, feasibility, and success of these measures cannot be accurately predicted for each specific project at this time, the program level impact related to historical resources is considered significant and unavoidable.

F. Transportation and Circulation

F.1 Introduction

This section analyzes potential transportation impacts that could result from implementation of the City of San Diego (City) Climate Action Plan (CAP).

F.2 Environmental Setting

San Diego's transportation system provides for the movement of people and goods through a network of highways and roads, public transit, freight railroads, airports, seaports, and intermodal facilities. Local streets, paths and trails serve to provide local access and connections to the regional network. The transportation system provides travel for residents, employees, visitors, and goods movement and creates a system that supports City and regional economic needs. To accommodate the various travel needs, the City's transportation network includes numerous modes of transportation.

The transportation system includes interstate and State highways, local arterial roadways, public transportation systems, nonmotorized transportation facilities, maritime and aviation facilities, and land ports of entry. The roadway system is an interconnected network of interstates, freeways, highways, toll roads, arterial streets, and local streets. This roadway network allows for the movement of private vehicles, commercial vehicles, buses, and heavy trucks. The regional public transit system includes local and regional bus operations, regional and interregional commuter rail services, and light rail service. The freight railroad network includes three freight rail lines serving cargo and goods services.

Nonmotorized transportation facilities generally include walkways and bikeways. Often, facilities such as bikeways share space with roadway facilities. The airport system consists of commercial, general, and military aviation facilities serving passenger, freight, business, recreational, and military needs. Individual components of the regional transportation network are described in the following sections.

Streets and Highways

San Diego has a well-developed and relatively uncongested highway system. Four major interstate freeways and six State highways serve the City. The average daily round-trip commute ranks fifth best compared to the 20 largest metropolitan areas in the nation. Since 1980, more than 1,000 miles of streets and highways have been added to the San Diego region. Roadways are categorized into the following street classifications and functions:

> **Freeway:** A street that is designed to carry through traffic, and is fully access controlled by grade separations, interchanges, and ramp connections. It normally is maintained by the California State Department of Transportation (Caltrans) and is constructed to State criteria, and varies in width from four to eight or more lanes.

Prime Arterial: A street that primarily provides a network connecting vehicles and transit to other primary arterials and to the freeway system. It carries heavy vehicular movement while providing low pedestrian movement and moderate bicycle and transit movements. It has a raised center median, bicycle lanes, street trees, traffic safety street lighting, sidewalks, and no access from abutting property. It may include underground utilities.

Major Arterial: A street that primarily provides a network connecting vehicles and transit to other major arterials and primary arterials, and to the freeway system and secondarily providing access to abutting commercial and industrial property. It carries moderate-to-heavy vehicular movement, low-to-high pedestrian and bicycle movements, and moderate-to-high transit movement. It has a raised center median, street trees, traffic safety, street lighting, and sidewalks, and may include landscaping, pedestrian-scale lighting, underground utilities, on-street parking, and/or bike lanes.

Collector Street: A street that primarily provides movement between local/collector streets and streets of higher classification and, secondarily, provides access to abutting property. It carries low- to moderate-vehicular movement, low- to heavy-pedestrian movement, moderate- to heavy-bicycle movement, and low- to moderate-transit movement. It has on-street parking, street trees, traffic safety street lighting, and sidewalks. It may also include landscaping, pedestrian-scale lighting, and underground utilities.

Local Street: A street that provides, primarily, direct access to abutting property. It carries low vehicular movement, low- to heavy-pedestrian movement, and low- to moderate-bicycle movement. It has on-street parking, street trees, traffic safety street lighting, and sidewalks. It may include landscaping, pedestrian-scale lighting, and underground utilities.

Bikeways

The City of San Diego has a developed network of designated Class I, II, and III bikeways. In San Diego, many Class I bikeways provide critical links between communities that would otherwise be totally separated for bicyclists. Two examples of these critical links are the Rose Canyon and Murphy Canyon paths, which provide for convenient bicycle travel in areas with no other alternative route adjacent to busy freeways. Most of the Class II bike lane facilities are located in areas of the City developed within the last 30 years, and some are of significant length. Class III bikeways are located both along major arterials and along quiet neighborhood streets. **Table 3.F-1** presents the existing bikeways in San Diego by classification.

The City of San Diego is committed to supporting bicycling as a form of mobility and recreation. As part of the City's long-term vision contained in the General Plan, the City supports the planning and development of bicycle-friendly development projects, streets, and neighborhoods for both commuter and recreational riders. To this end, the City has adopted a citywide Bicycle Master Plan (BMP), which guides development, maintenance, and support of the bicycle network, identifies existing and future needs, and provides specific recommendations for facilities and programs over the next 20 years. The BMP contains detailed policies, action items, and network maps, and addresses issues such as bikeway planning, community involvement, facility design, bikeway classifications, multimodal integration, safety and education, and support facilities. The BMP also identifies specific bicycling programs and addresses network implementation, maintenance and funding strategies.

TABLE 3.F-1
CLASSIFICATION AND EXISTING BIKEWAYS IN SAN DIEGO

Classification	Definition	Existing Facilities
Class I (Bike Path)	Consists of a paved right-of way completely separated from any street or highway.	Mission Valley, Mission Bay Park, along the beachfronts in Pacific Beach and Mission Beach, Carmel Valley, Rancho Peñasquitos, Mira Mesa, Rose Canyon, near the San Diego Airport, and in the Mission Trails Park
Class II (Bike Lane)	Provides a striped and stenciled lane for one-way travel on a street or highway; helps improve the visibility of bicyclists.	Rancho Bernardo, Rancho Peñasquitos, Sabre Springs, Mira Mesa, University City, Carmel Valley, and Tierrasanta, Genesee Avenue, Linda Vista, Kearny Villa, and Black Mountain Roads, Aero and Harbor Drives, Friars and Mission Gorge Roads, Nimitz and Beyer Boulevards, and Carmel Mountain, Torrey Pines, and Otay Mesa Roads
Class III (Bike Route)	Provides for shared use with pedestrian or motor vehicle traffic and is identified only by signage; recommended when there is enough right-of-way for bicyclists and motorists to safely pass.	Miramar Road, Rancho Peñasquitos Boulevard, Pacific Highway, 4th, 5th, and 6th Avenues, Camino Ruiz, and Saturn and Del Sol Boulevards, Orange Avenue in City Heights, Gold Coast Drive in Mira Mesa, Fort Stockton Drive in Mission Hills, Hornblend Avenue in Pacific Beach, L Street near Golden Hill, and Iris Avenue in Otay Mesa-Nestor
Freeway Shoulder	Locations along freeway shoulder where Caltrans permits bike use.	I-5, SR 52
Bicycle Boulevard	Local roads or residential streets that have been enhanced with traffic calming and other treatments to facilitate safe and convenient bicycle travel. Accommodate bicyclists and motorists in the same travel lanes, without specific vehicle or bicycle lane delineation. Prioritize bicycle travel above vehicular travel. Not recognized by Caltrans Highway Design Manual.	New Classification
Cycle Track	Hybrid type bicycle facility that combines the experience of a separated path with the on-street infrastructure of a conventional Bike Lane. Located in roadway right-of-ways but separated from vehicle lanes by physical barriers or buffers. Provide for one-way bicycle travel in each direction adjacent to vehicular travel lanes and are exclusively for bicycle use. Not recognized by Caltrans Highway Design Manual.	New Classification

SOURCE: General Plan PEIR, 2008; Bicycle Master Plan, 2013.

Transit

Transit services are provided for trips within the City and region and for trips between San Diego and adjacent areas. The current transit network includes local and express bus, light rail (trolley), and Coaster commuter rail services. Within the San Diego region, transit services are provided by the Metropolitan Transit System (MTS) in the southern metropolitan area (including the City of San Diego) and the North County Transit District (NCTD) in the northern part of the county (with Coaster and bus services that tie into the City of San Diego). Ferry service (privately operated)

also is available between San Diego and Coronado. In addition, there are demand-responsive transit services that provide transit service in sparsely traveled areas and for travelers with special needs that cannot be well served by fixed-route service.

The Coaster and Amtrak trains provide passenger rail service to the City of San Diego along the coastal rail corridor. Passenger and freight trains also share the predominately single-track corridor.

Transit service in the City includes the following (San Diego, 2011):

- The San Diego Trolley system operates over 53.5 miles on three routes with 53 stations on the Blue Line, Orange Line, and Green Line. The trolley connects the City with East San Diego County, San Diego State University, Qualcomm Stadium, Old Town, Downtown, and the Mexican Border. A new trolley extension is planned to extend service to UC San Diego and La Jolla.

- Passenger rail service is provided by Amtrak, Metrolink, and Coaster commuter trains. Amtrak operates ten trains to San Diego. The Coaster operates during peak hours connecting San Diego County coastal cities. More than 20 trains run on weekdays, with service on Saturdays. In March 2008, North County Transit District launched its newest addition, the east-west Sprinter light-rail train system between Oceanside, Vista, San Marcos and Escondido. The 22-mile long rail system runs east-west - along the Highway 78 corridor - serving 15 stations.

- The California High Speed Rail is planned to pass through San Diego and a trip from San Diego to Los Angeles would be approximately 80 minutes.

- The Metropolitan Transit System operates 29 bus routes covering 635 miles.

F.3 Regulatory Setting

This section identifies the laws, regulations, policies, and programs related to the physical environment that pertain to the Project's effects on transportation and circulation on the highways and local roadways within San Diego County.

Federal

MAP-21

The Moving Ahead for Progress in the 21st Century Act (MAP-21) was passed by Congress on June 29, 2012, and signed into law by President Obama on July 6, 2012. MAP-21 provides $105 billion in funding for surface transportation programs for fiscal years 2013 and 2014. This law replaced the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was passed in 2005 and extended ten times.

Federal highway standards are implemented in California by Caltrans (see discussion under "State" below).

State

Caltrans is responsible for planning, designing, constructing, and maintaining all State-owned and -operated roadways in San Diego County. Any improvements or modifications to the State highway system within San Diego County must be approved by Caltrans. San Diego County and other local agencies have no ability to unilaterally make improvements to the State highway system.

California Complete Streets Act of 2008

This law requires cities and counties to include complete streets policies as part of their general plans so that roadways are designed to safely accommodate all users, including bicyclists, pedestrians, transit riders, children, the elderly, and persons with disabilities, as well as motorists. This Act will complement an existing policy, which directs Caltrans to "fully consider the needs of non-motorized travelers (including pedestrians, bicyclists, and persons with disabilities) in all programming, planning, maintenance, construction, operations and project development activities and products." As of January 2011, any substantive revision of the circulation element in the general plan of a California local government must include complete streets provisions.

California Transportation Development Act (TDA)

The California TDA provides a dedicated State funding source for use by local jurisdictions at the county level to improve existing public transportation and encourage regional public transportation coordination. Transit agency audits are performed on a triennial basis to ensure that transit agencies are meeting minimum service performance standards (e.g., passengers per revenue mile and hour, annual passengers served etc.). Use of TDA monies is also tied to identifying and allocating funds to unmet transit needs, a process that requires local transportation planning agencies to identify and assess unmet transit needs on an annual basis. Unmet transit needs are defined in the Regional Transportation Plan (RTP) as transit service to those residents who use or would use public transportation regularly, if available, to meet their life expectations, such as trips for medical and dental services, shopping, employment, personal business, education, social services, and recreation. TDA funds can be allocated to non-transit uses if there are no unmet transit needs within the jurisdiction that are reasonable to meet with the use of TDA funds. Reasonableness is determined by community interest, equity, potential ridership, cost effectiveness, operational feasibility, and funding.

California Air Resources Board (CARB)

CARB, a part of the California EPA (Cal/EPA), is responsible for the coordination and administration of both federal and State air pollution control programs within California. With respect to transportation the California Air Resources Board reviews and approves metropolitan planning organizations (MPOs) implementation of Senate Bill 375 (SB 375) within each region of California.

Senate Bill 375

SB 375, which establishes mechanisms for the development of regional targets for reducing passenger vehicle greenhouse gas (GHG) emissions, was adopted by the State on September 30,

2008. On September 23, 2010, CARB adopted the vehicular GHG emissions reduction targets that had been developed in consultation with the MPOs; the targets require a seven to eight percent reduction by 2020 and between 13 to 16 percent reduction by 2035 for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs will work with local jurisdictions in the development of sustainable communities strategies (SCS) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions while meeting housing needs and other regional planning objectives.

Regional

Congestion Management Program (CMP)

The CMP is the State legislature's effort to reduce congestion on highways and local regionally significant roadways in California (Government Code Section 65089). It includes a land use analysis program to address regional transportation impacts of local land use decisions. It stipulates that a two-tiered review of affected CMP roadways must be completed for proposed residential, commercial, retail, and industrial development in the county. The first tier is a qualitative assessment of consistency with the designated Congestion Management Agency (in this case, SANDAG) regional planning documents and initiatives. The second tier determines whether the development project generates 125 or more peak-hour trips or 500 or more daily trips. Development projects that meet the tier two requirements must be evaluated for significant impacts per the CMP significance criteria under CEQA. Specific projects excluded from this requirement are high-density residential and mixed-use projects within one-quarter mile of a fixed-rail passenger station and low-income housing.

San Diego Association of Governments (SANDAG)

SANDAG serves as a forum for public decision making on regional issues such as growth, transportation, and land use in San Diego County and is comprised of representatives from each of the county's local jurisdictions, including the City of San Diego. SANDAG programs such as the Regional Comprehensive Plan (RCP) and RTP are pertinent to the City of San Diego's General Plan efforts.

SANDAG 2050 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS)

SANDAG adopted the 2050 RTP/SCS on October 28, 2011. The RTP/SCS serves as the region's comprehensive long-range transportation planning document by encouraging public policy decisions that will result in balanced investments for a wide range of multimodal transportation improvements. The RTP/SCS reflects a region-specific, balanced multimodal plan that achieves the intent of SB 375, and can be implemented through existing and planned programs or policies. The RTP/SCS consists of strategies to guide new policies and infrastructure development based on recent household and job growth forecasts, market demand and economic studies, and transportation studies.

City of San Diego General Plan

The following policies from the Mobility Element of the City of San Diego General Plan, adopted 2008, are applicable to transportation and circulation.

Walkable Communities

ME-A.1 Design and operate sidewalks, streets, and intersections to emphasize pedestrian safety and comfort through a variety of street design and traffic management solutions, including but not limited to those described in the Pedestrian Improvements Toolbox, Table ME-1.

ME-A.2 Design and implement safe pedestrian routes.

a. Collaborate with appropriate community groups, and other interested private and public sector groups or individuals to design and implement safe pedestrian routes to schools, transit, and other highly frequented destinations. Implement needed improvements and programs such as wider and non-contiguous sidewalks, more visible pedestrian crossings, traffic enforcement, traffic calming, street and pedestrian lighting, pedestrian trails, and educating children on traffic and bicycle safety.

b. Promote "Walking School Bus" efforts where parents or other responsible adults share the responsibility of escorting children to and from school by foot or bicycle.

c. When new schools are planned, work with school districts and affected communities to locate schools so that the number of students who can walk to school safely is maximized.

d. Implement Crime Prevention Through Environmental Design (CPTED) measures to reduce the threat and incidence of crime in the pedestrian environment (see also Urban Design Element, Policy UD-A.17).

e. Ensure that there are adequate law enforcement, code enforcement, and litter and graffiti control to maintain safe and attractive neighborhoods.

f. Provide adequate levels of lighting for pedestrian safety and comfort.

ME-A.3 Engage in a public education campaign to increase drivers' awareness of pedestrians and bicyclists, and to encourage more courteous driving.

ME-A.4 Make sidewalks and street crossings accessible to pedestrians of all abilities.

a. Meet or exceed all federal and State requirements.

b. Provide special attention to the needs of children, the elderly, and people with disabilities.

c. Maintain pedestrian facilities to be free of damage or trip hazards.

ME-A.5 Provide adequate sidewalk widths and clear path of travel as determined by street classification, adjoining land uses, and expected pedestrian usage.

a. Minimize obstructions and barriers that inhibit pedestrian circulation.

b. Consider pedestrian impacts when designing the width and number of driveways within a street segment.

ME-A.6 Work toward achieving a complete, functional and interconnected pedestrian network.

a. Ensure that pedestrian facilities such as sidewalks, trails, bridges, pedestrian-oriented and street lighting, ramps, stairways and other facilities are implemented as needed to support pedestrian circulation. Additional examples of pedestrian facilities are provided in the Pedestrian Improvements Toolbox, Table ME-1.

1. Close gaps in the sidewalk network.

2. Provide convenient pedestrian connections between land uses, including shortcuts where possible.

3. Design grading plans to provide convenient and accessible pedestrian connections from new development to adjacent uses and streets.

b. Link sidewalks, pedestrian paths and multi-purpose trails into a continuous region wide network where possible (see also Recreation Element, Policy RE-D.6).

c. Provide and maintain trash and recycling receptacles, and restrooms available to the public where needed.

d. Address pedestrian needs as an integral component of community and public facilities financing plan updates and amendments, other planning studies and programs, and the development project review process.

e. Routinely accommodate pedestrian facilities and amenities into private and public plans and projects.

ME-A.7 Improve walkability through the pedestrian-oriented design of public and private projects in areas where higher levels of pedestrian activity are present or desired.

a. Enhance streets and other public rights-of-way with amenities such as street trees, benches, plazas, public art or other measures including, but not limited to those described in the Pedestrian Improvement Toolbox, Table ME-1 (see also Urban Design Element, Policy UD-A.10).

b. Design site plans and structures with pedestrian-oriented features (see also Urban Design Element, Policies UD-A.6, UD-B.4, and UD-C.6).

c. Encourage the use of non-contiguous sidewalk design where appropriate to help separate pedestrians from auto traffic. In some areas, contiguous sidewalks with trees planted in grates adjacent to the street may be a preferable design.

d. Enhance alleys as secure pathways to provide additional pedestrian connections.

e. Implement traffic calming measures to improve walkability in accordance with Policy ME-C.5.

f. When existing sidewalks are repaired or replaced, take care to retain sidewalk stamps and imprints that are indicators of the age of a particular neighborhood, or that contribute to the historic character of a neighborhood.

ME-A.8 Encourage a mix of uses in villages, commercial centers, transit corridors, employment centers and other areas as identified in community plans so that it is possible for a greater number of short trips to be made by walking.

ME-A.9 Continue to collaborate with regional agencies, school districts, community planning groups, community activists, public health professionals, developers, law and code enforcement officials, and others, to better realize the mobility, environmental, social, and health benefits of walkable communities.

Transit First

ME-B.1 Work closely with regional agencies and others to increase transit ridership and mode share through increased transit service accessibility, frequency, connectivity, and availability.

a. Develop an urban network of routes that operate with a base, mid-day service frequency of ten-minute intervals or better.

b. Provide transit routes that offer efficient connections between highly frequented origins and destinations.

c. Enhance overall transit customer experience through attention to safety, station areas, vehicles, seating, and other factors.

ME-B.2 Support the provision of higher-frequency transit service and capital investments to benefit higher-density residential or mixed-use areas; higher-intensity employment areas and activity centers; and community plan-identified neighborhood, community, and urban villages; and transit-oriented development areas.

ME-B.3 Design and locate transit stops/stations to provide convenient access to high activity/density areas, respect neighborhood and activity center character, implement community plan recommendations, enhance the users' personal experience of each neighborhood/center, and contain comfortable walk and wait environments for customers (see also Urban Design Element, Policy UD-A.9).

ME-B.4 Collaborate with regional agencies to evaluate the need for, and design of, park-and-ride spaces at transit stations based on the character of the neighborhood, community plan recommendations, and the stations role in the regional transit system (see also Urban Design Element, Policies UD-A.11 and UD-A.12).

ME-B.5 Integrate the regional transit system with the intercity rail network.

ME-B.6 Work closely with regional agencies to achieve a transit system that is accessible to persons with disabilities.

ME-B.7 Support efforts to develop additional transportation options for non-driving older adults and persons with disabilities, including:

- Expansion of the regional database of public and private/nonprofit transportation providers;
- Development of innovative programs to link a wide range of transportation providers with persons in need; and
- Identification of transportation providers and programs that could assist in evacuating persons in need, as a part of emergency and disaster preparedness

plans that are referenced in the Public Facilities Element, Section P (see also Land Use Element, Policy LU-I.10).

ME-B.8 Support efforts to use alternative fuels in transit vehicles to help implement air quality and energy conservation goals.

ME-B.9 Make transit planning an integral component of long range planning documents and the development review process.

a. Identify recommended transit routes and stops/stations as a part of the preparation of community plans and community plan amendments, and through the development review process.

b. Plan for transit-supportive villages, transit corridors, and other higher-intensity uses in areas that are served by existing or planned higher-quality transit services, in accordance with Land Use and Community Planning Element, Sections A and C.

c. Proactively seek reservations or dedications of right-of-way along transit routes and stations through the planning and development review process.

d. Locate new public facilities that generate large numbers of person trips, such as libraries, community service centers, and some recreational facilities in areas with existing or planned transit access.

e. Design for walkability in accordance with the Urban Design Element, as pedestrian supportive design also helps create a transit supportive environment.

f. Address rail corridor safety in the design of development adjacent to or near railroad rights-of-way.

ME-B.10 Implement transit priority measures to help bypass congested areas. Priority measures include, but are not limited to, transit signal priority, queue jumpers, exclusive transit lanes, transit ways, use of freeway shoulders, and direct access ramps to freeway High Occupancy Vehicle (HOV) facilities.

Street and Freeway System

ME-C.2e Provide rights-of-way for designated HOV facilities and transit facilities on City streets where feasible.

ME-C.4c Encourage community participation in planning, assessing, and prioritizing the life cycle management of the circulation system.

Transportation Demand Management

ME-E.1 Support and implement TDM strategies including, but not limited to: alternative modes of transportation, alternative work schedules, and telework.

ME-E.2 Maintain and enhance personal mobility options by supporting public and private transportation projects that will facilitate the implementation of Transportation Demand Management (TDM) strategies.

ME-E.3 Emphasize the movement of people rather than vehicles.

ME-E.4 Promote the most efficient use of the City's existing transportation network.

ME-E.5 Support SANDAG's efforts to market TDM benefits to employers and identify strategies to reduce peak period employee commute trips.

ME-E.6 Require new development to have site designs and on-site amenities that support alternative modes of transportation. Emphasize pedestrian and bicycle-friendly design, accessibility to transit, and provision of amenities that are supportive and conducive to implementing TDM strategies such as car sharing vehicles and parking spaces, bike lockers, preferred rideshare parking, showers and lockers, on-site food service, and child care, where appropriate.

ME-E.7 Consider TDM programs with achievable trip reduction goals as partial mitigation for development project traffic and air quality impacts.

ME-E.8 Monitor implementation of TDM programs to ensure effectiveness.

Bicycling

ME-F.2 Identify and implement a network of bikeways that are feasible, fundable, and serve bicyclists' needs, especially for travel to employment centers, village centers, schools, commercial districts, transit stations, and institutions.

a. Develop a bikeway network that is continuous, closes gaps in the existing system, improves safety, and serves important destinations.

b. Implement bicycle facilities based on a priority program that considers existing deficiencies, safety, commuting needs, connectivity of routes, and community input.

c. Recognize that bicyclists use all City roadways.

1. Design future roadways to accommodate bicycle travel; and

2. Upgrade existing roadways to enhance bicycle travel, where feasible.

ME-F.4 Provide safe, convenient, and adequate short- and long-term bicycle parking facilities and other bicycle amenities for employment, retail, multifamily housing, schools and colleges, and transit facility uses.

a. Continue to require bicycle parking in commercial and multiple unit residential zones.

b. Provide bicycle facilities and amenities to help reduce the number of vehicle trips.

ME-F.5 Increase the number of bicycle-transit trips by coordinating with transit agencies to provide safe routes to transit stops and stations, to provide secure bicycle parking facilities, and to accommodate bicycles on transit vehicles.

F.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds (City of San Diego, 2011), a significant impact with regard to transportation and circulation could occur if implementation of the CAP results in the following:

- Result in traffic generation in excess of specific community plan allocation;
- Result in an increase in projected traffic which is substantial in relation to the existing traffic load and capacity of the street system;
- Result in the addition of a substantial amount of traffic to a congested freeway segment, interchange, or ramp as shown in the table on the next page;
- Result in an increased demand for off-site parking;
- Result in effects on existing parking;
- Result in a substantial impact upon existing or planned transportation systems;
- Result in substantial alterations to present circulation movements including effects on existing public access to beaches, parks, or other open space areas;
- Result in an increase in traffic hazards for motor vehicles, bicyclists or pedestrians due to a proposed, non-standard design feature (e.g., poor sight distance or driveway onto an access-restricted roadway); or
- Result in a conflict with adopted policies, plans or programs supporting alternative transportation models (e.g., bus turnouts, bicycle racks).

Impact Analysis

Several of the proposed CAP strategies and actions have the potential to affect transportation and circulation, by facilitating or promoting development or redevelopment that could alter existing roadways and traffic circulations patterns. Many of the proposed CAP strategies are aimed at decreasing use of automobiles as a transportation mode and promoting alternative modes, including walking, bicycling, and transit. Among those proposed CAP Actions that could affect transportation, many would only have the potential for an adverse effect during construction, when transportation systems and circulation movements could be temporarily disrupted.

- **Action 1.5 Outdoor Landscaping Ordinance.** This action could result in construction-related effects to transportation due to the construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, and/or monitoring systems.
- **Action 2.1 Community Choice Aggregation Program.** This action would promote the construction of distributed generation (small-scale renewables) on new and existing buildings, including solar photovoltaics, wind-turbines, and energy storage systems. This action may also result in the construction of large-scale renewable energy generation systems

within or outside of the City to satisfy a large demand for renewable energy. The construction and operation of such facilities could have an effect on transportation.

- **Action 2.2 Municipal Zero Emissions Vehicles.** This action would result in generally minor construction-related effects to transportation within the built environment associated with development of electrical charging and other fueling infrastructure.
- **Action 2.3 Convert Municipal Waste Collection Trucks to Low Emission Fuel.** This action would result in generally minor construction-related effects to transportation within the built environment associated with development of fueling infrastructure.
- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas.** This action would facilitate implementation of existing City policies that could result in construction-related effects to transportation due to the development of new and extended mass transit infrastructure and service.
- **Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas.** This action could result in construction-related effects to transportation due to implementation of the City's Pedestrian Master Plan, including renovations and retrofits of existing sidewalks, cross-walks, and pedestrian trails as well of construction of new pedestrian facilities.
- **Action 3.3 Implement the City's Bicycle Master Plan.** This action would facilitate implementation of the City's Bicycle Master Plan, which would include renovations and retrofits of existing bike lanes and construction of new bike lanes and facilities.
- **Action 3.4 Implement a Traffic Signal Master Plan.** This action would result in generally minor construction-related effects to transportation while traffic signals are reprogrammed.
- **Action 3.5 Implement a Roundabouts Master Plan.** This action would result in generally minor construction-related effects and operational changes to transportation through changes in the streetscape.
- **Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** This action would facilitate implementation of the City of Villages strategy, which could result in construction-related and operational effects on the transportation system and circulation.
- **Action 4.1 Divert Solid Waste and Capture Landfill Emissions.** This action would result in construction-related effects to transportation through the construction of new, or expansions of existing waste processing facilities, as well as new or expanded waste collection programs, and may result in long-term operational impacts.
- **Action 4.2 Capture Methane from Wastewater Treatment.** This action could result in construction-related effects to transportation during the construction of new or expanded wastewater treatment facilities, such as anaerobic digesters, and may result in long-term operational impacts.

