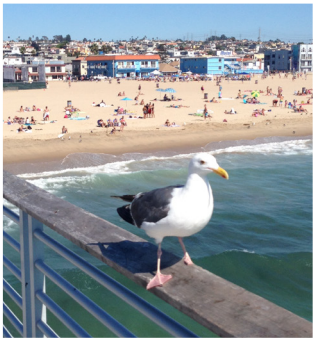

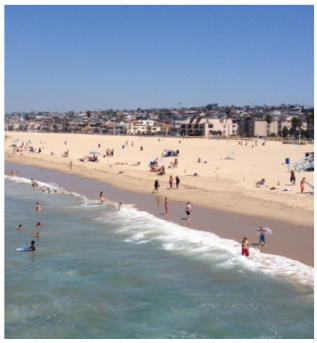
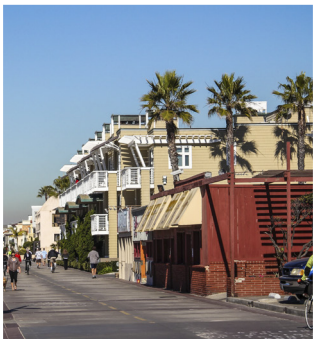

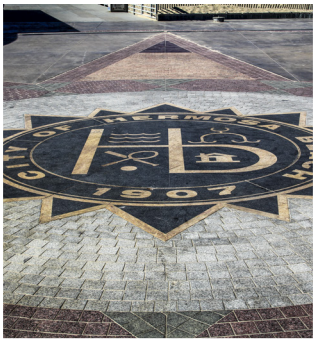

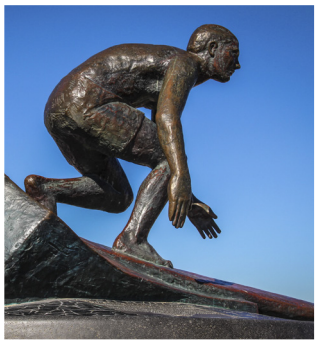

city of hermosa beach

PLAN Hermosa

Draft Environmental Impact Report

SCH# 2015081009 • October 2016

CITY OF HERMOSA BEACH

PLAN HERMOSA

DRAFT ENVIRONMENTAL IMPACT REPORT

SCH #2015081009

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OCTOBER 2016

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ABBREVIATIONS

AB	Assembly Bill
ADA	Americans with Disabilities Act
ADT	average daily traffic
afy	acre-feet per year
AQMP	Air Quality Management Plan
BAU	business as usual
CAAQS	California ambient air quality standards
CalEEMod	California Emissions Estimator Model
Cal/EPA	California Environmental Protection Agency
Cal Fire	California Department of Forestry and Fire Protection
Cal/OSHA	California Department of Occupational Safety and Health
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
Cal Water	California Water Service Company
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CHR	California Historical Resource
CIP	Capital Improvement Program
CLUP	Coastal Land Use Plan
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
COG	Council of Governments
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPUC	California Public Utilities Commission

CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DOC	California Department of Conservation
DOF	California Department of Finance
DTSC	California Department of Toxic Substances Control
DU/AC	dwelling units per acre
EIR	environmental impact report
EMS	emergency medical services
EO	Executive Order
EPA	US Environmental Protection Agency
ESA	Endangered Species Act
ESHA	Environmentally Sensitive Habitat Area
EWMP	Enhanced Watershed Management Program
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
GHG	greenhouse gas
GWh	gigawatt-hour
HBCSD	Hermosa Beach City School District
HBFD	Hermosa Beach Fire Department
HBPD	Hermosa Beach Police Department
HCM	Highway Capacity Manual
HVAC	heating, ventilating, and air conditioning
ICU	Intersection Capacity Utilization
IPCC	Intergovernmental Panel on Climate Change
JWPCP	Joint Water Pollution Control Plant
kV	kilovolt
kWh	kilowatt-hour
LACDPW	Los Angeles County Department of Public Works
LACFCD	Los Angeles County Flood Control District
LACFD	Los Angeles County Fire Department
LACSD	Sanitation Districts of Los Angeles County
LADOT	Los Angeles Department of Transportation
LARA	Los Angeles Regional Agency

lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
LCP	Local Coastal Program
LID	low impact development
LOS	level of service
LST	localized significance threshold
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MBUSD	Manhattan Beach Unified School District
MCL	maximum contaminant level
MEP	maximum extent practicable
Metro	Los Angeles County Metropolitan Transportation Authority
mgd	million gallons per day
$MMTCO_2e$	million metric tons of carbon dioxide equivalents
MRZ	mineral resource zone
MS4	municipal separate storm sewer system
$MTCO_2e$	metric tons of carbon dioxide equivalents
MW	megawatt
MWD	Metropolitan Water District of Southern California
MWh	megawatt-hour
NAAQS	national ambient air quality standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NHMLAC	Natural History Museum of Los Angeles County
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NO_2	nitrogen dioxide
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
N_2O	nitrous oxide
OPR	Governor's Office of Planning and Research
PCB	polychlorinated biphenyl
PCH	Pacific Coast Highway
PM	particulate matter
ppm	parts per million
PRC	Public Resources Code
PV	photovoltaic
RBUSD	Redondo Beach Unified School District

RCC	Regional Call Center
RCRA	Resource Conservation and Recovery Act
RHNA	Regional Housing Needs Allocation
ROG	reactive organic gas
RPS	Renewables Portfolio Standard
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBBMP	South Bay Bicycle Master Plan
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SCH	State Clearinghouse
SMARA	Surface Mining and Reclamation Act
SMBRP	Santa Monica Bay Restoration Project
SMGB	State Mining and Geology Board
SoCalGas	Southern California Gas Company
SO_2	sulfur dioxide
SR	State Route
SSMP	sewer system management plan
STIP	State Transportation Improvement Program
SWMP	stormwater management plan
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
T-BACT	Toxic Best Available Control Technology
TBR	Technical Background Report
TDM	transportation demand management
TMDL	Total Maximum Daily Load
TPH	total petroleum hydrocarbon
USACE	US Army Corps of Engineers
USC	United States Code
USDOT	US Department of Transportation
USFWS	US Fish and Wildlife Services
USGS	US Geological Survey
UWMP	urban water management plan
V/C	volume-to-capacity [ratio]

VMT	vehicle miles traveled
VTD	vehicle trips per day
WBMWD	West Basin Municipal Water District
WDR	waste discharge requirement
WMG	Watershed Management Group

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1.0 Executive Summary

1.0.1 PROJECT UNDER REVIEW

This Draft Environmental Impact Report (Draft EIR) considers the environmental impacts likely to occur with adoption and implementation of the City of Hermosa Beach's General Plan and Local Coastal Program (PLAN Hermosa). Together, these planning documents constitute the proposed project. This EIR is designed to inform decision-makers in Hermosa Beach, other responsible and trustee agencies, and the general public of the potential environmental effects of approval and implementation of the proposed project. A detailed description of the proposed project is provided in Chapter 3.0, Project Description. The City of Hermosa Beach (City) is the lead agency for environmental review of the proposed project.

PLAN Hermosa defines long-term community goals, decision-making policies, and implementation actions. The plan establishes several land use designations that include residential, commercial, creative, institutional, and public facilities uses. PLAN Hermosa establishes policies to accommodate a total of 10,409 dwelling units and 2,736,800 square feet of nonresidential uses in 2040. The environmental impact analysis in this Draft EIR is defined primarily by the change between existing conditions and those associated with future land uses proposed in PLAN Hermosa.