Issue 1: Would implementation of the CAP result in a substantial impact upon existing or planned transportation systems?

The CAP includes strategies and actions intended to reduce dependence on the automobile and promote and facilitate the use of alternative modes of transportation, including bicycling,

walking, and transit. This shift is anticipated in the General Plan and SANDAG Regional Transportation Plan, and so these CAP actions are consistent with planned transportation systems. Several CAP actions (see the list, above), such as energy efficiency, renewable energy, urban forestry, and others, may result in temporary or limited disruption or alteration of transportation patterns during project construction, but would not substantially alter existing or planned transportation systems. Proposed CAP Action 3.4 Implement a Traffic Signal Master Plan and Action 3.5 Implement a Roundabouts Master Plan would improve traffic flow. These two latter actions would alter the transportation system, but are intended to facilitate traffic flow, and are not expected to result in adverse effects to transportation systems.

Proposed Action 3.2: Implement the City's Pedestrian Master Plan in Transit Priority Areas, and Action 3.3: Implement the City's Bicycle Master Plan, encourage and facilitate implementation of existing City policies, which have already been subjected to environmental review in the Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR) and the Bicycle Master Plan Update EIR. The Bicycle Master Plan Update EIR identified a potentially significant impact of plan implementation on traffic and circulation, related to the removal or alteration of vehicle travel lanes along some roadway segments and intersections. Specified mitigation measures would avoid or reduce some impacts, but the Bicycle Master Plan Update EIR concludes that in some instances, significant impacts could be unavoidable.

Proposed CAP Actions 3.1 and 3.6 would facilitate implementation of the General Plan's City of Villages strategy and Mobility Element, which would result in major changes to urban form, including transportation systems, particularly within the Transit Priority Areas. The General Plan PEIR notes the many planned improvements to the transportation and circulation system that would be undertaken through implementation of the City of Villages strategy and Mobility Element, including greater emphasis on alternative transportation modes, will generally lead to better traffic conditions in the City by the year 2030. However, the General Plan PEIR concludes that some projects undertaken pursuant to and consistent with General Plan policies, including the City of Villages strategy and Mobility Element, may adversely affect existing transportation systems. The General Plan PEIR includes a mitigation framework that would be applied to individual projects and would reduce many transportation and circulation impacts of these projects, but the General Plan PEIR concludes that the effectiveness of mitigation measures cannot be ascertained at the program level, and that there is still the potential for significant and unavoidable impacts.

Significance of Impact

As discussed above, the General Plan PEIR identified the potential for significant unavoidable impacts to traffic associated with implementation of the City of Villages strategy. While several of the CAP actions, particularly Action 3.4 Implement a Traffic Signal Master Plan and Action 3.5 Implement a Roundabouts Master Plan would improve traffic flow, they may not be completely effective in reducing or avoiding the impacts to transportation systems associated with the City of Villages strategy.

Other proposed CAP actions would tend to improve the transportation system or would have only temporally and spatially limited effects, which would be considered less than significant. No mitigation is required.

Issue 2: Would implementation of the CAP create substantial alterations to present circulation movements including effects on existing public access points and/or resulting from anticipated changes in transportation modes?

As noted above, implementation of several of the proposed CAP actions would involve construction that could affect present circulation patterns. These effects would be temporary, and can generally be minimized through project planning, scheduling, and temporary signage. Existing regulations require development of a construction traffic management plan for projects that could disrupt traffic flow. With the exception of major projects such as major infill development and redevelopment within TPAs and the construction of major infrastructure facilities (discussed below), the effects of construction-related proposed CAP actions on circulation movements would not be substantial.

Implementation of the City of Villages strategy and General Plan Mobility Element, as facilitated by CAP Actions 3.1 through 3.6, would result in a major change in urban form and a shift to greater use of alternative transportation modes. These changes may result in changes to circulation systems and circulation movements within and around the TPAs, including the potential for the following effects:

- reduced LOS at some intersections and roadways, particularly in TPAs where new development is concentrated;
- increased conflict between transportation modes, such as bicycle vs. motor vehicle and mass transit vs. pedestrian, potentially resulting in adverse impacts to traffic flow and increased safety issues;
- changes in roadway design, including implementation of CAP Action 3.5 Implement a Roundabouts Master Plan. This action would install roundabouts at 15 intersections by 2020 and an additional 20 intersections by 2035. While roundabouts tend to improve traffic flow, they may, in some instances, result in increased safety hazards for pedestrians by eliminating signalized pedestrian crossings and routing traffic closer to crosswalks;
- development of facilities for bicycles, pedestrians, and mass transit that may “borrow” transportation space from existing automobile-oriented roadways, resulting in reduced LOS and increased congestion.

As noted in the discussion of Issue 1, above, The General Plan PEIR notes the many planned improvements to the transportation and circulation system that would be undertaken through implementation of the City of Villages strategy and Mobility Element, including greater emphasis on alternative transportation modes, will generally lead to better traffic conditions in the City by the year 2030. However, the General Plan PEIR concludes that some projects undertaken pursuant to and consistent with General Plan policies, including the City of Villages strategy and Mobility Element, may adversely affect existing transportation systems. The General Plan PEIR includes a mitigation framework that would be applied to individual projects and would reduce

many transportation and circulation impacts of these projects, but the General Plan PEIR concludes that the effectiveness of mitigation measures cannot be ascertained at the program level, and that there is still the potential for significant and unavoidable impacts. Also as discussed under Issue 1, the Bicycle Master Plan Update EIR recognizes the potential for significant unavoidable impacts associated with development of bicycle lanes and bicycle paths, where these would require the removal or alteration of vehicle travel lanes along some roadway segments and intersections.

Proposed CAP Action 1.5 Outdoor Landscaping Ordinance, Action 2.1 Community Choice Aggregation Program, Action 4.1 Divert Solid Waste and Capture Landfill Emissions, and Action 4.2 Capture Methane from Wastewater Treatment all could result in the development of major new or expanded infrastructure facilities, including large-scale renewable energy facilities, recycled water plants, solid waste processing and recovery facilities, and wastewater treatment facilities. These projects could result in short-term construction-related alterations to circulation systems, and could also, in some instances, permanently alter circulation systems, for example, by redeveloping industrial sites that would result in changes to existing roadways. While projects of this type and scale will need to be examined at the project level, project locations will generally be within existing facility footprints or industrial areas, which typically have relatively low traffic density. For large-scale renewable energy facilities proposed to be located within the City, application of Mitigation Measure LU-1 (see Section 3.A, Land Use) which would establish a screening process for ensuring consideration of site adjacencies and compatibilities, would screen for potential impacts to circulation movements.

Proposed CAP Action 2.1 may also encourage or facilitate the development of larger renewable energy systems outside of the City limits. Such development could occur on private or public lands, but would likely be in relatively undeveloped areas with low intensity of use. Thus, there is little potential for construction and operation of these facilities to impact circulation movements, even though they may result in short-term increases in traffic during construction and long term increases in traffic during operation. In any event, it would be the responsibility of the agency with land use authority over the project site to ensure that developments would not adversely affect local circulation movements, which may occur through a CEQA review process conducted by the local land use authority. Therefore, impacts to circulation movements would likely not occur. In any case, traffic impacts of any renewable energy facilities proposed for development outside of the City will be considered in the planning and environmental review process for proposed facilities. Since the exact nature of any impacts cannot be known at this time, effective mitigation cannot be determined at this time

Proposed CAP Action 4.1 Divert Solid Waste and Capture Landfill Emissions would include changes to existing solid waste collection programs, specifically a change to weekly collection of organic materials and recycling. This may result in an increased number of solid waste collection vehicles entering neighborhoods to collect waste materials. In any given location in the City, this change may result in one or two additional collection vehicles per week. This level of increase may result in minor inconveniences for residents and businesses, but would not constitute a substantial change to circulation movements, and therefore would not be significant. However,

the overall increase in the number of collection vehicles required to implement the more frequent collection service may result in substantial additions of trucks accessing transfer stations and materials recovery facilities and other waste recovery facilities. In some instances, this increase could adversely and substantially affect circulation movements in and around these facilities. However, the CAP contains no specific proposal for new or expanded waste handling facilities. It would, therefore, be speculative to assume that development of such facilities would cause a significant impact on transportation and circulation. Since new and substantially altered solid waste facilities are projects subject to environmental review under CEQA, potential impacts on traffic and circulation would be evaluated at the time that specific projects are proposed.

Significance of Impact

As discussed above, implementation of the City of Villages strategy, including redevelopment within TPAs and the planned shift in transportation modes has the potential to result in significant adverse impacts on traffic and circulation. These impacts have been analyzed in other CEQA documents, including the General Plan PEIR and the Bicycle Master Plan Update EIR. Proposed CAP Action 3.5 Implement a Roundabouts Master Plan, however, has the potential to result in significant safety impacts for pedestrians.

Other proposed CAP actions would not have the potential for significant adverse impacts on traffic and circulation, or would be subject to later, project-specific environmental review. Therefore, impacts of adopting and implementing these actions would be less than significant.

Proposed CAP Action 2.1 Community Choice Aggregation Program could result in the development of large-scale renewable energy facilities that could result in a significant impact to local traffic circulation.

Mitigation, Monitoring, and Reporting

> **Mitigation Measure TR-1:** The Roundabouts Master Plan shall include a monitoring and adaptive management program to evaluate, and if necessary, to correct, pedestrian safety issues at operating roundabouts.

Significance after Mitigation

Mitigation Measure TR-1 would require the City to monitor, and if necessary, provide an adaptive management program for the Roundabouts Master Plan, called for in CAP Action 3.5. However, this measure would only monitor the implementation of the Roundabouts Master Plan, and not mitigate for the potential impact that could result from implementing the Roundabouts Master Plan. Thus, the program level impact related to transportation and circulation is considered significant and unavoidable.

No large-scale renewable energy facilities are proposed as a part of the CAP, and therefore, the potential impacts from the substantial alteration or disruption of existing traffic and circulation patterns from the construction of such facilities is unknown. Because the degree of impact and applicability, feasibility, and success of any mitigation measures relating to traffic circulation cannot be accurately predicted for any large-scale renewable energy project at this time, the

program level impact related to transportation and circulation is considered significant and unavoidable

Issue 3: Would implementation of the CAP conflict with the adopted policies, plans or programs supporting alternative transportation modes (e.g., bus turnouts, trolley extensions, bicycle lanes, bicycle racks, etc.)?

Implementation of Proposed CAP Action 3.1 Implement the General Plan's Mobility Element and the City of Villages Strategy in Transit Priority Areas, Action 3.2 Implement the City of San Diego's Pedestrian Master Plan in Transit Priority Areas, and Action 3.3 Implement the City of San Diego's Bicycle Master Plan, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas would increase the number of people walking, biking, and using transit in the City, especially in the Transit Priority Areas.

Implementation of the CAP would benefit bicycle travel through implementation of the City's Bicycle Master Plan. The CAP would also implement the pedestrian improvements outlined in the Pedestrian Master Plan, which would enhance pedestrian facilities and connectivity. Through implementation of the City of Villages strategy and General Plan Mobility Element, the CAP supports transit infrastructure improvements, frequency of service, and increased ridership.

Because these proposed CAP actions would support and facilitate alternative methods of transportation, such as public transit and bicycle and pedestrian facilities, the CAP would be consistent with the intent of City and regional plans that seek to improve local and regional transportation.

Significance of Impact

This impact would be less than significant and no mitigation is required.

G. Utilities

G.1 Introduction

This section analyzes the effects of implementation of the City of San Diego Climate Action Plan (CAP) on wastewater, storm water, solid waste, communications, and energy infrastructure.

G.2 Environmental Setting

Wastewater Management

The Public Utilities Department (PUD) manages the treatment of wastewater from the City of San Diego (City) and 15 other cities and districts in a 450-square mile service area, including: the cities of Chula Vista, Coronado, Del Mar, El Cajon, Imperial Beach, La Mesa, National City, Poway, the Lemon Grove Sanitation District, the Otay Water District, the Padre Dam Municipal Water District, the county of San Diego (including Lakeside/Alpine, Spring Valley, Wintergardens, and East Otay Mesa). The City's wastewater facilities and infrastructure are shown in **Figure 3.G-1**.

Much of the wastewater generated in the region is conveyed to the Point Loma Wastewater Treatment Plant (PLWTP or Point Loma Plant), where an average of 145 million gallons of wastewater are treated each day before being discharged to the Pacific Ocean through two ocean outfalls. A portion of the wastewater is sent to the North City Water Reclamation Plan (NCWRP), which can recycle up to 30 million gallons of water per day before being distributed throughout the northern San Diego region for reuse. Another portion of wastewater is also sent to the South Bay Water Reclamation Plant (SBWRP), which has a treatment capacity of 15 million gallons and relays reclaimed water to areas in the South Bay. Solids from the wastewater treatment plants are conveyed and processed at the Metro Biosolids Center, and then used as soil amendments, landfill, or landfill cover materials.

Currently, the 2.2 million people in PUD's service area generate an average of 160 million gallons of wastewater per day. The treatment plant and two reclamation plants provide a functional treatment system capacity of 285 MGD, sufficient to meet the future needs of the 450-square-mile service area. PUD is currently planning various improvement programs to comply with the National Pollution Discharge Elimination System (NPDES) Permit and maintain the conveyance system to adequately serve an estimated 2.8 million people by 2050 that would generate an average of 220 million gallons of wastewater per day). In addition, the City has an ongoing need to rehabilitate or replace many pipelines, trunk sewers and pump stations to meet the City's wastewater management needs in accordance with state and federal requirements.

Storm Water Management

The City's storm water infrastructure includes more than 39,000 storm drain structures and over 900 miles of storm drain pipes and channels serving approximately 237 square miles of urbanized

development. The City's storm water facilities and infrastructure are shown in **Figure 3.G-2**.The City's storm water pollution prevention efforts are designed to protect and improve the quality of recreational waters and potable water resources, along with beneficial uses of other water resources, to comply with federal, state, and local directives, while fostering a safe and efficient drainage system. The City implements infrastructure improvements and maintenance; water quality monitoring; source identification of pollutants; land use and environmental planning policies and regulations relating to storm water; pollution prevention activities such as education, code enforcement, outreach, public advocacy, and training; and design and development of best management practices.

Solid Waste

The City's solid waste facilities are shown in **Figure 3.G-3**. Much of the solid waste that is not diverted is disposed of at the City-operated Miramar Landfill, located in central San Diego on the Marine Corps Air Station. In 2013, approximately 803,000 tons of solid waste was disposed of at Miramar Landfill, accounting for 59 percent of the 1.4 million tons of City waste disposed that year. Most of the remaining waste is sent to the Otay Landfill, located on a County unincorporated area within the City of Chula Vista, or the Sycamore Landfill near the City's border with the City of Santee. Both Sycamore and Otay landfills are owned by Allied Waste, known nationally as Republic Services, and in some areas as Pacific Waste. In 2013 Otay landfill received 334 thousand tons of waste (24 percent) and Sycamore Landfill received 229 thousand tons (17 percent) from the City of San Diego. Operation of each facility requires a Solid Waste Facility Permit, issued by the appropriate Local Enforcement Agency, which reports to the California Department of Resources Recycling and Recovery (CalRecycle). The facilities must comply with all applicable federal, state, and local regulations.

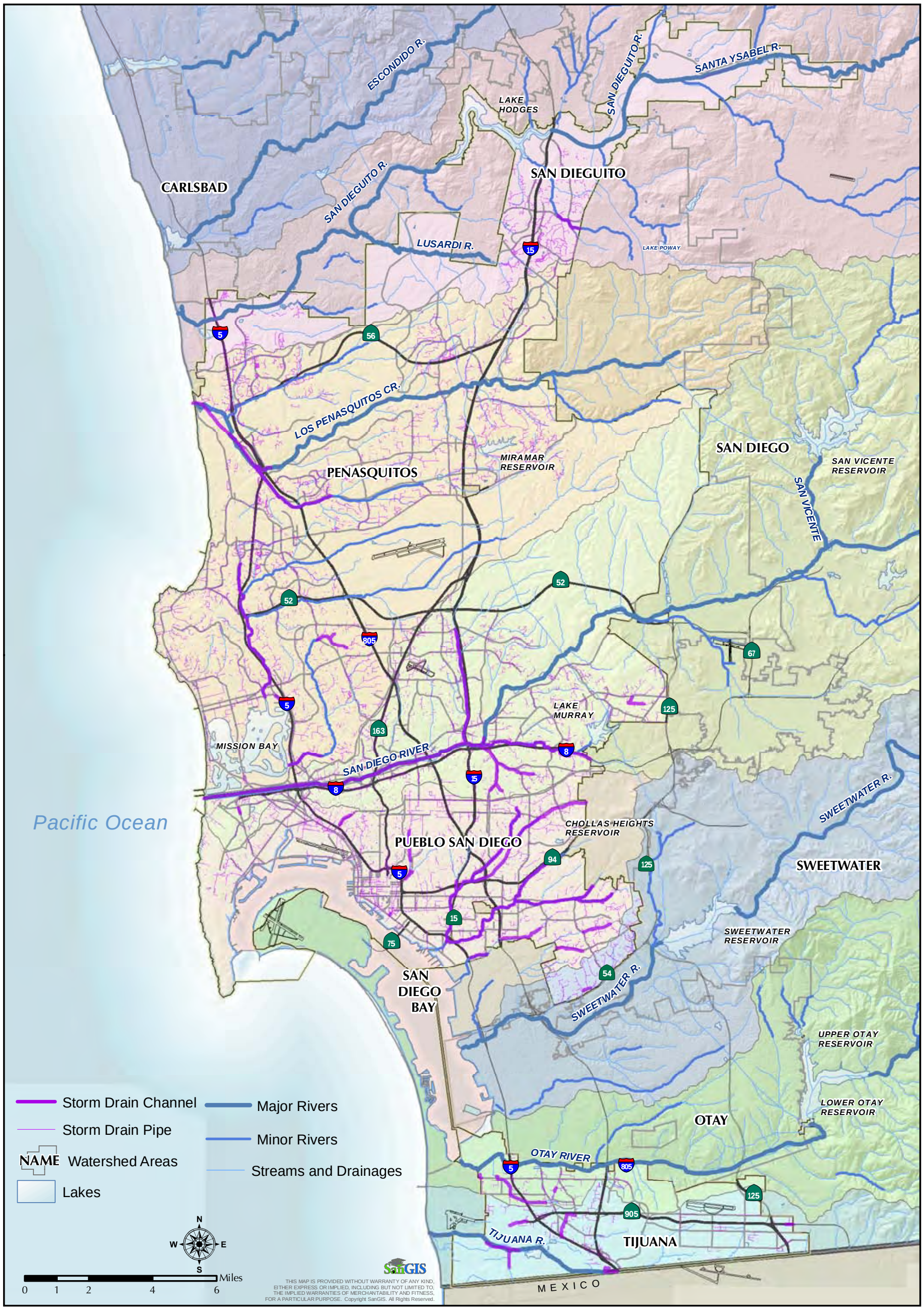
State of California regulations for solid waste (California PRC § 41700 - 41721.5) require that each region have a plan with adequate capacity to manage or dispose of solid waste for at least fifteen years into the future. The solid waste plan for the San Diego County region is contained in the Integrated Waste Management Plan, Countywide Siting Element (2005). The Countywide Integrated Waste Management Plan Five-Year Review Report (2012) estimated that the Miramar Landfill has a closure date of 2022 and the Otay Landfill has a closure date of 2028. Expansion of facilities would be necessary to ensure that the County of San Diego has enough daily permitted capacity to meet solid waste disposal needs until 2028, or the next 14 years; however, the County is lacking sufficient local landfill capacity to meet solid waste disposal needs after 2028 (County of San Diego, 2012).

It is the goal of the San Diego Association of Governments' (SANDAG) Comprehensive Resource Management Plan, the Countywide Siting Element, and the County's General Plan to make every effort to extend the life of existing disposal facilities. SANDAG's Regional Comprehensive Plan (RCP) Chapter 4.F provides language regarding "maximizing existing disposal capacity," and aims to achieve a 75 percent diversion rate. The Public Resources Code requires CalRecycle to establish a per capita target for solid waste reduction for each jurisdiction.

SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

San Diego CAP . 140651

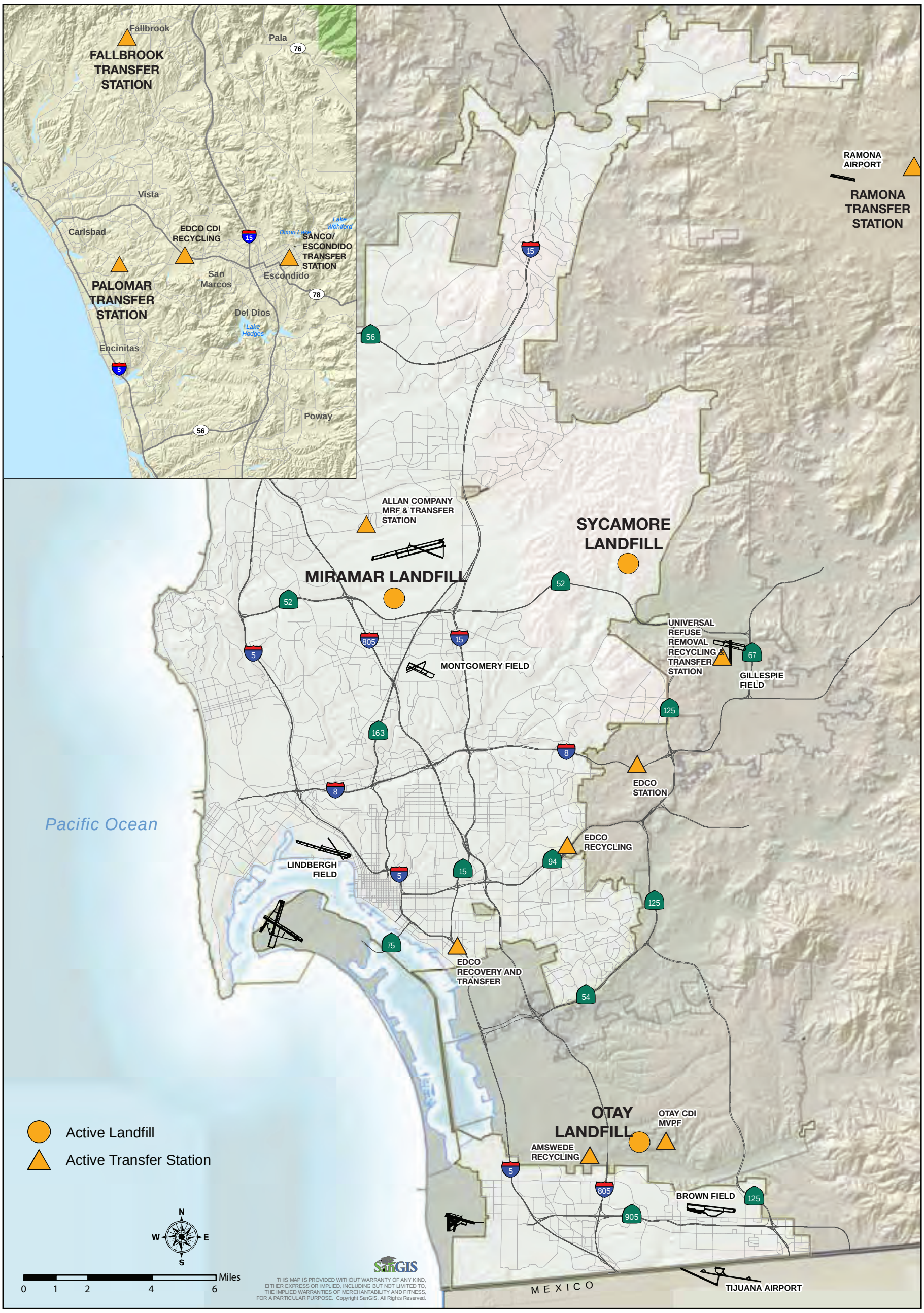
Figure 3.G-1
Wastewater Facilities



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

San Diego CAP . 140651

Figure 3.G-2
Storm Water Drainage



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

San Diego CAP . 140651

Figure 3.G-3
Solid Waste Facilities

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In 2013 San Diego stayed under its target disposal rate of 8.4 pounds per person per day (PPD), with an actual 5.7 PPD rate (CalRecycle, 2015). Additionally, AB 341 sets a statewide 75 percent waste diversion goal and CalRecycle's Strategic Directive 6.1 calls for a 50 percent reduction in organics disposed, both by 2020. Compliance with and implementation of the above state regulations and policy goals could potentially extend the life of existing landfills. On July 13, 2015 the City adopted a Zero Waste Plan, referenced in CAP Action 4.1, which would result in 70 percent waste diversion by 2020, 90 percent waste diversion by 2035 and 100 percent diversion by 2040.

Energy Generation

San Diego Gas & Electric Company (SDG&E) provides energy service to 3.3 million consumers through 1.3 million electric meters and more than 800,000 natural gas meters in San Diego and southern Orange counties. The utility's area spans 4,100 square miles. **Figure 3.G-4**, Gas and Electric Substations and Transmission Lines, identifies some of SDG&E's facilities within the City. ~~SDG&E produces electricity primarily at the Cabrillo (Encina) and South Bay Power Plants, as well other smaller power plants~~ SDG&E purchases electricity from the Otay Mesa Energy Center, owned by Calpine, and SDG&E owns and operates the Palomar Energy Center in Escondido, which is then sent to customers through various transmission lines. In 2010, the baseline year of the CAP, SDG&E derived 11 percent of its power from renewable resources including: wind power, solar, small hydroelectric, geothermal, and biomass and waste digestion. SDG&E derived 60 percent of its power from natural gas sources, with nuclear energy providing 16 percent, and coal power providing four percent. The remaining nine percent was derived from untraceable electricity transactions (SDG&E, 2010). Natural gas is imported into the City from sources outside of the region through pipelines to users and in addition to generating electricity is used for heating homes and businesses.

G.3 Regulatory Setting

Federal

International Boundary & Water Commission

The International Boundary & Water Commission (IBWC) is the agency charged with finding solutions to the problem of untreated wastewater flowing into San Diego's South Bay area from Mexico. Organized in 1889, the IBWC has responsibility for establishing the boundary and water treaties between the United States and Mexico and settling differences that may arise out of these treaties. The IBWC is a binational body with a U.S. Section and a Mexican Section, each headed by an engineer-commissioner appointed by their respective Presidents.

Clean Water Act

The Clean Water Act (CWA) is the cornerstone of surface water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric although narrative criteria based on bio-monitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) are responsible for ensuring implementation and compliance with the provisions of the Federal CWA.

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with an NPDES permit. The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges, including discharges associated with construction activities, under the NPDES program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), enacted in 1976, is the principal federal law in the United States governing the disposal of solid waste and hazardous waste. RCRA amended the Solid Waste Disposal Act of 1965 and set national goals for: protecting human health and the natural environment from the potential hazards of waste disposal; energy conservation and natural resources protection; reducing the amount of waste generated, through source reduction and recycling and ensuring the management of waste in an environmentally sound manner. RCRA is now most widely known for the regulations that set standards for the treatment, storage and disposal of hazardous waste in the United States. The U.S. Environmental Protection Agency (EPA) published waste management regulations, which are codified in Title 40 of the Code of Federal Regulations at parts 239 through 282. Most states have enacted laws and created regulations that are at least as stringent as the federal regulations.

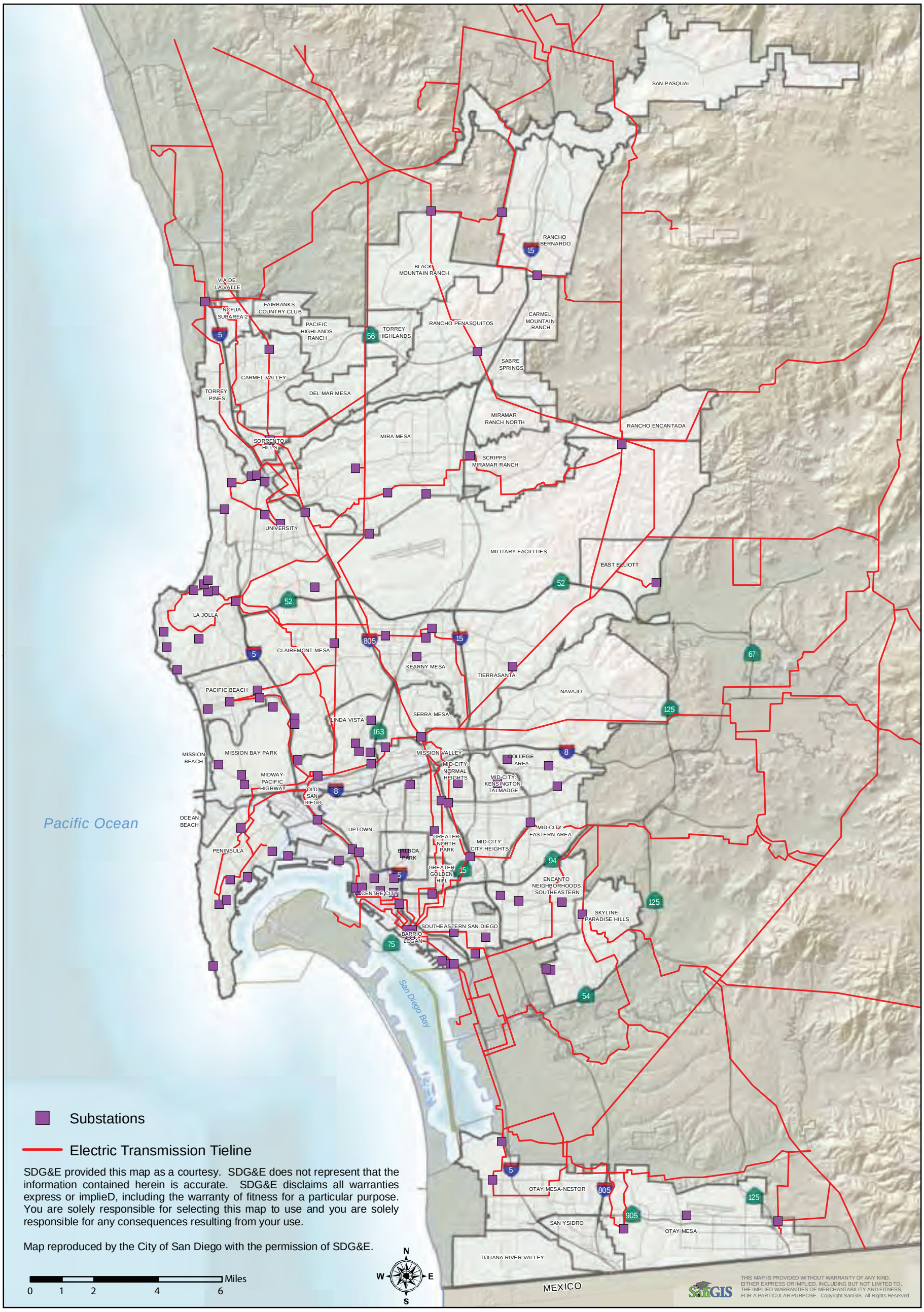
State

California Water Code

The California Water Code, a section of the California Code of Regulations, establishes the governing laws pertaining to all aspects of water management in California.

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) was created by the Legislature in 1967 with the mission of ensuring the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The SWRCB has authority over water allocation by administering and regulating appropriative water right permits and licenses, as per the Water Code, which require all use of water to be “reasonable and beneficial,” which includes municipal and industrial uses, irrigation, hydroelectric generation, and livestock watering.



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

San Diego CAP . 140651

Figure 3.G-4
Gas and Electric

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In 1970, the Porter-Cologne Water Quality Act created nine Regional Water Quality Control Boards (RWQCBs) that develop and enforce water quality objectives of the State and implementation plans within their region. The Regional Boards oversee various programs that protect surface water and groundwater quality, and enforce the federal NPDES Wastewater Program, and NPDES Storm Water Program. The Regional Boards are also responsible for developing and implementing Total Maximum Daily Loads (TMDLs) for impaired water bodies. The City of San Diego is located within Region 9, which is the San Diego Regional Water Quality Control Board.

Executive Order B-29-15

On April 1, 2015, Governor Brown signed Executive Order B-29-15, which for the first time in state history implements mandatory water reductions in cities and towns across California to reduce water usage by 25 percent. The order also calls on local water agencies to adjust their rate structures to implement conservation pricing, recognized as an effective way to realize water reductions and discourage water waste.

California Storm Water Regulatory Program

Drawing authority from the federal Water Pollution Control Act (Clean Water Act) and the NPDES Permit system, the SWRCB provides storm water policy and regulatory oversight, on behalf of the federal government. Under the program, cities and other jurisdictions that operate large, medium, and small storm water systems, as well as specific industrial sites and construction sites, that disturb more than an acre of land must apply for storm water permits. Construction permits are based on overall risk and may require certain measures to prevent erosion and reduce sediment and other pollutant discharges. Industrial activities are required to use the best technology available to reduce pollutants, and may be required to develop a storm water pollution prevention plan and monitoring plan. Municipal separate storm sewer system (MS4) operators must comply with permits that regulate storm water entering their systems under a two phase system.

California Code of Regulations

In accordance with Title 27of the California Code of Regulations (CCR), Sections 21600 through 21900, all solid waste disposal sites are jointly regulated under Title 27 CCR, Division 2, Chapters 1 through 8, Section 20005 through 23014; the California RWQCB; and CalRecycle. Solid waste transfer stations and compost sites are regulated under Title 14 CCR, Division 7, Chapters 3 and 4, Sections 17200 through 17870. Transfer stations and compost sites are primarily regulated by CalRecycle. The RWQCB has recently begun to regulate compost sites and has a limited authority regarding transfer stations. The City of San Diego is the Local Enforcement Agency (LEA) for all land within the city’s boundaries.

California Public Resources Code

AB 939 modified the Public Resources Code to establish the “California Integrated Waste Management Act (IWMA) of 1989, which defined an integrated waste management hierarchy

starting with the newly established CalRecycle (formerly the California Integrated Waste Management Board) and local agencies, to guide in implementation of, in order of priority as follows: (1) source reduction, (2) recycling and composting, and (3) environmentally safe transformation and land disposal. AB 939 also replaced the various County Solid Waste Management Plans (CoSWMP) with Integrated Waste Management Plans (IWMP) and Siting Elements. AB 939 established statewide waste diversion goals to divert 25 percent of all solid waste from landfills by January 1, 1995 and 50 percent of all solid waste by January 1, 2000 through source reduction, recycling, composting, and, to a limited extent, transformation activities. AB 939 also established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities, although the measurement for the waste diversion was changed to disposal-based, per capita limits by SB 1016, and the statewide waste diversion from disposal target was increased to 75 percent by AB 341.

California Global Warming Solutions Act of 2006

The passage of AB 32 requires a sharp reduction of greenhouse gas (GHG) emissions for the State of California to set the stage for its transition to a sustainable, low-carbon future. AB 32 was the first program in the country to take a comprehensive, long-term approach to addressing climate change, and does so in a way that aims to improve the environment and natural resources while maintaining a robust economy. As part of AB 32, landfill methane emissions are a targeted source of GHG reductions, as methane is a powerful GHG with about ten times the global warming potential of carbon dioxide.

California Public Utilities Commission

The California Constitution vests in the California Public Utilities Commission (CPUC), the exclusive power and sole authority to regulate privately owned or investor-owned public utilities such as SDG&E. This exclusive power extends to all aspects of the location, design, construction, maintenance, and operation of public utility facilities. Nevertheless, the CPUC has provisions for regulated utilities to work closely with local governments and give due consideration to their concerns. The state also regulates energy consumption under Title 24 of the California Code of Regulations. The Title 24 Building Energy Efficiency Standards apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential structures.

Senate Bill 226

The passage of SB 226 adds section 21080.35 to the Public Resources Code, and creates a new categorical exemption under CEQA for the installation of solar energy systems, including associated equipment, on the roof of an existing building or at an existing parking lot.

Renewable Energy Portfolio Standard

California's Renewables Portfolio Standard (RPS) was established in 2002 under SB 1078, accelerated in 2006 under SB 107 and expanded in 2011 under SB 2. As one of the most ambitious renewable energy standards in the country, the RPS program requires investor-owned

utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Regional

Regional Energy Strategy 2030

The City participates in regional energy planning efforts, and is actively working to achieve the City's long-term goal to pursue energy independence. The Regional Energy Strategy (RES) 2030 was produced to develop a vision for how energy will be produced and consumed in the region. The strategy developed policies and provided measurable targets to achieve the region's sustainable energy vision. At a regional level, the current status toward meeting these targets is reported in the RCP Performance Monitoring Report, most recently release for the years 2012-2013.

Local

Construction and Demolition Diversion Ordinance

The City of San Diego Municipal Code contains the City's Construction and Demolition Debris Ordinance (Sections 66.0601 through 66.0610), which requires an applicant for a building or demolition permit to divert 50 percent, by weight, of the total construction and demolition debris generated.

Recycling Ordinance

The of San Diego Recycling Ordinance was adopted in 2007 and fulfills requirements in Senate Bill 341 which mandated recycling regulations and enhanced recycling requirements for businesses and multifamily residences, as well as increased reporting requirements, for the whole state. The Ordinance requires all residential, commercial, and industrial property owners to procure recycling services in order to increase waste diversion from landfills.

City of San Diego General Plan

The following policies from the City of San Diego General Plan, adopted 2008, are applicable to wastewater, storm water, solid waste, and energy facilities.

Wastewater

PF-F.5 Construct and maintain facilities to accommodate regional growth projections that are consistent with sustainable development policies (see also Conservation Element, Section A).

Waste Management

PF-I.1 Provide efficient and effective waste collection services.

a. Route City and private fleets to minimize truck trip distances and use fuel-efficient vehicles producing low emissions.

b. Design or retrofit City and private operation stations consistent with sustainable development policies (see also Conservation Element, Section A).

c. Encourage waste reduction and recycling with source-separated collection of materials.

d. Provide space for recycling containers and efficient collection.

e. Identify additional funding sources for all waste management services.

PF-I.2 Maximize waste reduction and diversion (see also Conservation Element, Policy CE.A.9).

a. Conveniently locate facilities and informational guidelines to encourage waste reduction, diversion, and recycling practices.

b. Operate public and private facilities that collect and transport waste and recyclable materials in accordance with the highest environmental standards.

c. Support resource recovery programs that produce soil additives, mulch, or compost from yard debris and organic waste.

d. Maximize the separation of recyclable and compostable materials.

e. Collaborate with public and private entities to support the development of facilities that recycle materials into usable products or that compost organic materials.

f. Reduce and recycle Construction and Demolition (C&D) debris. Strive for recycling of 100 percent of inert C&D materials and a minimum of 50 percent by weight of all other material.

g. Use recycled, composted, and post-consumer materials in manufacturing, construction, public facilities and in other identified uses whenever appropriate.

h. Encourage advance disposal fees to prevent the disposal of materials that cause handling problems or hazards at landfills.

i. Provide sufficient information on the movement of waste and recyclable materials to meet regulatory requirements at public and private transfer stations and materials recovery facilities to allow adequate planning.

j. Reduce subsidies to disposal and encourage incentives for waste diversion.

k. Promote manufacturer and retailer responsibility to divert harmful, reusable, and recyclable products upon expiration from the waste stream.

1. Encourage the private sector to build a mixed construction and demolition waste materials recycling facility.

m. Expand and stabilize the economic base for recycling in the local and regional economy by encouraging and purchasing products made from recycled materials.

n. Continuously assess new technologies for recycling, composting, cogeneration, and disposal to maximize efficient use of City resources and environmental protection.

PF-I.3 Provide environmentally sound waste disposal facilities and alternatives.

a. Design and operate disposal facilities located within the City, or that serve as a destination for City waste, to meet or exceed the highest applicable environmental standards.

b. Identify and investigate alternatives to standard disposal practices as fiscally-and environmentally sound technologies become available.

c. Ensure efficient, environmentally sound refuse and recyclable materials collection and handling through appropriate infrastructure, alternative fuel use, trip coordination, and other alternatives.

d. Ensure environmentally and economically sound disposal options for materials that cannot be effectively reduced, reused, recycled, or composted.

e. Plan for disposal needs considering factors such as trip distance and environmentally sound disposal capacity.

f. Cooperate on a regional basis with local governments, state agencies, and private solid waste companies to find the best practicable, environmentally safe, and equitable solutions to solid and hazardous waste management.

g. Maximize environmental benefit in landfill-based waste diversion and effective load check programs by ensuring that recyclable or hazardous materials do not end up in the landfill.

h. Use closed and inactive landfill sites for public benefits, such as provision of energy from waste generated methane, reaction of wildlife habitat upon proper remediation or other land uses such as parks determined to be appropriate.

PF-I.4 Promote litter prevention efforts and practices.

a. Provide conveniently located public litter containers on public streets and in large public venues and strategically located recyclable materials containers.

b. Encourage partnerships and collaborative efforts to sponsor and coordinate neighborhood pride/cleanup events.

c. Promote anti-litter education campaign and encourage point of purchase and other funding options to support education and cleanup efforts.

Urban Runoff Management

CE-E.2c Reduce the amount of impervious surfaces through selection of materials, site planning, and street design where possible.

CE-E.2d Increase the use of vegetation in drainage design

CE-E.6 Continue to encourage "Pollution Control"" measures to promote the proper collection and disposal of pollutants at the source, rather than allowing them to enter the storm drain system.

a. Promote the provision of used oil recycling and/or hazardous waste recycling facilities and drop-off locations.

b. Review plans for new development and redevelopment for connections to the storm drain system.

c. Follow up on complaints of illegal discharges and accidental spills to storm drains, waterways, and canyons.

Sustainable Energy

CE-I.1 Maintain a centralized Energy Conservation and Management Program and Comprehensive Plan for all City operations.

CE-I.2 Coordinate City energy planning programs with federal, state and regional agencies. Maximize energy efficiency, use of clean renewable resources, and demand response.

CE-I.3 Pursue state and federal funding opportunities for research and development of alternative and renewable energy sources.

CE-I.4 Maintain and promote water conservation and waste diversion programs to conserve energy.

CE-I.5 Support the installation of photovoltaic panels, and other forms of renewable energy production.

a. Seek funding to incorporate renewable energy alternatives in public buildings.

b. Promote the use and installation of renewable energy alternatives in new and existing development.

CE-I.6 Develop emergency contingency plans, in cooperation with other local agencies and regional suppliers, to assure essential energy supplies and reduce non-essential consumption during periods of energy shortage.

CE-I.7 Pursue investments in energy efficiency and direct sustained efforts towards eliminating inefficient energy use.

CE-I.8 Improve fuel -efficiency to reduce consumption of fossil fuels.

CE-I.9 Implement local and regional transportation policies that improve mobility and increase energy efficiency and conservation.

CE-I.10 Use renewable energy sources to generate energy to the extent feasible.

CE-I.11 Collaborate with others to develop incentives to increase the use of renewable energy sources or reduce use of non-renewable energy sources.

CE-I.12 Use small, decentralized, aesthetically-designed, and appropriately-sited energy efficient power generation facilities to the extent feasible.

CE-I.13 Promote and conduct energy conservation education.

G.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego's CEQA Significance Determination Thresholds, an impact related to public utilities, including natural gas, water, sewer, solid waste disposal, or communication systems, would be considered significant if implementation of the CAP would:

- Result in the need for new systems, or requires substantial alterations to existing utilities, the construction of which would create physical impacts;
- Result in the use of excessive amounts of fuel or energy (e.g. natural gas);
- Result in the use of excessive amounts of power;
- Result in use of excessive amounts of water; or
- Result in landscaping which is predominantly non-drought resistant vegetation.

Impact Analysis

As indicated in Table 2-5 in Chapter 2, Project Description, the proposed CAP actions that could have an impact on public utilities include the following:

- **Action 1.5 Outdoor Landscaping Ordinance.** Supporting measures and steps that support implementation of this action could result in the construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, monitoring systems, etc. This could lead to increased recycled water supply and delivery systems.

- **Action 2.1 Community Choice Aggregation Program or Similar Program.** Supporting measures and steps that support implementation of this action could result in installation of small scale and large scale renewable energy generation, transmission, and storage systems. These could result in the extension, expansion, rerouting, and construction of new public and private utility needs.

- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas.** These actions would facilitate the implementation of the City of Villages strategy and the shift to greater emphasis on mass transit and other modes of transportation. These actions could, therefore, result in new construction and other physical changes that could result in new or modifications to the existing infrastructure systems to support a more concentrated urban landscape.

- **Action 3.6 Implement the City's Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City's Bicycle Master Plan, and Action 3.5 Implement a Roundabouts Master Plan.** These actions would generally result in minor changes to improve or add pedestrian and bicycle facilities, primarily in and around the TPAs, and would result in the installation of up to 24 roundabouts to facilitate traffic flow. These changes could result in replacement or relocation of existing public utility infrastructure.

- **Action 4.1 Divert Solid Waste and Capture Landfill Emissions.** These actions could lead to the development of new or expanded waste diversion and gas capture/use facilities.

Development of such facilities may result in the construction of new or expansion of existing natural gas, communication systems, water, sewer, and solid waste disposal systems.

- **Action 4.2 Capture Methane from Wastewater Treatment.** Associated actions could result in new or expanded wastewater treatment facilities, such as anaerobic digesters. These could result in the extension, expansion, rerouting, and construction of new public utility infrastructure.

Impacts and Mitigation Measures

Issue 1: Would implementation of the CAP result in a need for new utility systems, or require substantial alterations to existing infrastructure?

Several of the CAP strategies include actions that when implemented will result in physical changes to the environment. Some of these changes may result in a need for new utility systems or require modifications or retrofits to existing infrastructure.

Action 1.5 would involve implementation of the Outdoor Landscaping Ordinance, which would result in more efficient landscape irrigation systems and encourage the installation of landscaping that uses less water. This action could result in the construction of new or expansion of existing water recycling facilities and infrastructure, and installation of recycled water delivery systems, monitoring systems, etc. The use of more efficient landscape irrigation systems is consistent with the City's Recycled Water Study and Recycled Water Master Plan, which include long-term goals to optimize water reuse, including increased recycled water irrigation use.

Action 1.5 would also reduce outdoor water use, and would in turn reduce runoff from landscape irrigation. Implementation of the CAP would result in alterations to existing buildings and infrastructure, in the form of building retrofits as well as improvements to the transportation and utility systems; however, such changes are not expected to substantially increase impervious surfaces to the extent that it would require the construction of new storm water infrastructure. Such improvements would be subject to existing City policies and regulations and General Plan policies and programs applicable to storm water, including the Municipal Storm Water NPDES Permit. Because the CAP would reduce, rather than increase, storm water runoff, it is not anticipated that it would cause new or more severe impacts related to storm water.

As described in the CAP, the City's GHG inventory shows that energy consumption accounts for 40 percent of the emissions generated by the City. These emissions are the result of energy generation methods that emit high levels of GHGs, which include combustion of natural gas and coal. Action 2.1 of the CAP establishes a goal for the City to supply 100 percent of its electricity needs with renewable sources by 2035 through a community choice aggregation program or similar program, which would leverage the aggregated purchasing power of individual customers to purchase renewable energy on a large scale, and through encouraging local solar photovoltaic (PV) and solar water heater installations. Small scale facilities, such as rooftop photovoltaic panels, generally do not require substantial alterations to existing public utility infrastructure and therefore, would have less-than-significant impacts to public utilities. Additionally, this strategy

is intended to reduce the demand on utility systems, thereby reducing the energy used to operate such facilities and the emissions associated with generating that energy.

Large scale renewable energy projects, such as solar and wind farms, could involve new, large or extensive facilities that could result in a need for new utility systems, or require substantial alterations to existing infrastructure. New or expanded facilities may include or supply power generation and transmission facilities, which may have both construction effects and operational effects, including the disruption of services due to replacement or relocation of existing facilities. These impacts could be significant.

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas strategy are intended to facilitate implementation of major changes to the urban landscape already planned for in the General Plan, Sustainable Communities Strategy, and other planning documents. These changes would result in the development of more dense, built-up, and transit and alternative transportation-oriented development, particularly within the TPAs. The City of Villages strategy would reduce per capita demand for services, but could still result in localized effects (e.g., installation of new transmission or conveyance systems) as well as new or upgraded facilities. Because future development of properties within the City of Villages planning areas would likely increase demand, there may be a need to increase sizing of existing pipelines and mains for both wastewater and water, which could adversely affect existing utilities, as discussed more fully in the General Plan EIR.

The CAP does not propose any site-specific projects or allow for development that would result in a direct increase in demand for public utilities. The strategies in the CAP would generally support the General Plan Mitigation Framework by reducing energy and water demand, and extending the useful life of landfills. However, improvements to existing utilities systems and the development of new systems are anticipated to be developed to meet certain goals within the CAP that could have significant effects.

Proposed CAP Actions 3.2 and 3.3 would make generally minor changes to improve or add pedestrian and bicycle facilities, primarily in and around the TPAs, and would result in the installation of up to 24 roundabouts to facilitate traffic flow. These changes could result in replacement or relocation of existing public utility infrastructure. These impacts would be temporary in nature and are not expected to result in substantial alterations to existing infrastructure.

Action 4.1 would result in alterations to existing landfills to increase the methane capture rate to 80 percent in 2020 and 90 percent by 2035. Improvements to existing gas-capture equipment would not require the expansion of existing landfill facilities, and would not modify the remaining capacity of existing landfills. However, such improvements could result in construction activities within the existing footprint of affected landfill facilities that could generate construction waste. Action 4.1 also establishes a goal to reach zero waste disposal (90 percent diversion) by 2040. Such measures include a change to the weekly collection of recycling and green waste and addition of food scraps. This could result in new or expanded

organics processing and recycling processing. To achieve 90 percent waste diversion, existing recycling and transfer facilities may need to be expanded, and new waste handling facilities may need to be constructed. Associated construction and operational impacts of these facilities could be significant.

Any solid waste generated during construction-related activities associated with implementation of the CAP would be recycled or disposed of in accordance with all applicable local, state, and federal regulations. Demolition or construction materials that can be recycled or reused would comply with the City's Construction and Demolition Debris Ordinance. Any new facilities or expansions to existing facilities would be subject to existing City policies and regulations and General Plan policies and programs applicable to solid waste facilities.

Implementation of Strategy 4.2 in the CAP would result in alterations to existing wastewater facilities to increase the methane capture rate from 71 percent in 2010 to 98 percent by 2035. Such improvements could result in construction activities within the existing footprint of affected wastewater facilities, which could have short-term effects related to air quality, noise, traffic, GHG emissions, and hydrology. Such projects would be subject to existing City policies and regulations and General Plan policies and programs applicable to wastewater.

Significance of Impact

As discussed above, implementation of the City of Villages strategy, as facilitated by the CAP, has the potential to result in significant impacts to utility systems. However, because the City of Villages strategy is already City policy, and because it was already the subject of environmental review (the General Plan PEIR), potential impacts associated with implementation of the City of Villages strategy are not considered impacts of the CAP.

Also as noted above, development of large-scale renewable energy facilities, water recycling facilities, and waste processing facilities could potentially require new or expanded utility systems. The CAP contains no specific plans for developing such facilities, but only anticipates that they may be developed in the future, and such impacts would be site- and project-specific. For example, a large-scale renewable energy generation facility could be proposed for a site already adequately served with electrical transmission lines, water, sewer, communications, and stormwater systems, and so would not have a significant impact on utility systems; while another proposed facility may not be so well served, and may therefore require the expansion or extension of utility systems. The City's process for the evaluation of discretionary projects includes environmental review and documentation pursuant to CEQA as well as an analysis of those projects' consistency with the goals, policies, and recommendations of the General Plan. As future environmental analysis would be required for specific public utilities projects necessary to implement the CAP, impacts associated with construction and operation of new or substantially altered utilities systems would be addressed at the project-level. Therefore, such impacts would be examined as specific projects are proposed, and for the purposes of this PEIR, impacts of the CAP on utility systems are less than significant.

Mitigation Framework

No mitigation is required.

H. Water Supply

H.1 Introduction

This section analyzes potential impacts on water supply that could result from implementation of the City of San Diego (City) Climate Action Plan (CAP).

H.2 Environmental Setting

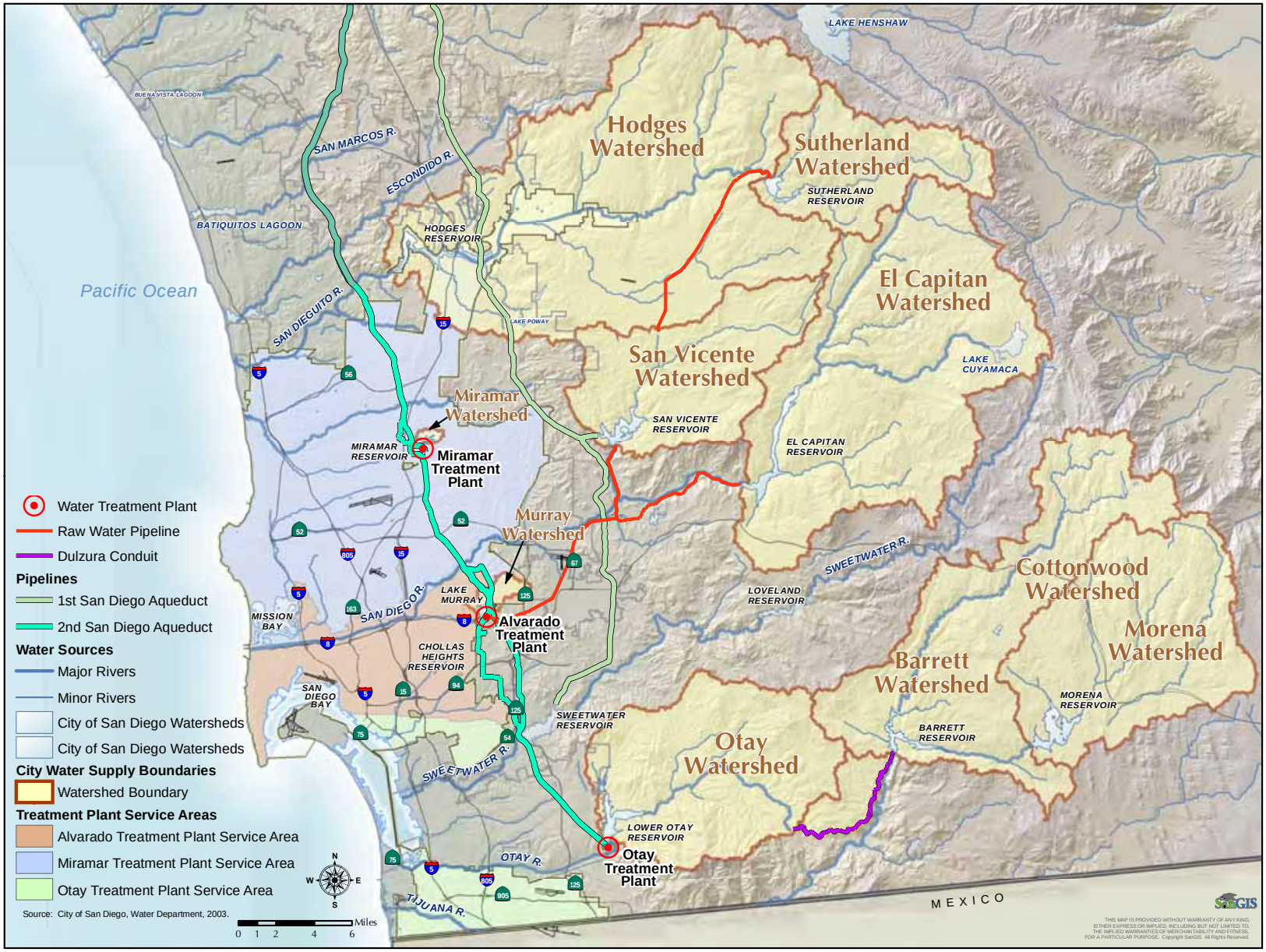
Regional Water Supply

The climate in the San Diego region is a semiarid coastal desert with little rainfall (averaging ten inches annually); therefore, the City relies heavily on imported water to meet its demands. The City of San Diego purchases water from the San Diego County Water Authority (Water Authority or SDCWA), a wholesale water agency that provides water to 24 member agencies. SDCWA purchases much of its water from the Metropolitan Water District of Southern California (MWD), which is a cooperative of 26 cities and water agencies that serve 19 million people across six counties in Southern California in a 5,200 square mile service area. MWD has stated that it "would provide the Water Authority with adequate supplemental imported supplies in normal years and a single dry-year. In multiple dry years, under its projected preferential right formula, the Water Authority could experience shortages (SDCWA, 2011)."

MWD imports water from Northern California via the State Water Project (SWP) and the Colorado River. Water from the SWP is captured in reservoirs north of Sacramento before its released through natural rivers and streams into the Sacramento-San Joaquin Delta, where it travels down the 444-mile long California Aqueduct which is operated by the Department of Water Resources (DWR). Water from the Colorado River travels from Lake Havasu on the California-Arizona border down the 242 mile long Colorado River Aqueduct where it joins the imported water from the SWP at a MWD facility in Riverside County before being transferred to local water treatment plans. The City's potable water system is shown in **Figure 3.H-1**.

SDCWA Water Supply Diversification

In the past, the City relied on water from MWD for 95 percent of its supply. During years of drought this made the City extremely vulnerable to water supply shortages, such as in 1991 when a drought forced MWD to cut its deliveries to San Diego by 30 percent. As a result, SDCWA has implemented a strategy to aggressively diversify its water supply portfolio through the introduction of new local and imported water supplies, so that by 2014 MWD deliveries accounted for around 49 percent of the total supply with new sources and conservation efforts accounting for the remaining 51 percent. **Table 3.H-1** shows the change in SDCWA's water supply portfolio from historic supplies in 1991 to present day and future supplies in 2020.



SOURCE: City of San Diego Draft General Plan Final PEIR, September 2007

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Figure 3.H-1

Surface and Recycled Water System

TABLE 3.H-1
SDCWA WATER SUPPLY DIVERSIFICATION

	1991		2014		2020	
Source	**TAF**	**Percent**	**TAF**	**Percent**	**TAF**	**Percent**
Metropolitan Water District	550	*95*	326	*49*	231	*30*
Imperial Irrigation District Transfer	-	-	100	*15*	190	*24*
All American and Coachella Canal Lining	-	-	80	*12*	80	*10*
Conservation Efforts	-	-	73	*11*	103	*13*
Local Surface Water	28	*5*	40	*6*	48	*6*
Recycled Water	-	-	29	*4*	44	*6*
Groundwater	-	-	19	*3*	27	*4*
Seawater Desalination	-	-	-	-	56	*7*
Total	**578**	***100***	**667**	***100***	**779**	***100***

NOTES: TAF represents one thousand acre feet per year, or 325,851 thousand gallons.

SOURCE: SDCWA, 2015.

SDCWA secured new imported water supplies through a long-term (45-75 year) water conservation and transfer agreement with the Imperial Irrigation District, which provided approximately 100,000 acre-feet of water from the Colorado River in 2014 and will double by 2021. SDCWA has a separate 110-year agreement to receive approximately 80,000 acre-feet of water from the Colorado River by lining parts of the Coachella and All-American canals.

SDCWA is also in the final stages of executing a $3.1 billion Capital Improvements Program that involves 50 different projects, including new reservoirs, pipelines, pumping stations, a new regional water treatment facility, and a project to raise the San Vicente Dam to allow for additional local storage. Other strategies involve collaboration with SDCWA's 24 local member retail agencies, and include: promoting water conservation through water use efficiency programs, and the introduction of supplies from groundwater, recycled water, and seawater desalination. Additional information about SDCWA water supply diversification projects is provided in SDWCA's 2010 Urban Water Management Plan (UWMP).

City of San Diego Water Supply

The City of San Diego water system serves more than 1.3 million people populating approximately 340 square miles. The City also conveys and sells water to the City of Del Mar, Santa Fe and San Dieguito Irrigation Districts, and California American Water Company (Cal-Am), which, in turn, serves the Cities of Coronado and Imperial Beach and portions of south San Diego. The City has agreements to sell surplus water to Otay Water District and exchange water to Ramona Municipal Water District. The City maintains several emergency connections to and from neighboring water agencies, including Santa Fe Irrigation District, Poway Municipal Water District, Otay Water District, Cal-Am, and Sweetwater Authority.

The City has nine local surface water reservoirs with more than 408,000 AF of capacity, which are connected directly or indirectly to three water treatment plants that include the Miramar Water Treatment Plant (WTP), the Alvarado WTP, and the Otay WTP and have a combined total treated capacity of 294 MGD. The department maintains and operates 32 treated water storage facilities, and a series of distribution lines to serve San Diego residents. Along with the potable water supply, the City has two water reclamation plants to treat wastewater to a level that is approved for irrigation, manufacturing and other non-drinking, or non-potable purposes. The Public Utilities Department (PUD) maintains and operates the recycled water distribution system.

The geography of San Diego provides limited natural local supplies in the form of groundwater, and in order to be usable, much of the available groundwater must undergo desalination to be potable. While the PUD has potential groundwater supply options estimated at 6,000 – 20,000 AFY, the current cost of utilizing the supply under current technology is infeasible. The San Pasqual/Lake Hodges groundwater basin is currently used for irrigation by some of the leaseholds.

The City currently purchases most of its water from the SDCWA, averaging between 100,000 and 228,000 acre-feet (AF) of water per year for the last 20 years. Other sources of water for the City include local surface water, groundwater, and recycled water sources. **Table 3.H-2** shows the City's projected water supply through 2035.

TABLE 3.H-2
CITY OF SAN DIEGO WATER SUPPLY

	2015		2020		2035	
Source	**AF**	**Percent**	**AF**	**Percent**	**AF**	**Percent**
San Diego County Water Authority	201,719	*83.9*	221,458	*85.1*	260,107	*87.0*
Supplier Produced Surface Water	29,000	*12.1*	29,000	*11.1*	29,000	*9.7*
Supplier Produced Groundwater	500	*0.2*	500	*0.2*	500	*0.2*
Recycled Water	9,253	*3.8*	9,253	*3.6*	9,253	*3.1*
Total	**240,472**	***100***	**260,211**	***100***	**298,860**	***100***

NOTES: AF represents one acre-foot or 325,851 gallons.

SOURCE: City of San Diego, 2011.

To improve water supply reliability the City continues to pursue water recycling and the expansion of its conservation programs. The City relies upon SDCWA and MWD to develop additional sources of water and storage for increased reliability. In the event of short-term interruptions in water supply, the City has developed a water shortage contingency plan that outlines actions that would be taken to reduce water consumption throughout its service area.

Water Conservation

The City's Water Conservation Program was adopted by the City Council in 1985 to reduce San Diego's dependency upon imported water. The program now accounts for over 30 million gallons per day (mgd) of potable water savings. Water conservation goals in the City's 2005

Urban Water Management Plan, the City of San Diego Long-Range Water Resources Plan (2002 – 2030) and the Strategic Plan for Water Supply (1997 – 2015) were established at: 32,000 AF by 2010; 36,000 AF by 2020; and 46,000 AF by 2030. The 2010 goal was achieved; however, in accordance with Senate Bill x7-7 the City's water savings goals for 2020 are now 40,400 AF per year to meet the required 20 percent reduction per capita set by the State's 20x2020 Water Conservation Plan. In response to the 20x2020 Water Conservation Plan, the City's Water Conservation Program includes water demand reduction through promoting or providing incentives for the installation of hardware that provides permanent water savings, and by providing services and information to help San Diegans make better decisions about water use. The program includes initiatives such as the rain barrel rebates, grass replacement and micro-irrigation rebates, free mulch program, commercial landscape survey program, residential interior/exterior survey program, and a variety of public outreach and education efforts including free California-friendly landscape classes. The City also has a plumbing retrofit upon re-sale ordinance for all buildings to have water-conserving plumbing fixtures in place prior to change of ownership.

H.3 Regulatory Setting

Federal

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), administered by the United States Environmental Protection Agency (EPA) in coordination with the California Department of Public Health (CDPH), is the main federal law that ensures the quality of Americans' drinking water. Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. In 1996, Congress amended the Safe Drinking Water Act to emphasize sound science and risk-based standard setting, small water supply system flexibility and technical assistance, community-empowered source water assessment and protection, public right-to-know, and water system infrastructure assistance through a multi-billion-dollar State revolving loan fund.

State

California Water Code

The California Water Code, a section of the California Code of Regulations, establishes the governing laws pertaining to all aspects of water management in California.

State Water Resources Control Board

As discussed in Section 3.G Utilities, the State Water Resources Control Board (the State Water Board) was created by the Legislature in 1967 with the mission of ensuring the highest reasonable quality for waters of the state, while allocating those waters to achieve the optimum balance of beneficial uses. The Water Board has authority over water allocation by administering and regulating appropriative water right permits and licenses, as per the Water Code, which require all

use of water to be "reasonable and beneficial," which includes municipal and industrial uses, irrigation, hydroelectric generation, and livestock watering.

In 1970, the Porter-Cologne Water Quality Act created nine Regional Water Quality Control Boards (Regional Boards) that develop and enforce water quality objectives of the State and implementation plans within their region. The Regional Boards oversee various programs, which protect surface water and groundwater quality, and enforce the federal National Pollutant Discharge Elimination System (NPDES) Wastewater Program, and NPDES Stormwater Program. The Regional Boards are also responsible for developing and implementing Total Maximum Daily Loads (TMDL) for impaired water bodies. The City of San Diego is located within Region 9 and is served by the San Diego Regional Water Quality Control Board.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code Section 10610 to 10656). The Act states that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet annually, should make every effort to ensure the appropriate level of reliability in its water service is sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The Act requires that urban water suppliers adopt and submit an urban water management plan at least once every five years to the Department of Water Resources. Non-compliant urban water suppliers are ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the State until the UWMP is submitted pursuant to the Urban Water Management Planning Act.

Senate Bills (SB) 610 and SB 221

SB 610 and SB 221 amended State law, effective January 1, 2002, to improve the link between the information on water supply availability and certain land use decisions made by cities and counties. Both statutes require detailed information regarding water availability to be provided to the city and county decision-makers prior to approval of specified large (greater than 500 dwelling units) development projects. Both statutes also require this detailed information to be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects as defined in Water Code 10912 subject to the California Environmental Quality Act (CEQA).[1] Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply.

[1] SB 610 water supply assessments are not required for General Plan Updates because they are not "water demand" projects as defined by SB 610. See CEQA Guidelines Section 15155(a)(1).

Senate Bill 7 of the Seventh Extraordinary Session of 2009

The State Legislature passed Senate Bill 7 as part of the Seventh Extraordinary Session (SBX7-7) on November 10, 2009, which became effective February 3, 2010. SBX7-7 was the water conservation component to the Delta legislation package, and seeks to achieve a 20 percent statewide reduction in urban per capita water use in California by December 31, 2020. The law requires each urban retail water supplier to develop urban water use targets to help meet the 20 percent goal by 2020, and an interim water reduction target by 2015.

Urban retail water suppliers must include in their 2010 UWMPs: (1) baseline daily per capita water use; (2) urban water use target; (3) interim water use target; (4) compliance daily per capita water use, including technical bases and supporting data for those determinations. An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan (Water Code Section 10608.20). Wholesale water suppliers must include in their 2010 Plans an assessment of their present and proposed future measures, programs and policies to help retail agencies achieve their water use reduction targets. (Water Code Section 10608.36).

Title 22 of California Code of Regulations

Title 22 regulates the use of reclaimed wastewater. In most cases, only disinfected tertiary water may be used on food crops where the recycled water would come into contact with the edible portion of the crop. Disinfected secondary treatment may be used for food crops where the edible portion is produced above ground and would not come into contact with the secondary effluent. Lesser levels of treatment are required for other types of crops, such as orchards, vineyards, and fiber crops. Standards are also prescribed for the use of treated wastewater for irrigation of parks, playgrounds, landscaping and other non-agricultural irrigation. Regulation of reclaimed water is governed by the nine RWQCBs and the CDPH.

Groundwater Management Act (AB 3030)

Passed in 1992, AB 3030 (California Water Code Sections 10750-10756) provides a systematic procedure for an existing local agency to develop a groundwater management plan. This section of the code provides such an agency with the powers of a water replenishment district to raise revenue to pay for facilities to manage the groundwater basin (extraction, recharge, conveyance, quality).

Sustainable Groundwater Management Act (2014)

On Sept. 16, 2014, the Sustainable Groundwater Management Act of 2014 (SGMA) was passed. The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention only if necessary to protect the resource.

The act requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally-based management plans. The act provides substantial time – 20 years – for GSAs to implement plans and achieve long-term groundwater sustainability. It protects existing surface water and groundwater rights and does not impact current drought response measures.

Executive Order B-29-15

On April 1, 2015, Governor Jerry Brown issued Executive Order B-29-15 to the State Water Resources Control Board to impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016. These restrictions require that water suppliers to California's cities and towns reduce usage as compared to the amount used in 2013. The order also includes additional orders including, but not limited to:

- Replace 50 million square feet of lawns throughout the state with drought tolerant landscaping in partnership with local governments;
- Direct the creation of a temporary, statewide consumer rebate program to replace old appliances with more water and energy efficient models;
- Require campuses, golf courses, cemeteries and other large landscapes to make significant cuts in water use; and
- Prohibit new homes and developments from irrigating with potable water unless water-efficient drip irrigation systems are used, and ban watering of ornamental grass on public street medians.

Regional

San Diego Integrated Regional Water Management Plan

The San Diego Integrated Water Management Plan (IRWMP) was created in response to California's IRWM Planning Act of 2002 (Division 6, Part 2.2 of the Water Code §10530 et seq.), amended in 2008. The first-ever San Diego IRWM Plan was completed in 2007, and submitted to DWR, to coordinate water resource management efforts and to enable the San Diego Region to pursue grant and other funding opportunities. The City, SDCWA, and the County of San Diego formed the Regional Water Management Group (RWMG) in 2005, which has funded, guided and managed the development of the IRWM Program to date. The Regional Advisory Committee (RAC) was formed in December 2006 to assist in the completion of San Diego's 2007 IRWM Plan and prioritization of projects both within the Plan and for future funding application(s) as they arise. An updated San Diego Integrated Regional Water Management Plan was adopted in 2013.

San Diego County Water Authority 2010 Urban Water Management Plan

The San Diego County Water Authority's (Water Authority) 2010 Urban Water Management Plan (UWMP) was prepared in accordance and compliance with the Urban Water Management Planning Act (Act) (Water Code§10610 through 10656) and includes the conservation measures, programs and policies required by Water Code §10608.36. The plan serves as the Water Authority's long-term planning document to ensure a reliable water supply for the region. The 2010 Plan includes: the Water Authority's climate change mitigation and adaptation strategies; measures, programs, and policies to achieve per capita water use targets as required by Water Code § 10608.36 at both the retail agency level and the Water Authority as a wholesale provider; a discussion on the Water Authority's Integrated Regional Water Management Plan; the Water Authority's Scenario Planning process to deal with future uncertainties in long-range water planning; and details on the 2007-2011 water shortage.

Local

City of San Diego 2010 Urban Water Management Plan

The City's 2010 Urban Water Management Plan (UWMP) describes historic and projected water supply and demand scenarios, water supply reliability, water usage trends, current and planned facilities to support demand, current and planned demand management programs, water shortage contingency plans, water recycling efforts, groundwater use, and alternative sources of water (desalting, water transfers, groundwater storage) that the City is considering. The UWMP describes the City's water conservation efforts, which are an important component of the City's overall water supply strategy and the City's efforts at meeting the requirements of SBX7-7. The UWMP also serves as a foundational document for compliance with SB 610 and SB 221 in determining the necessity for a project to complete a water supply assessment.

City of San Diego General Plan

The following policies from the City of San Diego General Plan, adopted 2008, from the Public Facilities, Services, and Safety Element and Conservation Element are applicable to water supply, treatment, and distribution facilities.

Water Infrastructure

PF-H.1 Optimize the use of imported supplies and improve reliability by increasing alternative water sources to: provide adequate water supplies for present uses, accommodate future growth, attract and support commercial and industrial development, and supply local agriculture.

a. Prepare, implement, and maintain, long-term, comprehensive water supply plans and options in cooperation with the appropriate state and federal agencies, regional authorities, water utilities, and local governments.

b. Develop, coordinate, facilitate, and implement water conservation plans and projects that are sustainable in reducing water demands.

c. Develop potential groundwater resources and storage capacity, combined with management of surface water in groundwater basins to meet overall water supply and resource management objectives.

e. Continue to develop the recycled water customer base, and expand the distribution system to meet current and future demands.

f. Consider and evaluate water transfers.

g. Optimize storage, treatment and distribution capacity of potable water systems.

PF-H.2 Provide and maintain essential water storage, treatment, supply facilities and infrastructure to serve existing and future development.

PF-H.3 Coordinate land use planning and water infrastructure planning with local, state, and regional agencies to provide for future development, maintain adequate service levels, and develop water supply options during emergency situations.

a. Plan for a water supply and emergency reserves to meet peak load demand during a natural disaster such as a fire or earthquake.

b. Plan for water supply and emergency reserves recognizing anticipated Climate Change impacts.

c. Recognize the water/energy nexus. Plan and implement water projects after consideration of their energy demands in coordination with energy suppliers to minimize and optimize the energy impact of projects.

Coastal Resources

CE-C.7 Encourage conservation measures and water recycling programs that eliminate or discourage wasteful uses of water.

Water Resources Management

CE-D.1 Implement a balanced, water conservation strategy as an effective way to manage demand by: reducing dependence on imported water supplies; maximizing the efficiency of existing urban water and agricultural supplies through conservation measures/programs; and developing alternative, reliable sources to sustain present and future water needs.

a. Integrate watershed planning with water supply and land use studies to achieve an integrated approach to ensure that the City can provide adequate water supplies for present uses, accommodate future growth, attract and support commercial and industrial development, and supply local agriculture.

b. Manage groundwater and surface water resources and capacity through an integrated approach to meet overall water supply and resource management objectives.

c. Participate in advanced water treatment processes such as brackish groundwater and seawater desalination programs.

d. Emphasize and refine recycled water programs to help meet non-potable irrigation demands.

e. Develop and expand water-efficient landscaping to include urban forestry, urban vegetation, and demonstration projects.

f. Support regional efforts towards ensuring that imported water is reliable, cost effective, and is of high quality.

g. Maintain existing and future water supply, storage, treatment and distribution facilities with minimal or no impact to the environment.

h. Implement conservation incentive programs that increase water-use efficiency and reduce urban runoff.

i. Develop a response plan to assist citizens in reducing water use during periods of water shortages and emergencies.

j. Encourage local water agencies to use state-mandated powers to enforce conservation measures that eliminate or penalize wasteful uses of water.

k. Explore alternative conservation measures and technology as they become available.

I. Review/update the City's landscaping regulations as needed to ensure they effectively address the efficient use of water in landscaping.

m. Educate the public on wise water use.

CE-D.2 Protect drinking water resources by implementing guidelines for future development that may affect water supply watersheds, reservoirs and groundwater aquifers. The guidelines should address site design, Best Management Practices (BMPs) and storm water treatment measures.

a. Collaborate with other jurisdictions to reduce the potential for polluted runoff to water supply reservoirs.

b. Enter into cooperative, voluntary agreements with other jurisdictions to enable the City to provide advisory review of development projects outside of the City's boundaries that may impact watersheds and reservoirs.

CE-D.3 Continue to participate in the development and implementation of watershed management plans.

a. Control water discharge in a manner that does not reduce reasonable use by others, damage important native habitats and historic resources, or create hazardous conditions (e.g., erosion, sedimentation, flooding and subsidence).

b. Protect reservoir capacity from sedimentation.

c. Improve and maintain drinking water quality and urban runoff water quality through implementation of Source Water Protection Guidelines for New Development.

d. Improve and maintain urban runoff water quality through implementation of storm water protection measures.

e. Encourage proper sustainable agricultural practices (if applicable) such as tillage, use of grass filter strips, runoff detention basins, and organic farming.

CE-D.4 Coordinate local land use planning with state and regional water resource planning to help ensure that the citizens of San Diego have a safe and adequate water supply that meets existing needs and accommodates future needs.

a. Consider and evaluate water transfers and other cost-effective ways to increase reliable supplies with minimal environmental effects, where it benefits the City, to help achieve a balanced and integrated water conservation strategy.

H.4 Impacts and Mitigation Measures

Significance Criteria

According to the City of San Diego’s CEQA Significance Determination Thresholds, a significant impact with regard to the City’s water supply could occur if implementation of the CAP results in the following:

- Use of excessive amounts of water.

Impacts

As indicated in Table 2-5 in Chapter 2, Project Description, the following proposed CAP actions could have an impact on water supply:

- **Action 1.5 Water Conservation and Disclosure Ordinance**. Supporting measures and steps that support implementation of this action could result in the construction of new or expansion of existing water recycling facilities and infrastructure, including potential modifications to wastewater treatment plants, installation of recycled water delivery systems, monitoring systems, etc.

- **Action 2.1 Community Choice Aggregation Program or Similar Program.** Supporting measures and steps that support implementation of this action could result in installation of small scale and large scale renewable energy generation, transmission, and storage systems. These could result in the demand for water to serve renewable energy facility needs.

- **Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas.** These actions would facilitate the implementation of the City of Villages strategy and the shift to greater emphasis on mass transit and other modes of transportation. These actions could, therefore, result in new construction and other physical changes that could result in new or modifications to the existing infrastructure systems to support a more concentrated urban landscape.

- **Action 4.1 Divert Solid Waste and Capture Landfill Emissions.** This action could lead to the implementation of landfill gas collection operational procedures in compliance with the California Air Resources Board's Landfill Methane Capture regulations, as well as new or expanded programs to divert solid waste from landfill disposal. Some of these programs could result in increased demand for water.

- **Action 4.2 Capture Methane from Wastewater Treatment.** Associated actions could result in new or expanded wastewater treatment facilities, such as anaerobic digesters, that could increase demand for water.

- **Action 5.1 Urban Tree Planting Program.** This action aims to achieve 15% urban tree canopy coverage by 2020 and 35% coverage by 2035. The program includes water conservation measures to minimize water use for tree plantings. Includes use of drought-tolerant plantings and native trees and prioritizing planting in areas with recycled water and grey water infrastructure.

Issue 1: Would implementation of the CAP result in the excessive use of water?

The City's UWMP contains information pertinent to planning and securing adequate water supplies to serve the City of San Diego. The UWMP also describes the conservation measures the City is taking to reduce its current and future demand for potable water, which reflects the anticipated population in the City's General Plan. SB 610 and SB 221 require detailed information regarding water availability to be provided to the City and County decision-makers prior to approval of the following types of development projects:

- Residential developments of more than 500 units;

- Shopping centers or businesses employing more than 1,000 people or having more than 500,000 square feet of floor space;
- Commercial office buildings employing more than 1,000 people or having more than 250,000 square feet of floor space;
- Hotels or motels having more than 500 rooms;
- Industrial, manufacturing, or processing plants or industrial parks planned to house more than 1,000 people or having more than 650,000 square feet of floor space;
- Mixed use projects that include one or more of the above types of projects; and
- Projects that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Although short-term increases in water demand from CAP-related construction projects could occur, proposed CAP Action 1.4 Water Conservation and Disclosure Ordinance and Action 1.5 Outdoor Landscaping Ordinance, would both have a long-term beneficial effect on water supply by supporting the City's existing water conservation efforts. Action 1.5 would result in more efficient landscape irrigation systems and encourage the installation of landscaping that uses less water. Through the use of recycled and grey water and selection of drought tolerant and low water demand species, long tern reduction in water use would result from CAP Strategy 1, Actions 1-3, 1-4, and 1-5.

Action 2.1 of the CAP establishes a goal for the City to supply 100 percent of its electricity needs with renewable sources by 2035 through a community choice aggregation program or similar program, which would leverage the aggregated purchasing power of individual customers to purchase renewable energy on a large scale, and through encouraging local solar photovoltaic (PV) and solar water heater installations. Installation of small scale facilities, such as rooftop photovoltaic panels, would have minimal impacts on existing water supplies. Large scale renewable energy projects, such as solar and wind farms, could involve new, large or extensive facilities such as solar and wind farms. Substantial volumes of water could be required for construction and operation of such facilities. Future development of these large-scale renewable facilities would therefore be required to provide detailed information regarding water use and availability, if they demand an amount of water required by a the development types listed above, as consistent with the requirements of SB 610.

Proposed CAP Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas, and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas are intended to facilitate implementation of major changes to the urban landscape already planned for in the General Plan, Sustainable Communities Strategy, and other planning documents. These changes would result in the development of more dense, built-up, and transit and alternative transportation-oriented development, particularly within the TPAs. The Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR) determined that implementation of the General Plan would not result in significant impacts on the water supply because the anticipated demand would not exceed the

expected supply, sufficient alternatives have been identified in case of unanticipated water shortages, and there are multiple conservation efforts underway to reduce the demand.

Implementation of Actions 4.1 and 4.2 would result in alterations to the existing solid waste management system to increase diversion of materials from the landfill and to increase methane capture from landfills and wastewater treatment plants. Such improvements could result in construction activities within the existing footprint of affected landfill and wastewater facilities, and potentially result in short-term increases in demand for water. Some facilities that may be developed pursuant to these proposed actions, such as composting facilities and anaerobic digesters, require use of water for processing; development of these facilities may therefore result in increased demand for water. Any expansions to existing facilities or development of new facilities would be subject to existing City policies and regulations. Impacts to the water supply during construction are considered adverse, but because they are of short duration and extent, the impact on water supply would not be substantial.

Implementation of Action 5.1 would increase the urban tree canopy coverage. The program includes water conservation measures to minimize water use for tree plantings, use of drought-tolerant plantings and native trees, and prioritizing planting in areas with recycled water and grey water infrastructure. Although the increase in urban tree canopy would result in additional use of water, the program would be developed to conform to current and future water use restrictions. The use of recycled water and drought tolerant and native planting and tree species would also reduce the demand for water.

Significance of Impact

Most CAP actions would not result in new or more severe impacts on water supply, and would not affect the ability of the City of San Diego or the San Diego County Water Authority's ability to provide water. Development of large-scale renewable energy facilities and other facilities would be required to provide detailed information regarding water use and availability, if they demand an amount of water required by the development types listed above, as consistent with the requirements of SB 610, and as outlined in the Mitigation Framework, below.

Mitigation Framework

> **Mitigation Measure WS-1: Water Supply Assessment.** In order to ensure that large-scale renewable energy projects do not use excessive amounts of water, a Water Supply Assessment (WSA) shall be submitted for review as part of the subsequent environmental review process. The WSA shall demonstrate that the proposed project would not demand an amount of water greater than the amount required by a 500 dwelling unit project.

Significance after Mitigation

Implementation of the Mitigation Measure WS-1 would serve to reduce impacts associated with future development of large-scale renewable energy projects which could demonstrate compliance with SB 610. Therefore, the program-level impact would be reduced to below a level of significance.

CHAPTER 4
History of Project Changes

A. Project Background

The City of San Diego's first Climate Protection Action Plan (CPAP) was approved in 2005 and focused on the City's mission to reduce emissions from municipal operations. The CPAP was central to fostering heightened awareness and developing "climate change literacy" within the City and the community.

Similarly, the City of San Diego General Plan (General Plan), updated in 2008, is the framework for the City's commitment to long-term conservation, sustainable growth, and resource management. It addresses GHG emission reductions through its City of Villages growth strategy and a wide range of interdisciplinary policies.

In 2010, the City embarked on development of a draft Climate Mitigation and Adaption Plan (CMAP). The draft CMAP was the initial GHG reduction plan considered by the City that provided policy direction and identified actions that the City and community could take to reduce GHG emissions consistent with AB 32. The City released a draft of the CMAP in August, 2012, but the plan was never adopted.

B. CAP

In 2013, the City began work on the Climate Action Plan (CAP). The CAP identifies measures to reduce the City's carbon footprint consistent with General Plan Policy CE-A.2 and updates the City's Climate Protection Action Plan consistent with General Plan Policy CE-A.13.

Three versions of the CAP have been released for public review (February 2014, September 2014, and March 2015). Each version of the CAP contained edits and changes, but kept the main focus of achieving GHG emissions reductions through five strategies: Energy and Water Efficient Buildings; Clean and Renewable Energy Resources; Biking, Walking and Transit; Zero Waste Management; and Climate Resiliency. Each version of the CAP has included goals and Actions to achieve GHG reductions in 2020 and 2035. The March 2015 version of the CAP included appendices outlining the calculations used to determine the GHG emissions reductions from each action and a map of Transit Priority Areas.

With the release of this Draft PEIR, the City of San Diego has also completed the July 2015 version of the CAP. Revisions to the CAP in the July 2015 version include adding text and calculations to demonstrate compliance with Executive Order B-30-15. The July 2015 version

includes a CAP Consistency Checklist to provide a streamlined review process for the GHG emissions analysis of proposed new development projects subject to discretionary review and trigger environmental review under CEQA. The July 2015 CAP also includes a companion document, Draft Greenhouse Gas Emissions Screening Criteria, to determine whether or not development projects have a significant impact on the environment.

City Staff intended to have the CAP Consistency Checklist and Draft Greenhouse Gas Emissions Screening Criteria (Screening Criteria) brought forward with the CAP, but during public review, City Staff received substantial comments including disagreements with the methodologies and science and regarding a lack of specificity used in developing the CAP Consistency Checklist and Screening Criteria. As such, a decision was made to move forward with the CAP alone. City Staff will continue to work on the CAP Consistency Checklist and a GHG Emissions Threshold to address the noted concerns and present them for City Council consideration in 2016.

For the Adoption Draft of the CAP (December 2015), the GHG emissions baseline, state and local targets, and forecasted reductions numbers have been updated to reflect the most up-to-date modeling and GHG reduction methodology. The CAP Appendices have been updated as well to clarify how these numbers were determined.

C. CAP PEIR

On February 18, 2015, the City sent a Notice of Preparation (NOP) to responsible, trustee, and federal agencies, as well as to organizations, and individuals potentially interested in the CAP PEIR, and a public scoping meeting was held on March 2, 2015. Subsequent to the NOP, City staff determined during project review to add analysis of historical resources (archaeology) to Section 3.E, Historical Resources. This section now includes archaeological resources impact analysis, and Mitigation Framework HIST-1.

Changes made to the CAP since the release of the Draft PEIR are reflected in the Final PEIR in strikeout/underline.

CHAPTER 5
Growth Inducement

A. Introduction

The CEQA *Guidelines* Section 15126.2(d) requires that an EIR evaluate the growth-inducing impacts of a proposed action. A growth-inducing impact is defined by the CEQA *Guidelines* as:

> *[T]he ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth ... It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.*

The following sections address these issues as they relate to implementation of the proposed project.

B. Growth Inducing Effects of the Proposed Project

A project can have direct and/or indirect growth-inducement potential. Direct growth inducement would result if a project involved construction of new housing. A project can have indirect growth-inducement potential if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial or governmental enterprises) that would encourage development of new housing for employees, or if it would involve a substantial construction effort creating short-term employment opportunities. Similarly, under CEQA, a project would indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service. Infrastructure projects could also indirectly stimulate growth by enhancing access to properties, or increasing their desirability for development.

Increases in population could tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA *Guidelines* also require analysis of the characteristics of projects that may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The timing, magnitude, and location of land development and population growth are based on various interrelated land use and economic variables. Key variables include regional economic trends, market demand for residential and non-residential uses, land availability and cost, the availability and quality of transportation facilities and public services, proximity to employment centers, the supply and cost of housing, and regulatory policies or conditions. Since a general plan

defines the location, type and intensity of growth, it is the primary means of regulating development and growth in California.

~~As discussed in Chapter 2, Project Description, the CAP includes a CAP Consistency Checklist to provide a streamlined review process for the GHG emissions analysis of proposed new development projects that are subject to discretionary review and trigger environmental review under CEQA. The use of the CAP Consistency Checklist does not remove the requirement to analyze any other potential environmental impact required under CEQA for a proposed new development project and therefore the Checklist is not considered to contribute to a growth-inducing impact.~~

Growth from the Proposed Project

The City of San Diego's General Plan (2008) provides land use development patterns and growth policies that allow the planned and orderly expansion of development supported by adequate public services. A project that would induce unplanned growth could indirectly cause additional adverse environmental and public services impacts not previously envisioned. To assess whether implementation of the CAP will result in growth inducing effects beyond what is currently anticipated by the City of San Diego, this PEIR must analyze the degree to which the growth associated with implementation of the CAP would be consistent with the General Plan.

The Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR) discussed the growth-inducing impacts of the General Plan in *Chapter 4, Growth Inducement*. The detailed discussion provided in the General Plan PEIR is fully incorporated into this PEIR by this reference. The General Plan PEIR found that implementation of the General Plan is growth accommodating in that it provides direction for the planning and management of population growth, and growth inducing in that it facilitates economic expansion and may result in infrastructure improvements (i.e. water, sewer, circulation systems) that could further remove existing obstacles to growth.

The General Plan provided goals and policies for redevelopment, infill, and new growth in compact, mixed-use activity areas that are pedestrian-friendly, center of community, and linked to the regional transit system. The SANDAG Sustainable Communities Strategy (SCS) relies on this type of development to reduce vehicle miles traveled, and thus GHG emissions in their effort to meet the requirements of SB 375.

The CAP would not revise the General Plan Planning Area or sphere of influence, and through the year 2020 would not allow additional development compared to the amount disclosed in the General Plan PEIR. Importantly, CAPs are not, by their nature, growth inducing. The CAP provides a framework for reducing greenhouse gas emissions from existing and future development that has previously been planned for in the General Plan. The CAP relies on the intensification of land uses around Transit Priority Areas and this growth has already been accounted for in the General Plan and SCS.

The CAP actions promote the internal relationship of mutually supportive uses in transit-oriented areas so as to decrease dependency on the automobile, encourage alternative transportation modes, make efficient use of land and infrastructure, reduce energy consumption, and promote sustainability.

The specific environmental effects resulting from the implementation of the CAP are discussed in the environmental issue areas in Chapter 3, Environmental Setting, Impacts, and Mitigations. The CAP would not, on its own, induce population growth in the City of San Diego, beyond that already identified in the General Plan PEIR. As a result, the proposed project is not considered to be growth-inducing.

The specific environmental effects resulting from the direct growth effects of proposed land use patterns and associated extension and/or improvement of public services by the year 2020 are discussed in Chapter 3, Sections 3.A through 3.H, of this Draft PEIR. The following is a discussion of the growth-inducing effects of implementing the CAP.

Employment Growth

The CAP notes that there are considerable economic benefits in implementing CAP strategies, including promoting job creation through capital improvements and corresponding research, develop and innovation. The CAP does not estimate the number of jobs that would be created, but notes that implementation of the CAP strategies could create jobs in wind, solar, biofuels, and transportation.

Implementation of the CAP would provide a small number of temporary construction jobs to retrofit existing development or construct new energy-generating structures. It is likely that the majority of these positions would be filled from the existing labor pool in and around the City of San Diego. Therefore, the creation of new jobs is not expected to result in a substantial increase in the demand for additional housing or services, and is not expected to be growth-inducing. The CAP facilitates development in Transit Priority Areas that have already been planned for. The growth-inducing and growth-accommodating tendencies of these developments have already been considered in the General Plan PEIR, and the CAP would not add to or increase these effects.

Growth Effects Associated with Infrastructure Improvements

The future development facilitated by a proposed project could indirectly induce growth if it would remove an obstacle to additional growth and development, such as removing a constraint on a required public service.

The General Plan includes proposed roadway improvements that have been designed to support the General Plan Land Use Diagram and to maintain the City's proposed level of service (LOS) standard of LOS D, where feasible and appropriate. The General Plan does not include any provisions requiring the oversizing of infrastructure facilities to serve growth not anticipated in the General Plan.

The CAP does not propose development other than what is already identified in the General Plan, and would not induce growth in an area that is not already developed with infrastructure to accommodate such growth. It does not call for the construction of major new roadways or utility systems in undeveloped areas that would stimulate development in those undeveloped areas. Further, while certain project elements may require the construction of solar panel systems, alternative transportation infrastructure, waste management facilities, and retrofitting buildings, these project elements would improve existing resources, and would not create infrastructure to serve new development.

Thus, the proposed project would not induce growth by removing infrastructure barriers or by providing infrastructure to serve new development, nor would it create new transportation access to a previously inaccessible area.

C. Environmental Effects of Growth

As described above, the CAP would not, in itself, induce population growth in the City, although it would allow for more growth in the “green job” employment field. However, the CAP is not considered to be growth-inducing as it only projects the growth anticipated by the General Plan.

CHAPTER 6
Cumulative Impacts

A. Introduction

The term "cumulative impacts," as defined in §15355 of the CEQA *Guidelines*, refers to two or more individual effects that, when taken together, are "considerable" or compound or increase other environmental impacts. A cumulative impact from multiple projects is the change in the environment that could result from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable (i.e., probable) future projects. CEQA *Guidelines* §15130 provides pertinent guidance for cumulative impact analysis:

- An EIR shall discuss the cumulative impacts of a project when the project's incremental effect may be individually limited, but "cumulatively considerable," meaning that the project's incremental effects are significant when viewed in connection with the effects of past, current, and probable future projects. An EIR should not discuss impacts that do not result in part from the Project evaluated in the EIR.

- A project's contribution is less than cumulatively considerable, and thus not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

- The focus of the analysis should be on the cumulative impact to which the identified other projects contribute, rather than on attributes of the other projects that do not contribute to the cumulative impact.

Two approaches to a cumulative impact analysis are provided for in CEQA *Guidelines* §15130(b)(1): (a) the analysis can be based on a list of past, present, and probable future projects producing related or cumulative impacts; or (b) a summary of projections contained in a general plan or related planning document or in an adopted or certified prior environmental document that described or evaluated regional or area wide conditions contributing to the cumulative impact. For the purpose of this EIR, the analysis employs the plan-based approach, as described in the following section.

B. Projects with Potential Cumulative Impacts

The cumulative setting conditions considered in this PEIR is the policies, programs, and land use designations contained in the City of San Diego General Plan (2008). Other relevant plans or programs also considered in the cumulative analysis include the City's community plans, the SANDAG Regional Transportation Plan, the Pure Water Program, and the Downtown Mobility

Specific Plan, as described below. The PEIR cumulative analysis focuses on whether there is a significant cumulative impact from one or more of these plans in combination with the CAP, and whether the CAP's incremental effect would be cumulatively considerable.

City of San Diego General Plan

The City's General Plan, updated in 2008, sets out a long-range vision and comprehensive policy framework for how the City should grow and develop, provide public services, and maintain the qualities that define San Diego over the next 20 to 30 years. It provides a strategy, the City of Villages, for how the City can enhance its many communities and neighborhoods as growth occurs over time. The City of Villages strategy focuses growth into mixed use activity centers that are pedestrian-friendly districts linked to an improved regional transit system. The strategy draws upon the character and strengths of San Diego's natural environment, neighborhoods, commercial centers, institutions, and employment centers. The strategy is designed to sustain the long-term economic, environmental, and social health of the City and its many communities. It recognizes the value of San Diego's distinctive neighborhoods and open spaces that together form the City as a whole.

A "village" is defined as the mixed-use heart of a community where residential, commercial, employment, and civic uses are all present and integrated. Each village will be unique to the community in which it is located. All villages will be pedestrian-friendly and characterized by inviting, accessible and attractive streets and public spaces. Public spaces will vary from village to village, consisting of well-designed public parks or plazas that bring people together. Individual villages will offer a variety of housing types affordable for people with different incomes and needs. Over time, villages will connect to each other via an expanded regional transit system.

Local Community Plans

The City has 52 community planning areas and 48 community plans. These community plans are an integral part of the General Plan as they provide more detailed land use designations, focused policies, and implementation recommendations that work to further implement City-wide and community goals. Since the General Plan was updated in 2008, the City Council has adopted new community plans for Barrio Logan, Otay Mesa and Ocean Beach. The Otay Mesa Community Plan update is currently in effect, the Ocean Beach Community Plan is awaiting California Coastal Commission certification, and the Barrio Logan Community Plan was repealed by voter referendum. The City's Planning Department is currently updating the San Ysidro, Southeastern, Encanto, Uptown, North Park, Golden Hill, Midway, Old Town, and Mission Valley plans. In addition, a Focused Plan Amendment was recently completed for the Grantville section of the Navajo Community Plan.

SANDAG 2050 Regional Transportation Plan and Sustainable Communities Strategy

The 2050 Regional Transportation Plan and Sustainable Communities Strategy (2050 RTP/SCS), adopted by SANDAG in 2011, presents a transportation system designed to maximize transit enhancements, integrate biking and walking elements, and promote programs to reduce demand and increase efficiency. One key theme of the Regional Transportation Plan (RTP) is to improve the connections between land use and transportation plans by using smart growth principles. The 2050 RTP includes a Sustainable Communities Strategy (SCS) that integrates land use planning, housing development, and transportation planning. The SCS also addresses how the transportation system will be developed in such a way that the region reduces per-capita GHG emissions to state-mandated levels. The SCS identifies a land use pattern that accommodates the region's future employment and housing needs, and protects sensitive habitats and resource areas. To accomplish this in a sustainable manner, the 2050 RTP/SCS land use pattern focuses housing and jobs growth in existing urbanized areas, protects about 1.3 million acres of land, and invests in a transportation network that provides residents and workers with alternatives to driving alone. Further, new development would be more compact and more accessible to public transit and other travel choices, such as walking and bicycling. SANDAG issued the Draft San Diego Forward Regional Plan, a plan that combines the Regional Comprehensive Plan (RCP) and the RTP/SCS into one Regional Plan, on April 2015 for public review and comment.

City of San Diego Pure Water Program

Pure Water San Diego is the City's 20-year program to provide a safe, reliable and cost-effective drinking water supply for San Diego. Program components include the construction of water purification facilities, continued operation of the test Advanced Water Purification Facility, research on additional treatment barriers for a potential direct potable reuse project, regulation and legislation development, and an education and outreach program. An initial 15-million gallon per day water purification facility is planned to be in operation by 2023. The long-term goal, producing 83 million gallons of purified water per day (one third of San Diego's future drinking water supply), is planned to be reached by 2035. The Program will divert approximately 100 MGD of wastewater from Point Loma to three future advanced water purification facilities located at the North City Water Reclamation Plant, South Bay Water Reclamation Plant and a future central area facility.

Downtown San Diego Mobility Plan

The Downtown San Diego Mobility Plan ("Mobility Plan") establishes policies, programs and projects that will improve overall mobility throughout the Downtown San Diego area. The Mobility Plan provides for the development of a cohesive network of complete streets, which will 1) increase priority and safety for bicyclists and pedestrians by providing supportive facilities and amenities; 2) provide desirable connections for all users to public parks, main shopping areas, entertainment facilities, major attractions, the waterfront, surrounding communities, and the

regional transportation network; and 3) support reductions in greenhouse gas emissions. Adoption of the Plan is expected in the summer of 2015.

C. Cumulative Impact Analysis

The affected area for the cumulative impacts analysis is the City of San Diego as described in the General Plan, and as outlined in Chapter 1, Introduction and Environmental Setting, and shown on Figure 2-1. As discussed in Chapter 3, Environmental Impacts and Mitigation Measures, implementation of the CAP would result in few significant impacts, other than those previously identified in the City of San Diego General Plan PEIR. These include significant impacts to visual effects and neighborhood character; air quality; historical resources; utilities, and transportation and circulation. While the CAP proposes several actions that would mitigate air quality and transportation impacts, including Action 3.2 Implement the City's Pedestrian Master Plan in Transit Priority Areas, Action 3.3 Implement the City's Bicycle Master Plan, Action 3.4 Implement a Traffic Signal Master Plan, and Action 3.5 Implement a Roundabouts Master Plan, the analyses in Chapter 3 conclude that these mitigating actions would not be sufficient to reduce impacts related to implementation of the City of Villages strategy to less than significant. In addition, proposed Action 3.1 Implement General Plan Mobility Element and City of Villages Strategy in Transit Priority Areas and Action 3.6 Implement Transit-Oriented Development within Transit Priority Areas, would facilitate and intensify development within the Transit Priority Areas. The intensification of development (e.g. higher density development) could result in greater population in a given area, with taller buildings or buildings with greater massing, which may potentially exacerbate the significant impacts already identified in the General Plan EIR. Therefore, CAP Actions 3.1 and 3.6 could contribute to cumulatively significant impacts in the areas of visual effects and neighborhood character; air quality; historical resources; utilities, and transportation and circulation associated with implementation of the City of Villages strategy, and the CAP's incremental effect could be cumulatively considerable in these areas. However, the potential for significant unavoidable impacts associated with implementation of the City of Villages strategy have already been identified in the General Plan PEIR. CAP Actions 3.1 and 3.6 would not change or exacerbate these impacts. Therefore, for the purpose of this PEIR, the cumulative impacts associated with the City of Villages strategy are considered less than significant.

Potential cumulative impacts to land use, visual resources and neighborhood character, air quality, and greenhouse gas emissions may be associated with development of large-scale renewable energy facilities as a result of CAP Action 2.1 Community Choice Aggregation Program or Another Program, when viewed cumulatively with the impacts of the plans listed above. These impacts, however, would be reduced to less than significant through implementation of Mitigation Measure LU-1 (see Section 2.A, Land Use), which would establish siting guidelines and a process for ensuring appropriate siting of such facilities.

Other CAP Actions identified as having the potential for cumulative impacts are those that could result in development of new or expanded facilities for reduced water consumption, waste recycling, and methane recovery facilities, and that call for increased frequency of recycling and

organic waste collection programs (CAP Action 1.3: Support water rate structures that provide pricing signals that encourage water conservation and reuse, Action 1.5: Outdoor Landscaping Ordinance, Action 4.1 Divert Solid Waste and Capture Landfill Emissions, and Action 4.2 Capture Methane from Wastewater Treatment). Potentially significant cumulative impacts related to Action 4.1 include cumulative impacts to air quality and GHG emissions, but these would be mitigated to less than significant with Mitigation Measure AIR-1 that requires use of low-emission alternative fuels in trucks. Other CAP Actions may result in site-specific impacts with a low potential to contribute to cumulative effects such as energy efficiency retrofits (Action 1.1 Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance; Action 1.2 Present to City Council for consideration a Municipal Energy Strategy and Implementation Plan) to existing buildings, low-water landscaping, (Action 1.5: Outdoor Landscaping Ordinance) and minor changes to streetscapes to better accommodate pedestrians and bicycles. These Actions would result in small, diffuse, and generally low-impact changes and therefore would not contribute to cumulatively significant impacts.

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CHAPTER 7
Other CEQA Considerations

A. Effects Found Not to be Significant

As required by Section 15128 of the CEQA *Guidelines*, an EIR must contain a brief discussion stating the reasons why certain environmental effects of the City of San Diego Climate Action Plan (CAP) Project were determined not to be significant and are therefore not discussed in detail in this PEIR. In accordance with the CEQA *Guidelines*, this Chapter discusses the environmental issue areas where impacts were found to not be significant. These discussions address the CEQA checklist questions and thresholds developed by the City of San Diego for each of the environmental topic areas.

Agricultural Resources

Threshold: Would the Project result in the conversion of a substantial amount of Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Within the City of San Diego, there are about 15,900 acres of land designated for agricultural uses, representing only about one percent of the City's total land area of 219,241 acres. The majority of agricultural production in the City is located in San Pasqual Valley (approximately 14,000 acres), in Otay Mesa, and in the Tijuana River Valley. These areas include lands designated as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. Many of the CAP Actions include activities that would take place in urban and developed areas, for example disclosing the energy efficiency of residential buildings (Action 1.1 Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance), modification of transportation facilities such as re-timing traffic signals or installing roundabouts (Action 3.4 Implement a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption and Action 3.5 Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption), and expansion of bicycle commuter amenities (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities). As a result, these Actions would not result in the conversion of farmland.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a Community Choice Aggregation (CCA) or other program. As stated in the Land Use section of this PEIR (Section 3.A), this may encourage or facilitate the development of larger renewable energy systems including large-scale solar PV and solar thermal

facilities; on- and off-shore wind turbines, tidal and water power systems, geothermal systems, and hydropower systems; and biomass systems; as well as new or upgraded transmission lines, substations, and energy storage systems. In general, larger-scale renewable energy facilities within the City's limits would be located in industrial areas, industrial brownfields, and near existing utility infrastructure. This would include areas designated in the City's General Plan (2008) for industrial uses, institutional, public, and semi-public facilities, and military uses. Therefore, no substantial loss of agricultural lands would be expected within City limits since these facilities would generally be located outside of agricultural lands.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands, including land designated for agricultural use. Such developments could be proposed for locations with general plan or zoning designations incompatible with facilities of this kind. In such cases, it would be the responsibility of the agency with land use authority over the project site to ensure that developments were compatible with existing designations or zoning, or that no construction of large-scale renewable energy facilities would convert any farmlands of statewide significance to non-agricultural use. Therefore, the loss of agricultural lands either would not occur, or would be resolved by the local agency. In either case, it is anticipated that the loss or conversion of farmlands will be considered in the planning and environmental review process for proposed facilities.

The CAP has been prepared to be consistent with the City's General Plan, and supports implementation of the City's General Plan to achieve better walkability and transit-supportive densities. The City's General Plan calls for infill and redevelopment of areas with existing development. The resulting intensification within selected urbanized areas is expected to reduce development pressures on vacant and undeveloped land including farmland. For these reasons, the adoption and implementation of the CAP would not result in the conversion of farmland to non-agricultural uses, and no significant impact would occur.

Threshold: Would the Project conflict with existing zoning for agricultural use, or Williamson Act contract?

Many of the Actions included in the CAP would involve modifications to existing structures and facilities in developed areas (Action 1.1 Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance, Action 1.2 Present to City Council for consideration a Municipal Energy Strategy and Implementation Plan, Action 1.4 Present to City Council for consideration a Water Conservation and Disclosure Ordinance, and Action 1.5 Implement an Outdoor Landscaping Ordinance that requires use of weather-based irrigation controllers), and would support City plans and policies calling for intensification within urbanized areas (Action 3.1 Implement the General Plan's Mobility Element and the City of Villages Strategy in Transit Priority Areas to increase the use of Transit); therefore, those Actions would not result in conflicts with existing zoning for agricultural use. Development of larger renewable energy systems that could result from implementation of Action 2.1 (Present to City Council for consideration a CCA or another program that increases the renewable energy supply on the electrical grid) would likely occur within the City's jurisdictional limits in industrial areas and near existing utility infrastructure; therefore, they are also not likely to conflict with existing

agricultural zoning. Additionally, the City of San Diego does not contain land subject to a Williamson Act contract. For these reasons, the implementation of the CAP would not result in a conflict with existing zoning for agricultural use or Williamson Act contracts within the City's jurisdiction, and no impact would occur. As stated above, development of larger-scale renewable energy facilities may occur outside the City's jurisdictional limits. Potential land use conflicts with lands zoned for agricultural use or Williamson Act contracts either would not occur, or would be resolved by the local agency. It is anticipated that impacts to agricultural lands will be considered in the planning and environmental review process for proposed facilities and therefore these potential impacts were determined to not be significant.

Threshold: Would the project involve other changes in the existing environment which due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

For the reasons stated above, the implementation of the CAP would not result in the conversion of farmland to non-agricultural uses for Actions occurring within the City's jurisdictional limits, and no impact would occur. The conversion of farmland to non-agricultural use could occur for large-scale renewable energy projects occurring outside the City's limits. However, as these impacts would be subject to further review in the planning and environmental review process for the proposed facilities, these potential impacts were determined to not be significant.

Biological Resources

Threshold: Would the Project have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the MSCP or other local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?

The Conservation Element of the City's General Plan includes policies intended to maintain and enhance biodiversity in the region and conserve viable populations of endangered, threatened, and key sensitive species and their habitats. The CAP has been prepared to be consistent with the City's General Plan, and implementation of CAP Actions would be subject to policies included in the General Plan Conservation Element. Additionally, implementation of the CAP as a component of a specific project would be subject to all applicable regulations regarding sensitive species, including the City's adopted Multiple Species Conservation Program (MSCP) Subarea Plan, Environmentally Sensitive Lands (ESL) ordinance, and Land Development Code Biology Guidelines, as well as applicable regulations of the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Projects implemented pursuant to the CAP Actions would primarily take place in urban and developed areas and would not generally require new areas of ground disturbance. Implementation of the CAP would also involve disclosing the energy efficiency of residential buildings (Action 1.1 Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance, modification of transportation facilities (Action 3.4 Implement a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption and Action 3.5 Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption), and expansion

of infrastructure supporting alternative modes of transportation like bicycles (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities). The CAP also supports implementation of City plans and policies that are intended to achieve better walkability and transit-supportive densities. The resulting intensification within selected urbanized areas is expected to reduce development pressures on vacant and undeveloped land, and therefore not result in impacts to sensitive species habitat. Therefore, implementation of CAP Actions that are confined to existing urban areas is not expected to have a substantial adverse impact on any species identified as a candidate, sensitive or special status species.

New infrastructure may be necessary for increased solid waste diversion programs to achieve zero waste under CAP Action 4.1, or for increased methane capture at wastewater treatment plants under CAP Action 4.2. It is anticipated that new infrastructure associated with implementation of these CAP Actions, such as footings or pipelines, would be located within the existing disturbed footprint of the facility and would not generally require new ground disturbance. Development of new facilities, such as composting facilities or material recovery facilities, that may involve disturbance of previously undisturbed ground, would be subject to existing policies and regulations intended to protect biological resources. Projects of this kind and scale would also be subject to project-level CEQA review, which would examine the potential for impacts to biological resources.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a CCA or other program. While the CAP does not propose to construct any site-specific renewable energy infrastructure projects, this Action could result in the development of small-scale renewable energy systems (such as residential and commercial roof-top solar PV systems). This type of small-scale project would generally result in minimal environmental impacts. There is the potential, however, for development of renewable energy facilities in undeveloped areas and more sensitive areas, both within and outside the City limits. Within the City limits, any such development would be subject to the restrictions and requirements of the MSCP Subarea Plan, ESL ordinance, and the Biology Guidelines. Such projects would be required to comply with the MSCP Land Use Adjacency Guidelines, which require all projects to ensure that site drainage is not directed into MSCP lands, measures are incorporated to reduce potential for chemicals to enter the MHPA lands, lighting is directed away from MHPA lands and buffered by landscaping where possible, noises are minimized and excessive noise during the breeding season is curtailed, and barriers are constructed along new development to protect MHPA lands from the public. Any renewable energy project proposed to implement CAP Action 2.1 would be subject to the ESL Ordinance, Section143.01 of the Land Development Code, which would reduce impacts to these areas. Therefore, conflicts or inconsistencies with these plans are not expected to occur within the City and are not expected to have a substantial adverse impact on any species identified as a candidate, sensitive or special status species.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands. Such developments could be proposed for locations within the boundaries of adopted habitat conservation plans or other environmental plans. In such cases, it would be the responsibility of the agency with land use authority over the project site to ensure that such

developments were compatible with the requirements of any such plans. Therefore, conflicts either would not occur, or would have to be resolved by the local agency. In either case, it is anticipated that any impacts on sensitive biological resources would be identified and mitigated through the planning process for proposed facilities and therefore would not have a substantial adverse impact on any species identified as a candidate, sensitive or special status species.

In summary, most CAP actions do not have the potential to result in adverse impacts to sensitive species and their habitats. Where such a potential does exist, projects undertaken pursuant to CAP actions would be required to adhere to existing policies and regulations, and would also be subject to further environmental review. Therefore, at the program level, the CAP would not have a significant effect on sensitive species and their habitats.

Threshold: Would the Project have a substantial adverse impact on any Tier I Habitats, Tier II Habitats, Tier IIIA Habitats, or Tier IIIB Habitats as identified in the Biology Guidelines of the Land Development manual or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS?

Because CAP strategies and actions would primarily take place in urban and developed areas, and because associated infrastructure would be located within the disturbed footprint of existing facilities, impacts on Tier I, Tier II, Tier IIIA and Tier IIIB habitats or other sensitive natural communities are not expected as a result of implementation of the CAP. Implementation of the CAP as a component of a specific project would also be subject to policies included in the General Plan's Conservation Element, as well as other local, state and federal regulations regarding sensitive habitats. For these reasons, implementation of the CAP would not result in a substantial adverse impact on any Tier I, Tier II, Tier IIIA and Tier IIIB habitats, or other identified sensitive natural communities.

Threshold: Would the Project have a substantial adverse impact on wetlands (including, but not limited to, marsh, vernal pool, riparian, etc.) through direct removal, filling, hydrological interruption, or other means?

CAP Actions would primarily take place in urban and developed areas, and associated infrastructure would be located within the disturbed footprint of existing facilities. Therefore, impacts on wetlands are not expected as a result of implementation of the CAP. Implementation of the CAP as a component of a specific project would also be subject to policies included in the General Plan's Conservation Element, as well as other local, state and federal regulations regarding wetlands, including applicable regulations of the U.S. Army Corps of Engineers. For these reasons, implementation of the CAP would not result in a substantial adverse impact on wetlands.

Threshold: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, including linkages identified in the MSCP Plan, or impede the use of native wildlife nursery sites?

It is unlikely that implementation of the CAP Actions would impact wildlife movement or migration or impede native wildlife nursery sites, because CAP Actions would primarily take

place in urban and developed areas, and associated infrastructure would be located within the disturbed footprint of existing facilities. Implementation of the CAP as a component of a specific project would be subject to all applicable regulations regarding animal species and habitats, including the City's adopted MSCP Subarea Plan, which includes identification of wildlife corridors as part of the regional planning effort. In addition, implementation of the CAP would be subject to the Migratory Bird Treaty Act (MBTA), which prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. For these reasons, implementation of the CAP would not result in a substantial adverse impact on wildlife movement, wildlife corridors, and wildlife nursery sites.

Threshold: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan, either within the MSCP plan area or in the surrounding region?

Implementation of the CAP would not result in conflicts with the provisions of the MSCP or other approved local, regional or state habitat conservation plan because CAP Actions would primarily take place in urban and developed areas, and associated infrastructure would be located within the disturbed footprint of existing facilities. Additionally, implementation of the CAP as a component of a specific project within or adjacent to a habitat conservation plan area would be subject to all provisions and requirements associated with that plan, further minimizing any potential for conflict. For these reasons, implementation of the CAP would not result in a substantial adverse impact regarding conflicts with habitat conservation plans.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands. Such developments could be proposed for locations within the boundaries of adopted habitat conservation plan areas or other approved local, regional, or state habitat conservation plan areas. In such cases, it would be the responsibility of the agency with land use authority over the project site to ensure that such developments were compatible with the requirements of any such plans. Therefore, conflicts either would not occur, or would be resolved by the local agency. In either case, it is anticipated that any impacts on sensitive biological resources would be identified and mitigated through the planning process and would not result in a substantial adverse impact regarding conflicts with habitat conservation plans.

Threshold: Would the Project introduce land use within an area adjacent to the MHPA that would result in adverse edge effects?

Policies incorporated into the City's General Plan result in infill and redevelopment of areas with existing development and therefore lessen development pressure on vacant or sensitive areas. The General Plan was designed to avoid adjacency concerns with the City's MHPA. Nevertheless, if development did occur on undeveloped lands, the CAP Actions would not be expected to cause adverse edge effects in addition to those already associated with development. For these reasons, implementation of the CAP would result in a less-than-significant impact regarding adverse edge effects on the MHPA.

Threshold: Would the Project result in a conflict with any local policies or ordinances protecting biological resources?

Implementation of the CAP would not conflict with General Plan Conservation Element policies, the MSCP Subarea Plan, ESL ordinance, or Land Development Code Biology Guidelines. Therefore implementation of the CAP would not result in a conflict with any local policies or ordinances protecting biological resources.

Threshold: Would the Project introduce invasive species of plants into a natural open space area?

Implementation of CAP Actions would comply with the City's General Plan Conservation Element, which includes a policy that encourages the removal of invasive plant species and the planting of native plants near open space preserves. In addition, implementation of the CAP as a component of a specific project would be required to comply with MHPA Land Use Adjacency Guidelines for drainage, toxics, lighting, noise, barriers, invasive species and brush management, as identified in the MSCP Subarea Plan. For these reasons, implementation of the CAP would result in a less-than-significant impact regarding introduction of invasive species of plants into a natural open space area.

Geologic Conditions

Threshold: Would the Project expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?

Southern California is considered one of the most seismically active regions in the United States, with numerous active faults and a history of destructive earthquakes. The entire San Diego region is susceptible to impacts from seismic activity, including earthquakes and ground-shaking events. The Actions included in the CAP are intended to reduce community-wide greenhouse gases (GHGs) by improving building efficiency, increasing renewable energy use, and improving multimodal transportation options, among other similar actions. Implementation of these strategies and actions would not directly affect the potential to expose people or structures to adverse effects resulting from geologic hazards such as earthquakes, landslides, mudslides, or ground failure.

Implementation of the CAP may include disclosing the energy efficiency of residential buildings (Action 1.1 Present to City Council for consideration a Residential Energy Conservation, Benchmarking, and Disclosure Ordinance), modification of transportation facilities such as re-timing traffic signals or installing roundabouts (Action 3.4 Implement a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption and Action 3.5 Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption), and expansion of bicycle commuter amenities (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities). Projects implementing CAP Actions would be subject to all relevant federal, state, and local regulations and building standards, including the California Building Code (CBC) and the City's grading ordinance. Required conformance with the City's grading ordinance, and all seismic requirements that are outlined within the CBC, reduce the potential for hazards due to earthquakes. Therefore, implementation

of the CAP would not be expected to expose people or structures to potential substantial adverse effects involving earthquakes, and risks related to these hazards would be less than significant.

Slope failure results in landslides and mudslides from unstable soils or geologic units. Geologic hazards, including landslides, are regulated mainly by the CBC and the City's grading ordinance. The CBC requires special foundation engineering and investigation of soils on proposed development sites located in geologic hazard areas. All projects are required to adhere to California design standards and all standard design, grading, and construction practices to avoid or reduce geologic hazards. Implementation of the CAP as a component of a specific project would be required to conform to the City's grading ordinance and other local geologic hazard regulations, as well as all requirements outlined within the CBC, would reduce potential for hazards due to landslides. Therefore, implementation of the CAP would not be expected to expose people or structures to increased potential substantial adverse effects involving landslides, and risks associated with landslides would be less than significant.

Threshold: Would the Project result in a substantial increase in wind or water erosion of soils, either on or off the site?

High erosion potential in soils is primarily caused by loose soils and steep slopes. The potential for erosion generally increases as a result of the development of structures and impervious surfaces and the removal of vegetative cover. Implementation of the CAP as a component of a specific project would be subject to the City's grading ordinance, and other applicable regulations, including the National Pollutant Discharge Elimination System (NPDES) and the CBC, which contain policies to reduce erosion potential. Required conformance to the City's grading ordinance and other local geologic hazard regulations, as well as all regulatory requirements, would reduce potential for erosion and loss of topsoil, and result in a less-than-significant impact.

Construction of new infrastructure projects as part of CAP Actions have the potential for a short-term increase in wind or water erosion of soils; however, it is expected that adherence to existing standard best management practices (BMP) during construction would reduce these temporary impacts from wind or water erosion on soils to less than significant levels.

Threshold: Would the Project be located on a geologic unit or soil that is unstable or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Geologic hazards, including landslides, are regulated mainly by the CBC and the City's grading ordinance. Required conformance to the City's grading ordinance and other local geologic hazard regulations, as well as requirements included in the CBC, would reduce the potential for hazards due to unstable soil conditions. Therefore, implementation of CAP Actions as a component of a specific project would not be expected to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse, and risks related to unstable soil conditions would be less than significant.

Health and Safety and Hazardous Materials

Threshold: Would the Project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including when wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Due to climate, topography, and native vegetation, the City of San Diego is subject to both wildland and urban fires. Current drought conditions in the State of California have both increased the risk of wildland fires due to dry conditions, and prompted the implementation of water conservation strategies. Implementation of CAP Actions is not likely to occur in areas where people or structures would be exposed to a significant risk of wildland fires, because they would primarily take place in urban and developed areas. Implementation of the CAP may include disclosing the energy efficiency of residential buildings (Action 1.1 Present to City Council for consideration a Residential Energy Conservation and Disclosure Ordinance), modification of transportation facilities such as re-timing traffic signals or installing roundabouts (Action 3.4 Implement a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption and Action 3.5 Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption), and expansion of bicycle commuter amenities (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycling opportunities). Projects implementing CAP Actions would not have an increased likeliness of exposing people or structures to urban fires including fires in areas where urbanized areas are adjacent to wildland areas. For these reasons, risks from exposure to wildland fires would be less than significant.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a CCA or other program. Action 2.1 could result in the development of larger renewable energy systems (such as large-scale solar PV systems or biomass systems). Though facilities such as this could be located outside of existing urbanized areas, it is expected that they would be sited in industrial areas and near existing utility infrastructure within City limits, and therefore would not contribute to an increased risk of exposing people or structures to loss, injury, or death involving wildland fires, and the impact would be less than significant.

Outside of the City limits, development of large-scale renewable energy facilities may occur on private or public lands. Such developments could be developed in proximity to rural, open space areas with exposure to wildland fires. In such cases, it would be the responsibility of the agency with land use authority over the project site to ensure that such developments do not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Therefore, conflicts either would not occur, or would be resolved by the local agency. In either case, it is anticipated that impacts associated with exposure to wildland fires would be identified and mitigated through the planning process for proposed facilities and would result in risks from exposure to wildland fires that are less than significant.

Threshold: Would the Project result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school?

Projects implementing CAP Actions could be located within one-quarter mile of a school. Implementation of the CAP would not change or alter the use of hazardous materials associated with these projects and would not increase the risk from hazardous materials. Construction activities associated with implementation of the CAP, for example, residential and commercial retrofits, intersection modifications, or facility improvements, could require temporary use of construction materials such as paints and solvents. To the extent that construction of future projects implementing the CAP would result in projects transporting or using hazardous materials, those projects would be required to comply with applicable federal, state, and local regulations related to hazardous materials, such as those administered by the U.S. Environmental Protection Agency; U.S. Department of Transportation; and County of San Diego Department of Environmental Health, Hazardous Materials Division.

Implementation of the CAP is not expected to increase exposure of the population to hazardous waste, and required compliance with federal and state regulations pertaining to hazardous wastes would minimize risks associated with hazardous emissions, and impacts regarding the handling or discovery of hazardous materials, substances, or waste within close proximity to a school would be less than significant.

Threshold: Would the Project impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The ongoing implementation and updating of the City of San Diego's Emergency Operations Plan allows for adequate response to emergencies as growth occurs, and reduces the potential for interference with emergency plans. Strategies and activities included in the CAP would not result in effects, such as an increase in traffic volumes that could impair implementation of an emergency response plan or emergency evacuation plan. Action 3.4 of the CAP entails implementation of a Traffic Signal Master Plan to retime traffic signals to reduce vehicle fuel consumption. It is anticipated that any traffic signal retiming would be incorporated within and comply with updates to the City's Emergency Operations Plan, and therefore would not interfere with an adopted emergency response plan or emergency evacuation plan.

Improvements to transportation infrastructure related to implementation of the CAP, such as modification of an intersection to install a roundabout, would be required to comply with City construction requirements. An approved Traffic Control Plan would be implemented during construction of any future project implementing the CAP which would allow emergency plans to operate. Therefore, implementation of the CAP would not physically interfere with an adopted emergency response plan or emergency evacuation plan, and the impact would be less than significant.

Threshold: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment?

Implementation of CAP strategies and actions as a component of future projects would not change or alter the potential for location on a hazardous materials site, and would not be expected to increase risk of exposure to hazardous materials. If implementation of the CAP Actions as a component of a specific project is proposed on a hazardous materials site, remediation and cleanup to the appropriate standard would be required to comply with existing federal, state and local hazardous materials policies and regulations. For these reasons, the impact to the public or environment from location on a hazardous material site is less than significant.

Threshold: Would the Project expose people to toxic substances, such as pesticides and herbicides, some of which have long-lasting ability, applied to the soil during previous agricultural uses?

Implementation of the CAP as a component of a specific project would not change or alter the potential for exposure of the population to hazardous toxic substances such as pesticides and herbicides. Required compliance with federal, state and local regulations pertaining to hazardous wastes would minimize any risks, and therefore impacts regarding the risk of exposure to these toxic substances would be less than significant.

Threshold: Would the Project result in a safety hazard for people residing or working in a designated airport influence area?

The San Diego International Airport, Marine Corps Air Station Miramar, Brown Field Municipal Airport, and Montgomery Field Municipal Airport are located within the City. The Tijuana International Airport, Gillespie Field, Naval Air Station North Island, and Naval Outlying Field Imperial Beach are located adjacent to the City, but have the potential to affect land use and people within the City. To prevent incompatible uses in areas of higher aircraft hazard potential, the Airport Land Use Commission (ALUC), in compliance with State law, has prepared Airport Land Use Compatibility Plans (ALUCPs) for areas surrounding each airport with land use policies and criteria in the interest of public safety.

Implementation of CAP Actions as a component of future projects would not change or alter their compatibility with or proximity to a public airport. Any project proposed near an airport facility would be required to be compatible with the applicable ACLUP, and any applicable Federal Aviation Administration (FAA) regulations. For these reasons, implementation of CAP Actions would not introduce any new features that would result in a safety hazard for people residing in or working in a designated airport influence area, and impacts related to this risk would be less than significant.

Threshold: Would the Project result in a safety hazard for people residing or working within two miles of a private airstrip or a private airport or heliport facility that is not covered by an adopted Airport Land Use Compatibility Plan?

Implementation of CAP Actions as a component of future projects would not change or alter their compatibility with or proximity to a private airstrip, airport or heliport facility. Any project

proposed near such a facility would be required to be compatible with applicable Federal Aviation Administration (FAA) regulations. For these reasons, implementation of CAP Actions would not introduce any new features that would result in a safety hazard for people residing or living within two miles of a private airstrip or a private airport or heliport facility that is not covered by an adopted ALUCP, and impacts related to this risk would be less than significant.

Hydrology and Water Quality

The CAP includes Actions which promote the use of clean and renewable energy through encouraging use of mass transit, walking and bicycling by creating new and extended mass transit infrastructure and services, renovations, retrofits of existing sidewalks, cross-walks, pedestrian trails, and new bike lanes and facilities (Actions 3.1 through 3.6). The CAP also includes strategies to divert solid waste and capture methane from wastewater treatment facilities (Action 4.1 and 4.2). These actions would result in the construction of new or an expansion of existing waste processing and wastewater treatment facilities. These CAP Actions could result in both short-term construction and long-term operational impacts that could potentially affect hydrology and water quality resources. Water resources are protected by numerous federal, state and local jurisdictional laws, regulations, plans and ordinances. Compliance with water quality regulations and standards within the City of San Diego is achieved through conditions of required permits. Adherence to the City's Stormwater Standards Manual is considered to result less-than-significant impacts to hydrology and water quality. Projects that implement the CAP Actions would be subject to the required permits and adherence to the City's Stormwater Standards; therefore, implementation of the CAP would not be expected to violate applicable water quality regulations and standards.

Implementation of the CAP Actions described above would be subject to the City's Storm Water Standards Manual or later iteration of that document; however, projects that implement the CAP Actions would primarily take place in urban and developed areas and would not generally require new areas of ground disturbance. In some cases new infrastructure may be necessary, for example, for gas capture improvements at landfills or wastewater treatment plants (Action 4.2 Implement operational procedures to capture methane gas from wastewater treatment). It is anticipated that new infrastructure associated with implementation of Action 4.2, such as footings or a pipeline, would be located within the existing disturbed footprint of the facility and therefore would not generally require new ground disturbance.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a CCA or other program. While the CAP does not propose to construct any site-specific renewable energy infrastructure projects, it could encourage the development of larger renewable energy systems (such as large-scale solar PV systems or biomass systems). Facilities such as this could be located outside of existing urbanized areas, but it is expected that they would be located in industrial areas and near existing utility infrastructure within the City's limits. These facilities would also be subject to the City's existing water quality regulations and standards, and therefore, the impacts to hydrology and water quality would be less than significant.

Development of these renewable facilities occurring outside the City's limits would be subject to review and approval by the agency with land use authority over the project site. The local jurisdiction would ensure that such developments are compatible with local, state and federal water quality regulations and standards. It is anticipated that any impacts on water quality resources would be identified and mitigated through the planning process for proposed facilities, and therefore, the impacts to hydrology and water quality would be less than significant.

Depending on the area of disturbance, implementation of certain measures or strategies in the CAP, such as the installation of bicycle amenities and facilities (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycle opportunities), gas capture improvements at landfills or wastewater treatment plants (Action 4.1 Present to City Council for consideration a Zero Waste, and development of large scale renewable facilities would have to comply with either a Water Pollution Control Plan (WPCP) or Storm Water Pollution Prevention Plan (SWPPP). These plans would prevent or effectively minimize short-term water-quality impacts during construction activities. Additionally, projects that implement the CAP Actions would be subject to all Regional Water Quality Control Board regulations related to water quality protection. Therefore, implementation of the CAP would not violate existing water quality standards or discharge requirements, and a less-than-significant impact would result.

Threshold: Would the Project result in a substantial increase in impervious surfaces and associated increased runoff?

Implementation of CAP Actions is not likely to result in a substantial increase in impervious surfaces, because they would primarily take place in urban and developed areas. In fact, CAP Action 1.5 entails implementation of an Outdoor Landscaping Ordinance that requires use of weather-based irrigation controllers, which would have the positive effect of reducing runoff on existing impervious surfaces.

Implementation of the CAP would involve modification of transportation facilities (Action 3.5 Implement a Roundabouts Master Plan to install roundabouts to reduce vehicle fuel consumption) and expansion of infrastructure supporting alternative modes of transportation like bicycles (Action 3.3 Implement the City of San Diego's Bicycle Master Plan to increase commuter bicycle opportunities). The CAP also supports implementation of City plans and policies that are intended to achieve better walkability (Action 3.2 Implement the City of San Diego's Pedestrian Master Plan in Transit Priority Areas to increase commuter walking opportunities) and transit-supportive densities (Action 3.6 Implement transit-oriented development within Transit Priority Areas). The resulting intensification within selected urbanized areas is expected to reduce development pressures on vacant and undeveloped land and so would not contribute to an increase in impervious surfaces and associated increased runoff. It is anticipated that new infrastructure associated with implementation of CAP Actions, such as the modification of an existing intersection to install a roundabout, would be located primarily within the existing footprint of the facility and would not generally result in a substantial increase in impervious surfaces and associated runoff, therefore a less than significant impact would occur.

Threshold: Would the Project result in a substantial alteration to on- and off-site drainage patterns due to changes in runoff flow rates or volumes?

Implementation of CAP Actions would require minimal, if any, new areas of disturbance. Therefore, existing drainage patterns of a site would not be altered, nor would the amount of surface runoff be increased such that it would cause flooding. Implementation of CAP Actions as a component of future projects would not change or alter a future project's effect on drainage patterns. Therefore, implementation of the CAP would not substantially alter existing drainage patterns or increase amounts of surface runoff that could result in flooding, and a less-than-significant impact would occur.

Mineral Resources

Threshold: Would the Project result in the loss of availability of a significant mineral resource (e.g. sand or gravel) as identified the Open File Report 96-04, Update of Mineral Land Classification: Aggregate Materials in the Western San Diego County Production – Consumption Region, 1996, Department of Conservation, California Department of Geological Survey (located in the EAS library)?

The location of San Diego's high-quality mineral resource areas are designated within the General Plan as Mineral Resource Zone (MRZ)-2 areas. These are areas designated for the managed production of mineral resources. State law requires cities to plan for the beneficial management of these valuable mineral resources. Impacts on mineral resources occur when access to the resource is restricted or prohibited through development of lands containing the resource or when non-compatible land uses are developed in close proximity, thereby reducing the likelihood for extraction of those resources. Implementation of the CAP would not create new or modified land uses that would be incompatible with mineral access, as most CAP-related Actions would include modifications or improvements to existing structures or facilities. The CAP Actions are consistent with the General Plan and associated policies and plans, including those related to mineral resources in the Conservation Element. For these reasons, adoption of the CAP would not result in the loss of availability of a known mineral resource of value to the region and the state, and a less-than-significant impact would occur.

Noise

Threshold: Would the Project result or create a significant increase in the existing ambient noise levels?

Implementation of the CAP Actions would include retrofitting existing structures for energy efficiency, modification of transportation facilities such as re-timing traffic signals or installing roundabouts, and expansion of electric vehicle charging infrastructure and bicycle commuter amenities. These CAP components would typically not produce a new source of noise resulting in a permanent increase over ambient noise levels. However CAP Action 3.1, which entails implementation of the General Plan's Mobility Element and the City of Villages Strategy in Transit Priority Areas (TPAs) to increase the use of transit, could result in additional noise due to an increase in transit vehicles like buses in TPAs. The CAP has been prepared to be consistent with the

City's General Plan, and because the City of Villages Strategy is part of the General Plan, the impacts associated with planned transit improvements have been analyzed in the General Plan EIR. Therefore, Action 3.1 of the CAP will implement projects already included in the General Plan and the General Plan EIR, so no additional noise impacts are expected as a result of the CAP.

Implementation of the CAP Actions as a component of a specific project, or due to installation of new infrastructure such as intersection modifications, could result in temporary construction noise. The City of San Diego typically regulates noise associated with construction equipment and activities through enforcement of noise ordinance standards, implementation of General Plan policies, and imposition of conditions of approval for building or grading permits, so temporary noise impacts would be minimized.

Implementation of the CAP would be subject to existing City noise policies and regulations, and General Plan policies and programs, specifically those found in the Noise Element. Therefore, implementation of most actions included in the CAP would not create a permanent increase in ambient noise levels, and the impact would be less than significant. Action 3.1 could create a permanent increase in noise levels due to additional transit vehicles in TPAs, but these improvements are included in the General Plan City of Villages Strategy, and the impacts have been analyzed in the General Plan EIR.

CAP Action 2.1 could encourage the development of larger renewable energy systems (such as large-scale solar PV systems or biomass systems), within or outside the City's limits. Adherence to City noise policies and regulations during construction and operation of the facilities would serve to mitigate noise-related impacts. Development of these renewable facilities occurring outside the City's limits would be subject to review and approval by the agency with land use authority over the project site. The local jurisdiction would ensure that such developments adhere to local noise regulations and standards during construction and operation of the facilities. It is anticipated that any noise impacts would be identified and mitigated through the planning process for proposed facilities.

Threshold: Would the Project expose people to noise levels which exceed the City's adopted noise ordinance or are incompatible with Table K-4?

As stated above, implementation of the CAP as a component of a specific project would typically not produce a new permanent source of noise, and construction-related noise would be regulated through enforcement of applicable City noise policies, regulations and permits. As a result, implementation of the CAP would not expose people to noise levels which exceed the City's adopted noise ordinance or are incompatible with Table K-4, and the impact would be less than significant.

Threshold: Would the Project expose people to current or future transportation noise levels which exceed standards established in the Transportation Element of the General Plan or an adopted airport Comprehensive Land Use Plan?

Implementation of the CAP strategies and actions include a number of transportation-related improvements, including modification of transportation facilities such as re-timing traffic signals

or installing roundabouts, expansion of bicycle commuter amenities. The CAP also supports implementation of existing City plans and policies such as the Bicycle Master Plan, Pedestrian Master Plan, and goals and policies of the City's General Plan to achieve better walkability and transit-supportive densities. In general, because they support mass transit and switching from vehicles to active transportation (such as bicycles and walking), the transportation-related strategies and actions in the CAP would contribute to a reduction in future transportation noise levels, and a less-than-significant impact would occur.

Threshold: Would the Project result in land uses which are not compatible with aircraft noise levels as defined by an adopted airport Comprehensive Land Use Plan (CLUP)?

Permanent noise increases are not anticipated with implementation of the CAP, and only minor temporary increases would occur with project-specific construction activities that would be regulated by City codes and policies. If project work were to occur within an airport land use plan area or within two miles of a public airport, and if construction workers were to be exposed to airport noise, compliance with Occupational Safety and Health Administration (OSHA) standards for worker safety would minimize exposure to excessive noise levels. For these reasons, implementation of the CAP would be compatible with aircraft noise levels as defined by an adopted airport Comprehensive Land Use Plan, and any impact would be less than significant.

Paleontological Resources

Threshold: Would the Project require over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit?

Implementation of the CAP Actions under CAP Strategy 1 (Water and Energy Efficient Buildings), Strategy 3 (Bicycling, Walking, Transit and Land Use), Strategy 4 (Zero Waste), and Strategy 5 (Climate Resiliency) would primarily include projects located in urban and developed areas, and would not generally require new ground disturbance that could impact a high or moderate resource potential geologic deposit. While some ground disturbing activity may result from work on existing structures during an energy efficiency retrofit, or installation of new infrastructure for gas capture improvements at landfills or wastewater treatment plants, it is anticipated that it would be located entirely within the existing disturbed footprint of the facility with no new areas of disturbance. Because no new areas of substantial ground disturbance are anticipated with implementation of these CAP Actions, implementation of the CAP is not expected to require over 1,000 cubic yards of excavation in a high resource potential geologic deposit, formation or rock unit, and the impact on paleontological resources or unique geologic features would be less than significant.

Action 2.1 of the CAP targets achievement of a 100 percent renewable supply of electricity by 2035 through consideration of a CCA or other program. While the CAP does not propose to construct any site-specific renewable energy infrastructure projects, it could encourage the development of larger renewable energy systems (such as large-scale solar PV systems or biomass systems) within and outside the City's limits. Development of these renewable facilities occurring outside the City's limits would be subject to review and approval by the agency with land use authority over the project site. It is anticipated that impacts to paleontological resources

that may occur during construction of facilities located within a high or moderate resource potential geologic deposit would be identified and mitigated through the planning process for proposed facilities.

Threshold: Would the Project require over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit?

As stated above, it is not anticipated that substantial ground disturbance would result from implementation of most CAP actions. For the same reasons stated above, implementation of the CAP is not expected to require over 2,000 cubic yards of excavation in a medium resource potential geologic deposit, formation or rock unit, and the impact on paleontological resources or unique geologic features would be less than significant.

Public Services and Facilities

Threshold: Would the Project have an effect upon, or result in a need for new or altered governmental services in any of the following areas:

Police protection	***Parks or other recreational facilities***
Fire/Life Safety protection	***Maintenance of public facilities, including roads***
Libraries	***Schools***

Implementation of the CAP could include modification of existing City structures and facilities, improvements to intersection operations, an increase in use of mass transit options, and implementation of other similar energy-saving actions. These CAP-related project components would not generate new or increased demand for fire protection services, or interfere with or modify the ability of fire protection services to meet performance objectives or response times outlined in the General Plan. As a result, implementation of CAP strategies and actions as part of a new project would not change or alter the fire protection requirements associated with that project, and no impact would occur. For the same reasons, implementation of the CAP would not result in the need for new or expanded police protection facilities that could result in an environmental effect, and no impact would occur.

The CAP does not contain any strategies or actions that would increase school enrollment. Implementation of the CAP could modify school facilities to make them more energy efficient, but these retrofit projects would not change the capacity of schools or increase the enrollment. Implementation of CAP strategies and actions as a component of future projects would not change or alter the school enrollment demands associated with that project. For these reasons, implementation of the CAP would not result in the need for new or expanded school facilities that could result in environmental effects, and no impact would occur.

Implementation of the CAP as a component of a specific project would not change or alter the demand for park or recreation facilities. For this reason, adoption and implementation of the CAP would not result in the need for new or expanded park facilities that could result in environmental effects, and no impact would occur.

Implementation of the CAP would not increase the demand for libraries or other services to the extent that new facilities would be required, and would not result in an accelerated deterioration of facilities or need for new facilities. Implementation of CAP strategies and actions could result in public facilities modifications to make them more energy efficient, but these retrofit actions would not interfere with operation of public facilities or increase the use or deterioration of the facility. Implementation of the CAP as a component of a specific project would not change or alter the demand for public facilities associated with that project. For these reasons, implementation of the CAP would not result in the need for new or altered maintenance of public facilities, including roads, which could result in environmental effects, and no impact would occur.

B. Significant Unavoidable Impacts

Public Resources Code Section 21100(b) (2) and CEQA *Guidelines* Section 15126.2(b) require that any significant and unavoidable effect on the environment must be identified in an EIR. In addition, CEQA *Guidelines* Section15093(a) allows the decision-making agency to determine if the benefits of a project outweigh the unavoidable adverse environmental impacts of implementing the project. The City can approve a project with unavoidable adverse impacts if it prepares and adopts a "Statement of Overriding Considerations" setting forth the specific reasons for making such a judgment.

The Project, if implemented, could result in significant adverse environmental impacts, as discussed in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures. Mitigation measures proposed as part of the Project or added in this EIR would avoid or reduce most of the impacts to a less-than-significant level. After mitigation, the following impacts could remain significant, and should be considered an unavoidable consequence of the project:

Issue B.1: Visual Effects and Neighborhood Character: Implementation of the CAP could affect the visual quality of the planning area, particularly with respect to views from public viewing areas, vistas, or open spaces.

Issue B.2: Visual Effects and Neighborhood Character: Implementation of the CAP could introduce incompatible uses with surrounding development in terms of bulk, scale, materials, or style that would result in adverse visual impacts.

Issue C.2: Air Quality: Implementation of the CAP could result in air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations.

Issue E.1: Historic Resources: Implementation of the CAP could cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5, or have other physical or aesthetic effects to a prehistoric or historic building, structure, object or site.

Issue F.2: Transportation and Circulation: Implementation of the CAP could create substantial alterations to present circulation movements including effects on existing public access points and/or resulting from anticipated changes in transportation modes.

C. Significant Irreversible Environmental Changes

Public Resources Code Section 21100(b)(2) requires that an EIR include a discussion of significant irreversible environmental changes that would result from implementation of a project. CEQA *Guidelines* Section 15126.2(c) describes irreversible environmental changes as follows:

> *Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.*

In addition, Public Resources Code Section 21100(b)(3) requires that lead agencies consider "measures to reduce the wasteful, inefficient, and unnecessary consumption of energy." Appendix F of the CEQA *Guidelines* further states, "Potentially significant energy implications of a project shall be considered in an EIR to the extent relevant and applicable to the project."

As discussed in Section 3.A Land Use, the CAP does not propose any changes to land use or zoning designations that would alter the population or job growth anticipated in the City's General Plan such that there would be additional growth. The CAP quantifies the GHG reduction potential of Actions that implement the General Plan City of Villages strategy, and SANDAG Sustainable Communities Strategy (SCS), which both direct growth into compact, mixed-use, walkable centers linked by transit, thereby reducing vehicular travel. By reducing vehicle use and encouraging the use of alternative transportation modes, the CAP would reduce dependency on fossil fuels and associated GHG emissions.

The CAP encourages the construction of small- and large-scale renewable energy generation systems, which would require the use of energy and building materials during construction, but would result in a long-term reduction in energy consumption from the business-as-usual (BAU) scenario and a reduction in the use of nonrenewable energy sources. Operation and maintenance of the facilities may require the use of natural gas, electricity, and water resources; however, such use would be insignificant compared to the overall reduction in use of these resources that would result from CAP implementation. The CAP does not propose any development that would otherwise entail a significant use of energy resources.

Furthermore, a primary goal of the CAP is to reduce energy consumption throughout the City by increasing residential and municipal energy efficiency in existing buildings and reducing water consumption, which would reduce the City's overall energy consumption. At the same time, the CAP anticipates that the City will supply the majority (up to 94 percent) of its energy needs with renewable energy sources, and would thereby eliminate the use of most nonrenewable energy sources by 2035. The CAP would not result in the inefficient, wasteful, and unnecessary consumption of energy or other resources, and therefore, no significant irreversible environmental changes would occur.

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CHAPTER 8
Alternatives

The purpose of this chapter is to describe and evaluate a reasonable range of alternatives to the proposed Project in order to inform the public and decision makers regarding the comparative merits of alternatives that might avoid or substantially lessen any of the Project's significant environmental effects.

A. CEQA Requirements

The California Environmental Quality Act (CEQA) requires that an EIR describe and evaluate a range of reasonable alternatives to the proposed project, or to the location of the proposed project, and evaluate the comparative merits of the alternatives (CEQA *Guidelines* Section 15126.6(a),(d)). The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit informed public participation and an informed and reasoned choice by the decision-making body (Section 15126.6(a),(f)).

The range of alternatives shall include alternatives that would feasibly attain most of the basic objectives of the project and would avoid or substantially lessen any of the significant effects of the project (Section 15126.6(a)-(c)). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. In addition, the following may be taken into consideration when assessing the feasibility of alternatives: site suitability; economic viability; availability of infrastructure; general plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and the ability of the proponent to attain site control (Section 15126.6(f)(1)). If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR (Section 15126.6(f)(2)(B)).

The description or evaluation of alternatives does not need to be exhaustive, and an EIR need not consider alternatives for which the effects cannot be reasonably determined and for which implementation is remote or speculative. An EIR need not describe or evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project (CEQA *Guidelines* Section 15126.6(d)).

The "No Project" alternative must be evaluated. This analysis shall discuss the existing conditions, as well as what could be reasonably expected to occur in the foreseeable future if the

project were not approved, based on current plans and consistent with available infrastructure and community services (Section 15126.6(e)(2)).

CEQA also requires that an environmentally superior alternative be selected from among the alternatives. The environmentally superior alternative is the alternative with the fewest or least severe adverse environmental impacts. When the "no project" alternative is the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives (Section 15126.6(e)(2)).

B. Factors in the Selection and Rejection of Alternatives

The CEQA *Guidelines* provide that an EIR should briefly describe the rationale for selecting the alternatives to be discussed, identify any alternatives that were considered by the lead agency but were rejected as infeasible, and briefly explain the reasons underlying the lead agency's determination (CEQA *Guidelines* Section 15126.6(c)). The following factors were considered in identifying the reasonable range of alternatives analyzed in this PEIR:

- the extent to which the alternative would accomplish most of the basic goals and objectives of the proposed Project (shown in Chapter 2, Project Description);
- the extent to which the alternative would avoid or lessen any of the identified significant effects of the proposed Project;
- the feasibility of the alternative, taking into account suitability, economic viability, availability of infrastructure, and consistency with other applicable plans and regulatory limitations;
- the appropriateness of the alternative in contributing to a "reasonable range" of alternatives necessary to permit a reasoned choice; and
- the requirement of the CEQA *Guidelines* to consider a "No Project" alternative and to identify an "environmentally superior" alternative in addition to the No Project Alternative (Section 15126.6(e)).

C. Alternatives Eliminated from Consideration

CEQA *Guidelines* Section 15126.6(c) requires an EIR to identify and briefly discuss any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process. In identifying alternatives, primary consideration was given to alternatives that would reduce significant impacts while still meeting most of the Project objectives.

As the City of San Diego Climate Action Plan (CAP) is specifically intended to reduce greenhouse gas (GHG) emissions within the City, an alternative site would not be appropriate as an alternative to the proposed Project. Therefore, any off-site alternatives were rejected from further analysis in this PEIR because they do not meet the objectives, nor do they fulfill legal requirements under State law.

Because the CAP is intended to implement and supplement policies in the City of San Diego General Plan (2008) regarding GHG reduction and sustainability and not replace them, no alternative is considered that would alter General Plan policies regarding land use, including the City of Villages development strategy and the Mobility element.

The **Enhanced Sustainability Alternative** was analyzed in the Final Program Environmental Impact Report for the City's 2008 General Plan update (General Plan PEIR) as an alternative that would reduce the environmental effects of the General Plan related to energy and water consumption, solid waste generation, water quality and air quality. As described in the General Plan PEIR, this alternative would likely take several years to develop, including adoption of new or amended regulations and programs to implement the mandatory policies. Specifically, the Enhanced Sustainability Alternative would add mandatory policies to the General Plan to enhance the sustainability of future development within the plan area. Likely policies would include requirements for: builders/owners to employ sustainable building techniques (e.g., energy efficient design; landscaped "green" roofs; recycled building materials; renewable energy generation [e.g., solar panels]) in private developments; the installation of recycled water systems for large development projects; and reductions in water consumption associated with existing and future development in the plan area (e.g., landscaping associated with residential land uses, landscaping and fields within parks and open spaces, etc.).

The Enhanced Sustainability Alternative from the General Plan PEIR is similar to the CAP, as it would add the General Plan policies aimed at achieving more sustainable development. The Enhanced Sustainability Alternative was identified as the environmentally superior alternative in the General Plan PEIR. However, the City, by undertaking the CAP, has taken actions to reduce GHG emissions in an approach that incorporates the principals and environmental objectives of the Enhanced Sustainability Alternative. Since the Enhanced Sustainability Alternative does not differ substantially from the Project as proposed (i.e., the CAP), it would not add to the range of alternatives considered, and therefore is excluded from further analysis.

An **Environmental Justice Alternative** would gear CAP actions to environmental justice communities, including low income communities and communities of color. This alternative would emphasize: development of affordable housing within transit priority areas (TPAs); development of transit and other alternative transportation modes specifically to serve environmental justice communities; implementing CAP actions, such as energy and water conservation and tree planting, in environmental justice communities; and clear preference for siting facilities, including renewable energy facilities that emit air pollutants (such as biomass and other combustion facilities), and waste processing facilities in locations where they would not adversely affect environmental justice communities.

This alternative was rejected from further consideration because some actions are not under the jurisdiction of the City (development of transit and other alternative transportation modes specifically to service environmental justice communities), some actions are already incorporated into the General Plan, especially the Housing Element, (development of affordable housing within Transit Priority Areas), and some actions are already incorporated into the CAP (energy and water

conservation and tree planting would be citywide, and thus, in environmental justice communities). In addition, an Environmental Justice Alternative would not reduce any of the significant impacts to Visual Effects and Neighborhood Character, Air Quality, Historical Resources, or Transportation and Circulation. Therefore, this alternative's actions are not substantially different from the CAP, and thus, this alternative was rejected from further consideration.

D. Description of Alternatives Selected for Analysis

According to the CEQA *Guidelines*, the range of alternatives required is governed by the "rule of reason" that requires the PEIR to set forth only those feasible alternatives necessary to permit an informed and reasoned choice by the decision-making body and informed public participation. There are many potential CAP alternatives that could be considered for implementation by the City. Analysis of every possible alternative is infeasible and would be redundant. Furthermore, CEQA does not require that every alternative be considered. This section describes the reasonable range of alternatives that were developed by the City during the planning process for the PEIR. The following alternatives to the proposed Project were selected to be addressed in this PEIR:

- **No Project Alternative.** The No Project Alternative represents a continuation of the City's existing General Plan (adopted in 2008) without the adoption of the CAP.
- **The CMAP Alternative** is based on the City of San Diego's earlier efforts to develop a climate action plan, called the Climate Mitigation and Adaptation Plan (CMAP). The CMAP was drafted in 2012, but never adopted. This alternative consists of a somewhat different set of strategies and actions than the CAP.

No Project Alternative

Section 15126.6(e) of the CEQA *Guidelines* requires that an EIR evaluate and analyze the environmental impacts of the "No Project" Alternative, to examine and compare the potential environmental consequences associated with disapproving the Project. In this case, the No Project Alternative examines the scenario that would occur if the CAP is not adopted and implemented by the City. Under this scenario, the General Plan policies and programs would still be in effect, including the City of Villages development strategy and Mobility Element.

While the General Plan includes several policies related to climate change, it lacks the specificity of program development contained in the CAP. Under the No Project Alternative, strategies and actions that implement those policies would not be put into place. Actions aimed at facilitating and encouraging implementation of the City of Villages strategy, including Actions 3.1 and 3.6, would not occur. Therefore, it is likely that implementation of the City of Villages strategy and concentration of future development within TPAs may be slowed. There would not be development of a community choice aggregation program or similar program, so there would be less incentive for development of small scale and large scale renewable energy facilities, and a slower shift to renewable energy sources. Other actions that would increase building energy efficiency and water use would not be implemented, and efforts to reduce waste and increase recovery of methane from waste treatment would be less intensive and less coordinated.

Implementation of the Bicycle Master Plan and Pedestrian Master Plan, as well as the Urban Forestry Plan and the Recycled Water Master Plan, all of which have already been adopted by the City, would still occur. Other CAP actions, such as 3.4 Implement a Traffic Signal Master Plan and 3.5 Implement a Roundabouts Master Plan, would not occur. Overall, the No Project Alternative would result in fewer actions and measures to reduce GHG emissions, and less coordinated and presumably less effective implementation of the General Plan's goals and policies to address climate change.

Without the CAP, it is questionable whether the City would achieve its GHG reduction target of 49 percent below 2010 levels by the Year 2035. Under the No Project Alternative the City would still realize GHG emissions reductions from several high-impact state-wide measures included in the AB 32 Scoping Plan, but the gap in emissions reduction potential intended to be filled by the CAP would likely still exist.

CMAP Alternative

The CMAP was the initial GHG reduction plan considered by the City that provided policy direction and identified actions that the City and community could take to reduce GHG emissions consistent with AB 32. The City released a draft of the CMAP in August, 2012, but the plan was never adopted. This Alternative would adopt and implement the 2012 Draft CMAP instead of the CAP.

The CMAP Alternative establishes a planning horizon of 2013-2035; however, the CMAP did not contain specific implementing actions and corresponding reductions for meeting the post-2020 reduction goals. Also, due to the less-recently updated nature of the CMAP, it would not serve as a qualified GHG reduction plan under CEQA Guidelines Section 15183.5. that would account for emissions post-2020. ~~and~~ The CMAP Alternative includes the following: quantifies GHG emissions from community-at-large and City operations; establishes reduction targets for 2020, 2035 and 2050; identifies strategies and measures to reduce GHG levels, focusing on those that the City has authority to implement; and provides guidance for monitoring progress on an annual basis. In addition, the CMAP Alternative highlights climate change vulnerabilities, adaptation strategies, and recommendations for further research.

The CMAP Alternative, similar to the proposed Project, focuses on four categories of GHG sources and associated reduction strategies:

1. The Energy strategy aims to reduce GHG emissions by improving the energy efficiency of both new and existing residential and commercial buildings, increasing the use of distributed renewable and efficient energy production, and improving community wide understanding of energy management.

2. The Transportation strategy focuses on reducing emissions by reducing vehicle miles traveled (VMT) through multimodal transportation options, and by decreasing the energy intensity per miles travel by reducing idling and increasing electric vehicle use by improving the electric vehicle infrastructure.

3. The Land Use and Local Food System strategy would reduce emissions by supporting the City's General Plan, resulting in more compact, walkable, transit-accessible neighborhoods and by strengthening the regional food system, including expanding urban agricultural activities.

4. The Waste strategy would reduce emissions by diverting waste from landfills, and by supporting continual improvement in equipment and operation for wastewater treatment and landfill management.

As stated in the 2012 Draft CMAP, GHG reductions from actions undertaken pursuant to the plan would be 1.6 million metric tons (MT) of CO_2e by 2020, and 3.3 million MT by 2035.

E. Project Objectives

As stated in the first factor bulleted under 8.B above, the selection of alternatives must consider the basic goals and objectives of the Project. As previously presented in Chapter 2, Project Description, the Project objectives for the CAP include:

- Provide a roadmap to achieve GHG reductions;
- Conform to California laws and regulations;
- Implement the General Plan;
- Provide CEQA tiering for new development's GHG emissions;
- Create green jobs through incentive-based policies, such as the manufacturing and installation of solar panels;
- Improve public health by removing harmful pollutants from our air and improve water quality;
- Increase local control over the City's future by reducing dependence on imported water and energy;
- Enhance quality of life by supporting active transportation, planting trees and reducing landfill waste; and
- Save taxpayer' money by decreasing municipal water, waste and energy usage in city-owned buildings.

The ability of the Project and the two Alternatives to meet these objectives is discussed further, below.

F. Environmental Assessment

This section presents an environmental assessment of each alternative relative to the proposed Project, by environmental topic. As permitted by CEQA, the significant environmental effects of the alternatives are discussed in less detail than are the effects of the proposed Project (CEQA *Guidelines* Section 15126.6(d)). However, the analysis is conducted at a sufficient level of detail to provide the public and decision-makers with adequate information to fully evaluate the alternatives and to approve any of the alternatives without further environmental review.

Visual Effects and Neighborhood Character

As discussed in Section 3.B, the CAP as proposed could result in impacts to visual resources, but these would be mitigated to less than significant with specified mitigation measures. Significant visual impacts were identified for CAP Action 2.1 Community Choice Aggregation Program, since it could result in the development of large-scale renewable energy facilities within the City, which could be out of character with the surrounding neighborhood, or could adversely affect scenic views. The No Project Alternative does not include CAP Action 2.1, and so it would avoid this impact. The CMAP alternative does not anticipate development of large-scale renewable energy facilities, and so would also avoid this impact.

The General Plan PEIR identified as significant and unavoidable the potential for visual quality and neighborhood character conflicts associated with implementation of the City of Villages strategy. This impact would remain significant and unavoidable for the Project, as well as for the No Project Alternative and the CMAP Alternative, both of which would also implement the City of Villages strategy.

Air Quality

Section 3.C, Air Quality, states that the General Plan PEIR identifies potentially significant and unavoidable air quality impacts from emissions of particulate matter from construction activities and concentrated CO “hot spots” associated with implementation of the City of Villages strategy, and states that this impact would remain significant and unavoidable for the CAP. The same impact would potentially occur with each of the two alternatives, both of which would also implement the City of Villages strategy.

Section 3.C also identifies a potentially significant and unavoidable air quality impact from development of large-scale renewable energy, solid waste, water, and wastewater facilities. Because the No Project Alternative would not result in the development projects of this kind, it would not have associated impacts. The CMAP Alternative does not anticipate construction of large-scale renewable energy facilities within the City, and so would avoid project impacts associated with the development and operation of such facilities. The CMAP contains an aggressive waste reduction strategy, and so would likely have similar impacts related to increased solid waste collection and processing programs. The No Project Alternative does not include this action, and so would not have an impact of this kind.

Biological Resources

The proposed CAP and the two alternatives would all concentrate future growth within the urbanized area, and all would be required to comply with existing regulations for protection of biological resources. Therefore, impacts on biological resources would be less than significant for both alternatives, as well as for the Project as proposed.

Historical Resources

Section 3.E, Historical Resources, notes the potential for proposed CAP actions to impact historical resources, for example from building retrofits or installation of small-scale renewable energy systems, but states that adherence to existing regulations and policies intended to protect the integrity of these resources would avoid significant impacts. This would be true of both of the alternatives being examined, since the existing regulations and policies would be equally applicable and effective.

Section 3.E also notes that the General Plan PEIR identifies a significant and unavoidable impact from redevelopment that would occur from implementation of the City of Villages strategy, and that this impact would be carried over to the proposed CAP as well. The No Project Alternative and the CMAP Alternative would both also the potential for this impact as well, since they both would maintain and implement the City of Villages strategy. Therefore, the Project as proposed and both alternatives would have the same impacts on historical resources.

Paleontological Resources

Chapter 7, Other CEQA Considerations, examines the potential for the CAP to disturb paleontological resources, and concludes that while some proposed CAP actions may result in land disturbance, the extent of disturbance would generally be limited, and most disturbance would take place within already developed areas. Therefore, the impact on paleontological resources or unique geologic features would be less than significant.

The No Project Alternative would result in fewer actions involving construction and land disturbance, and so would have a somewhat lesser impact on paleontological resources. The CMAP Alternative does not anticipate development of large-scale renewable energy facilities, and so its impacts on these resources would be somewhat less than the Project as proposed.

Mineral Resources

Chapter 7, Other CEQA Considerations, examines the potential for the CAP to impact mineral resources, including the potential to result in new or modified land uses that would lead to the loss of availability of a known mineral resource of value to the region and the state, and concludes that no such potential exists. Neither the No Project Alternative nor the CMAP Alternative would be associated with changed land uses, and so neither alternative would have the potential for an impact of this kind.

Geology and Soils

Chapter 7, Other CEQA Considerations briefly discusses the potential for the proposed CAP to have an adverse impact related to geology and soils, and concludes that implementation of the CAP would not be expected to expose people or structures to potential substantial adverse effects involving earthquakes, mudslides, landslides, or other geologic hazards and therefore risks related to these hazards would be less than significant. Chapter 7 also concludes that existing regulations

would be sufficient to prevent significant erosion associated with construction that may take place pursuant to the CAP.

Both the No Project Alternative and the CMAP Alternative would involve redevelopment within the City with implementation of the City of Villages strategy, and this development would be subject to the same risks and the same regulatory protections. Therefore, both of the alternatives would have the same less than significant impacts as the Project with regard to geology and soils.

Greenhouse Gases

Section 3.D, Greenhouse Gases, concludes that one proposed CAP Action, Action 4.1 Divert Solid Waste and Capture Landfill Emissions, could result in significantly increased GHG emissions, because it would increase VMT by solid waste collection and long-haul vehicles; however, implementation of the CAP as a whole, including CAP Action 2.3, Conversion of Waste Collection Vehicles to Alternative Fuel, would result in a net decrease of GHG emissions. ~~Application of the specified mitigation measure would reduce this impact to less than significant.~~

The No Project Alternative does not include Action 4.1, and so would avoid this impact. The CMAP Alternative would include similar waste reduction strategies, and may therefore have a similar impact. However, the No Project Alternative would not include the CAP strategies and actions intended to implement the climate change policies contained in the General Plan, and would therefore result in inconsistency or conflict with policies and programs to reduce GHGs and address climate change. The No Project Alternative would thus have a significant impact related to GHGs.

The CMAP Alternative would implement local programs that would achieve a projected reduction of about 1.6 MMT of CO_2e below business as usual by 2020, and about 3.3 MMT by 2035. The Project as proposed is projected to achieve reductions of about 0.4 million MT of CO2e by 2020, 1.3 MMT CO_2e by 2030, and about 2.5 ~~3.5~~ MMT by 2035. However, the CAP projects much higher reductions from State and federal programs, such that the overall GHG reduction by 2035 is substantially higher than projected in the CMAP.

Health and Safety and Hazardous Materials

Chapter 7, Other CEQA Considerations discusses the potential for the CAP to result in increased risk or exposure of persons to hazardous situations and materials, including urban fires, wildland fires, the handling or discovery of hazardous substances within close proximity to a school, interference with an adopted emergency response plan or emergency evacuation plan, location of a project on a hazardous material site, safety hazards for people residing in or working in a designated airport influence area or proximity to a private airstrip or heliport. Chapter 7 concludes that the CAP would not have any significant impacts related to these issues.

Neither the No Project Alternative nor the CMAP Alternative would include any provisions that would increase health and safety risks or hazardous materials risks.

Hydrology and Water Quality

Chapter 7, Other CEQA Considerations includes a discussion of the potential for implementation of proposed CAP actions to adversely impact hydrology and water quality. The discussion focuses on the potential for construction projects to result in contaminated runoff entering waterways, and for new development to increase impervious surfaces and associated increased runoff or to substantially alter surface drainage patterns, and concludes that, with adherence to existing regulations, impacts would be less than significant. For the same reasons – that is, the limited area of disturbance or change and the effectiveness of existing regulations, both the No Project Alternative and the CMAP Alternative would also be expected to have less than significant impacts of this kind.

Water Supply

Section 3.H, Water Supply, discusses the potential for implementation of proposed CAP actions to result in a significant increase in the demand for water, and concludes that the CAP would not substantially increase demand and would not affect the ability of the City of San Diego or the San Diego County Water Authority's ability to provide water. The impacts associated with implementation of the CAP strategies and actions are therefore less than significant.

The CAP includes several actions to increase efficiency of water use and decrease water demand. Since these actions would not be implemented under the No Project Alternative, that alternative would have somewhat greater impacts than the CAP with regard to water supply; however, the concentrated development associated with the City of Villages strategy would also likely result in decreased water demand, and the General Plan PEIR concludes that implementation of the General Plan would not result in a significant impact on water supply.

The CMAP Alternative would include similar water efficiency actions as the CAP, and would not include any actions that would increase water demand; this alternative, therefore, would have the same beneficial impact on water supply as the CAP.

Land Use

As described in Section 3.A, Land Use, implementation of the CAP would generally be consistent with all applicable land use plans, policies, and regulations of agencies with jurisdiction over the Project, and would not conflict with any land use plans, including not conflicting with the environmental goals, objectives, or recommendations of the General Plan or affected community plans. However, Some projects undertaken pursuant to the CAP or in support of CAP programs, particularly the development of large-scale renewable energy facilities within the City limits, could conflict with existing land use and zoning designations or could conflict with adjacent land uses. With implementation of Mitigation Measure LU-1, potentially significant land use conflicts from siting of large-scale renewable energy facilities would be avoided, and after mitigation, this impact would be less than significant.

Neither the No Project Alternative nor the CMAP Alternative includes actions that would promote development of large-scale renewable energy projects within the City, and therefore the ~~significant~~ land use impact associated with the CAP would be avoided with both of these alternatives.

Noise

Chapter 7, Other CEQA Considerations, examines the potential for the CAP to result in significant noise impacts and concludes that, while implementation of the CAP actions could result in temporary construction noise, City noise regulations, enforcement of noise ordinance standards, implementation of General Plan policies, and imposition of conditions of approval for building or grading permits would minimize temporary construction noise impacts and render such impacts less than significant. Implementation of the City of Villages strategy, as facilitated by the CAP, could result in permanent increases in noise levels in some TPAs, due to more concentrated development and greater use of transit buses and trains. General Plan policies would generally avoid significant impacts, however.

For the same reasons – that is, the limited extent of construction projects and the effectiveness of existing regulations, both the No Project Alternative and the CMAP Alternative would also be expected to have less than significant impacts of this kind.

Public Services and Facilities

Chapter 7, Other CEQA Considerations examines whether the CAP would have an adverse effect upon, or result in a need for new or altered governmental services including police protection, parks and recreational facilities, fire/life safety protection, maintenance of public facilities, libraries, and schools. The discussion concludes that, because the CAP would not result in development or population growth beyond that anticipated and planned for in the General Plan, it would not have an impact on public services or facilities. For the same reason, both the No Project Alternative and the CMAP Alternative would have the same less than significant impacts.

Utilities

As described in Section 3.G, most of the proposed CAP actions would not result in a need for new utility systems, or require substantial alterations to existing infrastructure. However, the development of large-scale renewable energy facilities within the City limits, which may result from implementation of CAP Action 2.1; the implementation of the City of Villages strategy, which would be facilitated by implementation of CAP Actions 3.1 and 3.6; and the development of new or expanded waste diversion and gas capture/use facilities which may result with implementation of CAP Actions 4.1 and 4.2, could result in such effects. This could result in a significant impact to public utilities. The potential for implementation of the City of Villages strategy to cause significant impacts on public utilities as identified in the General Plan PEIR, would remain significant and unavoidable. <u>However, because the City of Villages strategy is already City policy, and because it was already the subject of environmental review (the General Plan PEIR), potential impacts associated with implementation of the City of Villages strategy are not considered impacts of the CAP.</u> Other utility-related impacts are found to be less than significant.

For the same reason, both the No Project Alternative and the CMAP Alternative would have the same less than significant ~~and unavoidable~~ impacts.

Transportation and Circulation

Section 3.F, Transportation and Circulation, concludes that, while proposed CAP actions including Action 3.4 Implement a Traffic Signal Master Plan and Action 3.5 Implement a Roundabouts Master Plan would improve traffic flow, the conclusion reached in the General Plan PEIR regarding the potential for significant unavoidable traffic impacts associated with implementation of the City of Villages strategy would remain. The No Project Alternative would not include Actions 3.4 and 3.5, so this impact would likely be more severe. The CMAP Alternative also includes actions to install roundabouts and time traffic lights, similar to the CAP.

Agricultural Resources

Chapter 7, Other CEQA Considerations, examines the potential for implementation of the CAP to result in significant impacts on agricultural resources. The discussion notes that most of the CAP strategies and actions include activities that would take place in urban and developed areas of the City, and as a result, these actions would not result in the conversion of farmland or conflict with existing zoning for agricultural use, or Williamson Act contract. Action 2.1 of the CAP could, however, encourage or facilitate the development of larger renewable energy systems including large-scale solar renewable energy facilities within or outside the City limits. It is anticipated that such facilities would be located in industrial areas, industrial brownfields, and near existing utility infrastructure. This would include areas designated in the General Plan for industrial uses, institutional, public, and semi-public facilities. Any such development outside of the City would be subject to local land use regulations and planning process, and additional environmental review. Therefore, impacts on agricultural resources would not be expected.

The No Project Alternative would not implement Action 2.1, and so would not encourage development of large-scale renewable energy facilities within or outside the City, thus avoiding the potential for effects on agricultural resources identified for the CAP. The CMAP does not contemplate development of large-scale renewable energy facilities within the City, and so would not be expected to have an adverse effect on Agricultural Resources.

G. Comparison of the Alternatives

The analysis of the alternatives is summarized and compared in two tables: **Table 8-1** provides a summary of the most severe impact level within each environmental topic area for each of the two alternatives and the Project as proposed (i.e., the CAP), and **Table 8-2** summarizes the ability of each alternative and the Project to meet the objectives of the CAP. The tables provide a ready means for the reader to review and compare the alternatives with each other, and with the CAP, as proposed.

TABLE 8-1
ALTERNATIVES IMPACT SUMMARY AND COMPARISON

Impact	Project	No Project	CMAP Alternative
Visual Effects and Neighborhood Character	Significant and Unavoidable	Lesser Impact ~~Same Impact~~	Lesser Impact ~~Same Impact~~
Air Quality	Significant and Unavoidable	Lesser Impact ~~Same Impact~~	Lesser Impact ~~Same Impact~~
Biological Resources	Less than Significant	Same Impact	Same Impact
Historical Resources	Significant and Unavoidable	Same Impact	Same Impact
Paleontological Resources	Less than Significant	Lesser Impact	Same Impact
Mineral Resources	Less than Significant	Same Impact	Same Impact
Geology and Soils	Less than Significant	Same Impact	Same Impact
Greenhouse Gases	Less than Significant ~~with Mitigation~~	Greater Impact	Same or Greater Impact
Health and Safety and Hazardous Materials	Less than Significant	Same Impact	Same Impact
Hydrology and Water Quality	Less than Significant	Same Impact	Same Impact
Water Supply	Less than Significant	Greater Impact	Same Impact
Land Use	Less than Significant with Mitigation	No Impact	Lesser Impact
Noise	Less than Significant	Same Impact	Same Impact
Public Services and Facilities	Less than Significant	Same Impact	Same Impact
Utilities	Less than Significant ~~Significant and Unavoidable~~	Same Impact	Same Impact
Transportation and Circulation	Significant and Unavoidable	Greater Impact	Lesser Impact ~~Same Impact~~
Agricultural Resources	Less than Significant	Lesser Impact	Same Impact

TABLE 8-2
ABILITY OF ALTERNATIVES TO SATISFY PROJECT OBJECTIVES

Proposed Project Objective	CAP as Proposed	No Project Alternative	CMAP Alternative
Provide a roadmap to achieve GHG reductions	Meets Objective	Does Not Meet Objective	Meets Objective
Conform to California laws and regulations	Meets Objective	Does Not Meet Objective	Partially Meets Objective
Implement the 2008 General Plan	Meets Objective	Does Not Meet Objective	Meets Objective
Provide CEQA tiering for new development's GHG emissions	Meets Objective	Does Not Meet Objective	Does not Meet~~s~~ Objective
Create green jobs through incentive-based policies, such as the manufacturing and installation of solar panels	Meets Objective	Does Not Meet Objective	Meets Objective
Improve public health by removing harmful pollutants from our air and improve water quality	Meets Objective	Does Not Meet Objective	Meets Objective
Increase local control over the City's future by reducing dependence on imported water and energy	Meets Objective	Does Not Meet Objective	Meets Objective
Enhance quality of life by supporting active transportation, planting trees and reducing landfill waste	Meets Objective	Does Not Meet Objective	Meets Objective
Save taxpayer' money by decreasing municipal water, waste and energy usage in city-owned buildings	Meets Objective	Does Not Meet Objective	Meets Objective

Table 8-1 indicates that little difference in severity of impacts between the Project and the alternatives. The No Project Alternative would have an additional significant impact related to GHGs, since it would not implement the policies regarding reduction of GHGs contained in the General Plan, and would not meet any of the project objectives. The CMAP Alternative would have somewhat reduced impacts related to ~~land use,~~ Land Use, Visual Effects and Neighborhood Character, Air Quality, and Transportation and Circulation because it does not include CAP Action 2.1, which could result in large scale renewable energy facilities, but would not be as effective as the CAP in reducing GHG emissions overall, and would not meet the project objective of providing adequate CEQA tiering for new development.

Table 8-2 indicates that the CAP, as proposed, has the ability to meet stated objectives. The CMAP Alternative also has the ability to meet, or partially meet, most Project objectives. The No Project Alternative would not meet Project objectives.

H. Environmentally Superior Alternative

Based upon the evaluation described in this section, ~~both the No Project Alternative and~~ the CMAP Alternative would have ~~greater~~ fewer impacts related to ~~GHGs~~ Land Use, Visual Effects and Neighborhood Character, Air Quality, and Transportation and Circulation than the proposed CAP. Therefore, the CMAP Alternative ~~Project as proposed~~ is considered the Environmentally Superior Alternative.

CHAPTER 9
Certification and Report Preparers

This document has been completed by the City's Environmental and Resources Analysis (E&RA) Division under the direction of the Planning Department and is based on independent analysis and determinations made pursuant to the San Diego Land Development Code Section 128.0103.

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CHAPTER 10
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CHAPTER 11
Mitigation Monitoring and Reporting Program

A. Introduction

This Mitigation Monitoring and Reporting Program is designed to ensure compliance with Public Resources Code Section 21081.6 during implementation of mitigation measures. This program identifies at a minimum: the department responsible for the monitoring, what is to be monitored, how the monitoring shall be accomplished, the monitoring and reporting schedule, and completion requirements. A record of the Mitigation Monitoring and Reporting Program will be maintained at the offices of the Entitlement Division, 1222 First Avenue, Fifth Floor, San Diego, CA, 92101. All mitigation measures contained in this Program Environmental Impact Report (PEIS) shall be made conditions of the project as may be further described below.

The proposed Project, i.e., the Climate Action Plan (CAP) is described in this PEIR. The PEIR focused on issues determined to be potentially significant by the City. The issues addressed in the PEIR include land use, visual effects and neighborhood character, air quality, greenhouse gas emissions, historical resources, transportation/circulation, public utilities, and water supply.

Public Resources Code Section 21081.6 requires monitoring of only those impacts identified as significant or potentially significant. After analysis, potentially significant impacts requiring mitigation were identified for land use, visual effects and neighborhood character, air quality, historical resources, and transportation/circulation.

The environmental analysis identified mitigation measures determined to be feasible that would reduce some or all of the potentially significant impacts to a less than significant level for the following issues: land use, visual effects and neighborhood character, air quality, and transportation/circulation however, impacts would not be fully reduced for ~~one~~ the following issue areas:~~,~~ Visual Effects and Neighborhood Character, Air Quality, ~~h~~Historical ~~r~~Resources, and Transportation and Circulation. ~~This~~ These impacts ~~is~~ are potentially significant and unavoidable.

B. Significant Impacts, Mitigation Measures, Monitoring and Reporting Requirements

Land Use

Impact: implementation of the CAP could conflict with applicable land use plans, policies or regulations of an agency with jurisdiction over the Project.

Mitigation Measure LU-1: Siting of Large-scale Renewable Energy Projects.

To ensure that large-scale renewable energy projects are compatible and not in conflict with existing land use and zoning designations, and that any such facilities do not result in conflicts with adjacent land uses, the City shall develop a set of siting guidelines for such facilities prior to permitting any large-scale renewable energy projects. The guidelines shall avoid land use conflicts and contain specific provisions for appropriate siting of large renewable energy facilities to include all of the following at a minimum:

- A definition of the type and scale of facility that is subject to the siting guidelines. This list may be revised from time to time, as new technologies emerge and evolve.
- A matrix table that shows, for each type of facility, the appropriate land use and zoning designations, where siting of facilities would not be expected to cause a significant land use conflict.
- Guidelines or best management practices for minimizing conflicts with neighboring land uses. These would include, but not be limited to, required and recommended siting criteria; general design guidelines (such as property line setbacks); minimizing construction and operational noise (such as adherence to Noise Ordinance standards and General Plan compatibility standards); minimizing electromagnetic frequency (EMF) exposure; ~~and~~ minimizing visual prominence (for example, by avoiding siting of facilities on ridgelines and other prominent topographical features, or by providing vegetative screens); and minimizing lighting and glare effects (such as adherence to the City's Outdoor Lighting Regulations).
- The requirement that a facility demonstrate that there are no sensitive biological resources present on-site that would be impacted by development of the proposed large-scale renewable energy facility, or demonstrate compliance with the MSCP Subarea Plan Section 1.4.3, Land Use Adjacency Guidelines, and with the City's ESL Regulations.
- The requirement that a facility demonstrate that there are no historical resources present on-site that would be impacted by development of the proposed large-scale renewable energy facility, or demonstrate compliance with Mitigation Framework HIST-1.
- A checklist to determine whether, even with adherence to the guidelines provided, a facility may still result in a land use conflict.

Visual Effects and Neighborhood Character

Impact: Implementation of the CAP could affect the visual quality of the planning area, particularly with respect to views from public viewing areas, vistas, or open spaces.

Mitigation: Implement **Mitigation Measure LU-1**.

Impact: Implementation of the CAP could introduce incompatible uses with surrounding development in terms of bulk, scale, materials, or style that would result in adverse visual impacts.

Mitigation: Implement **Mitigation Measure LU-1**.

Air Quality

Impact: Implementation of the CAP could result in air emissions that would substantially deteriorate ambient air quality, including the exposure of sensitive receptors to substantial pollutant concentrations.

Mitigation Measure AIR-1: Best Available Control Measures for Construction Emissions.

This mitigation measure incorporates the Mitigation Framework for construction-related air impacts contained in the General Plan PEIR, which states the following:

For projects that may exceed daily construction emissions established by the City of San Diego, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the City of San Diego. Project proponents must prepare and implement a Construction Management Plan which includes but is not limited to Best Available Control Measures. Appropriate control measures will be determined on a project-by-project basis, and are specific to the pollutant for which the daily threshold may be exceeded. Control measures may include:

- Minimizing simultaneous operation of multiple construction equipment units;
- Use of low pollutant emitting equipment;
- Use of catalytic reduction for gasoline-powered equipment;
- Watering the construction area to minimize fugitive dust; and
- Minimizing idling time by construction vehicles.

Mitigation Measure AIR-2: Reduce Emissions from Expanded Recycling and Organics Collection Programs.

To ensure that increased VMT resulting from implementation of CAP Action 4.1 does not result in significant air emissions, collection vehicles shall be converted to alternative fuels, such as natural gas, during roll-out of the expanded program, such that combined emissions fall below the significance threshold for daily and annual NOx emissions. This will be confirmed using generally accepted air emissions modeling, such as the CalEEMod model. In addition, to the extent that new programs increase VMT for long-haul vehicles, these

vehicles shall also be converted to alternative fuels, such as natural gas, such that any increase falls below the significance threshold for daily and annual NOx emissions.

Historical Resources

Impact: Implementation of the CAP could cause a substantial adverse change in the significance of a historical resource, as defined in Section 15064.5, or have other physical or aesthetic effects to a prehistoric or historic building, structure, object or site.

Mitigation Measure HIST-1: Archaeological Resources.

Prior to issuance of any permit for a future development that could directly affect an archaeological resource, the City shall require the following steps be taken to determine: (1) the presence of archaeological resources and (2) the appropriate mitigation for any significant resources which may be impacted by a development activity. Sites may include, but are not limited to, residential and commercial properties, privies, trash pits, building foundations, and industrial features representing the contributions of people from diverse socio-economic and ethnic backgrounds. Sites may also include resources associated with prehistoric Native American activities.

Initial Determination

The likelihood for the project site to contain historical resources shall be determined by reviewing site photographs and existing historic information (e.g. Archaeological Sensitivity Maps, the Archaeological Map Book, and the City's "Historical Inventory of Important Architects, Structures, and People in San Diego") and conducting a site visit. If there is any evidence that the site contains archaeological resources, then a historic evaluation consistent with the City's Historical Resources Guidelines (City Guidelines) would be required. All individuals conducting any phase of the archaeological evaluation program must meet professional qualifications in accordance with the City Guidelines.

Step 1: Based on the results of the Initial Determination, if there is evidence that the site contains historical resources, preparation of a historic evaluation is required. The evaluation report would generally include background research, field survey, archeological testing and analysis. Before actual field reconnaissance would occur, background research is required which includes a record search at the SCIC at San Diego State University and the San Diego Museum of Man. A review of the Sacred Lands File maintained by the NAHC must also be conducted at this time. Information about existing archaeological collections shall also be obtained from the San Diego Archaeology Center and any tribal repositories or museums.

In addition to the record searches mentioned above, background information may include, but is not limited to: examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), Sanborn Fire Maps, and historic cartographic and aerial photograph sources; reviewing previous archeological research in similar areas, models that predict site distribution, and archeological, architectural, and historical site inventory files; and conducting informant interviews. The results of the background information shall be included in the evaluation report.

Once the background research is complete, a field reconnaissance must be conducted by individuals whose qualifications meet the standards outlined in the City Guidelines.

Consultants are encouraged to employ innovative survey techniques when conducting enhanced reconnaissance, including, but not limited to, remote sensing, ground penetrating radar, and other soil resistivity techniques as determined on a case-by-case basis. Native American participation is required for field surveys when there is likelihood that the project site contains prehistoric archaeological resources or traditional cultural properties. If through background research and field surveys historical resources are identified, then an evaluation of significance must be performed by a qualified archaeologist.

Step 2: Once a historical resource has been identified, a significance determination must be made. Tribal representatives and/or Native American monitors will be involved in making recommendations regarding the significance of prehistoric archaeological sites during this phase of the process. The testing program may require reevaluation of the proposed project in consultation with the Native American representative which could result in a combination of project redesign to avoid and/or preserve significant resources as well as mitigation in the form of data recovery and monitoring (as recommended by the qualified archaeologist and Native American representative). An archaeological testing program will be required which includes evaluating the horizontal and vertical dimensions of a site, the chronological placement, site function, artifact/ecofact density and variability, presence/absence of subsurface features, and research potential. A thorough discussion of testing methodologies, including surface and subsurface investigations, can be found in the City Guidelines.

The results from the testing program shall be evaluated against the Significance Thresholds found in the City Guidelines. If significant historical resources are identified within the Area of Potential Effect, the site may be eligible for local designation. At this time, the final testing report must be submitted to Historical Resources Board staff for eligibility determination and possible designation. An agreement on the appropriate form of mitigation is required prior to distribution of a draft environmental document. If no significant resources are found, and site conditions are such that there is no potential for further discoveries, then no further action is required. Resources found to be non-significant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate Department of Parks and Recreation (DPR) site forms and inclusion of results in the survey and/or assessment report. If no significant resources are found, but results of the initial evaluation and testing phase indicates there is still a potential for resources to be present in portions of the property that could not be tested, then mitigation monitoring is required.

Step 3: Preferred mitigation for historical resources is to avoid the resource through project redesign. If the resource cannot be entirely avoided, all prudent and feasible measures to minimize harm shall be taken. For archaeological resources where preservation is not an option, a Research Design and Data Recovery Program is required, which includes a Collections Management Plan for review and approval. The data recovery program shall be based on a written research design and is subject to the provisions as outlined in CEQA, Section 21083.2. The data recovery program must be reviewed and approved by the City's Environmental Analyst prior to draft CEQA document distribution. Archaeological monitoring may be required during building demolition and/or construction grading when significant resources are known or suspected to be present on a site, but cannot be recovered prior to grading due to obstructions such as, but not limited to, existing development or dense vegetation.

A Native American observer must be retained for all subsurface investigations, including geotechnical testing and other ground-disturbing activities, whenever a Native American Traditional Cultural Property or any archaeological site located on City property or within the Area of Potential Effect of a City project would be impacted. In the event that human remains are encountered during data recovery and/or a monitoring program, the provisions of Public Resources Code Section 5097 must be followed. In the event that human remains are discovered during project grading, work shall halt in that area and the procedures set forth in the California Public Resources Code (Section 50987.98) and State Health and Safety Code (Section 7050.5), and in the federal, state, and local regulations described above shall be undertaken. These provisions are outlined in the Mitigation Monitoring and Reporting Program (MMRP) included in the environmental document. The Native American monitor shall be consulted during the preparation of the written report, at which time they may express concerns about the treatment of sensitive resources. If the Native American community requests participation of an observer for subsurface investigations on private property, the request shall be honored.

Step 4: Archaeological Resource Management reports shall be prepared by qualified professionals as determined by the criteria set forth in Appendix B of the City Guidelines. The discipline shall be tailored to the resource under evaluation. In cases involving complex resources, such as traditional cultural properties, rural landscape districts, sites involving a combination of prehistoric and historic archaeology, or historic districts, a team of experts will be necessary for a complete evaluation.

Specific types of historical resource reports are required to document the methods (see Section III of the City Guidelines) used to determine the presence or absence of historical resources; to identify the potential impacts from proposed development and evaluate the significance of any identified historical resources; to document the appropriate curation of archaeological collections (e.g. collected materials and the associated records); in the case of potentially significant impacts to historical resources, to recommend appropriate mitigation measures that would reduce the impacts to below a level of significance; and to document the results of mitigation and monitoring programs, if required.

Archaeological Resource Management reports shall be prepared in conformance with the California Office of Historic Preservation "Archaeological Resource Management Reports: Recommended Contents and Format" (see Appendix C of the City Guidelines), which will be used by Environmental Analysis Section staff in the review of archaeological resource reports. Consultants must ensure that archaeological resource reports are prepared consistent with this checklist. This requirement will standardize the content and format of all archaeological technical reports submitted to the City. A confidential appendix must be submitted (under separate cover) along with historical resources reports for archaeological sites and traditional cultural properties containing the confidential resource maps and records search information gathered during the background study. In addition, a Collections Management Plan shall be prepared for projects which result in a substantial collection of artifacts and must address the management and research goals of the project and the types of materials to be collected and curated based on a sampling strategy that is acceptable to the City. Appendix D (Historical Resources Report Form) may be used when no archaeological resources were identified within the project boundaries.

Step 5: For Archaeological Resources: All cultural materials, including original maps, field notes, non-burial related artifacts, catalog information, and final reports recovered during

public and/or private development projects must be permanently curated with an appropriate institution, one which has the proper facilities and staffing for insuring research access to the collections consistent with state and federal standards. In the event that a prehistoric and/or historic deposit is encountered during construction monitoring, a Collections Management Plan would be required in accordance with the project MMRP. The disposition of human remains and burial related artifacts that cannot be avoided or are inadvertently discovered is governed by state (i.e., Assembly Bill 2641 and California Native American Graves Protection and Repatriation Act of 2001) and federal (i.e., Native American Graves Protection and Repatriation Act) law, and must be treated in a dignified and culturally appropriate manner with respect for the deceased individual(s) and their descendants. Any human bones and associated grave goods of Native American origin shall be turned over to the appropriate Native American group for repatriation.

Arrangements for long-term curation must be established between the applicant/property owner and the consultant prior to the initiation of the field reconnaissance, and must be included in the archaeological survey, testing, and/or data recovery report submitted to the City for review and approval. Curation must be accomplished in accordance with the California State Historic Resources Commission's Guidelines for the Curation of Archaeological Collection (dated May 7, 1993) and, if federal funding is involved, 36 Code of Federal Regulations 79 of the Federal Register. Additional information regarding curation is provided in Section II of the City Guidelines.

Transportation and Circulation

Impact: Implementation of the CAP could create substantial alterations to present circulation movements including effects on existing public access points and/or resulting from anticipated changes in transportation modes.

Mitigation Measure TR-1: The Roundabouts Master Plan shall include a monitoring and adaptive management program to evaluate, and if necessary, to correct, pedestrian safety issues at operating roundabouts.

Water Supply

Impact: Implementation of the CAP could result in the excessive use of water.

Mitigation Measure WS-1: Water Supply Assessment. In order to ensure that large-scale renewable energy projects do not use excessive amounts of water, a Water Supply Assessment (WSA) shall be submitted for review as part of the subsequent environmental review process. The WSA shall demonstrate that the proposed project would not demand an amount of water greater than the amount required by a 500 dwelling unit project.

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CITY OF SAN DIEGO