To ensure maximum public access to the coast and public recreation areas, the Coastal Act directs each local government in the Coastal Zone to prepare a Local Coastal Program (LCP) consistent with Section 30501 of the California Coastal Act, in consultation with the Coastal Commission and with public participation. The Governor's Office of Planning and Research (OPR) 2003 General Plan Guidelines suggest integration of the general plan and local coastal program into a "coherent and internally consistent local general plan." As such, the City has decided to update both the General Plan and the LCP together as an integrated document. The General Plan and LCP update addresses land use; mobility; parks, recreation, and open space; coastal access; coastal hazards; water quality; air quality and climate change; noise; and other issues that are important to the community. In order to achieve certification from the Coastal Commission and receive local control over the issuance of Coastal Development Permits, Hermosa Beach must update the Coastal Land Use Plan and prepare and adopt a Local Implementation Program that collectively consider and address emerging coastal issues such as beach management, parking, water quality, sea level rise, and climate change.

1.0.2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

As shown in **Table 1.0-1 (Summary of Impacts and Mitigation Measures)**, a number of project impacts identified in the EIR were found to be less than significant, requiring no mitigation measures. These impacts are found in the following sections: Aesthetics and Visual Resources; Air Quality; Biological Resources; Cultural Resources; Geology and Soils; Greenhouse Gas Emissions; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Mineral Resources; Noise; Population, Housing, and Employment; Public Services, Community Facilities, and Utilities; and Transportation. In addition, it was determined that numerous other identified impacts could be reduced to a less than significant level with implementation of the proposed mitigation measures described in Chapter 4.0 of this EIR.

ENVIRONMENTAL IMPACTS AND MITIGATION

Under the California Environmental Quality Act (CEQA), a significant effect on the environment is defined as a substantial or potentially substantial adverse change in any of the physical conditions in the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (CEQA Guidelines Section 15382). Implementation of PLAN Hermosa would result in significant impacts on some of these resources,

which are analyzed in Sections 4.1 through 4.14 of this document and summarized in **Table 1.0-1** (provided at the end of this chapter).

SIGNIFICANT AND UNAVOIDABLE IMPACTS

Air Quality

Impact 4.2-2 Short-Term Construction Emissions. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would generate air pollutant emissions from short-term construction.

Impact 4.2-7 Cumulative Construction and Operational Emissions. PLAN Hermosa in addition to anticipated growth in the South Coast Air Basin would increase the amount of construction-related air pollutant emissions occurring within the basin, thereby affecting the region's ability to attain ambient air quality standards.

Cultural Resources

Impact 4.4-4 Substantial Change in the Significance of a Historical Resource. PLAN Hermosa would provide for future development and reuse projects in the city in a manner that could cause a substantial change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.

Impact 4.4-8 Cumulative Effects on Historical Resources. PLAN Hermosa in addition to anticipated future development in the South Bay Cities COG planning area could cause a substantial change in the significance of a historical resource.

Transportation

Impact 4.14-1 Exceedance of LOS Performance Standards. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not increase overall demand for travel within Hermosa Beach. Both the City's and Caltrans's existing level of service standards for intersections and roadway segments would be maintained at the majority of intersections and segments analyzed, except at three intersections and on one roadway segment.

Impact 4.14-7 Cumulative Contribution to Exceedance of LOS Performance Standards. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not increase overall demand for travel within Hermosa Beach. Both the City's and Caltrans's existing level of service standards for intersections and roadway segments would be maintained at the majority of intersections and segments analyzed, with the exception of three intersections and one roadway segment.

1.0.3 ALTERNATIVES TO THE PROJECT

Chapter 6.0, Alternatives to the Proposed Project, contains a full description and analysis of three alternatives to the proposed project that are analyzed in this Draft EIR. The alternatives are:

- **Alternative 1 – Retain Existing General Plan/Local Coastal Land Use Plan (No Project Alternative)**: This alternative assumes that PLAN Hermosa would not be implemented and that future development in the city would proceed as indicated in the existing General Plan and Coastal Land Use Plan.
- **Alternative 2 – Achieve Carbon Neutrality by 2030**: This alternative would be focused on achieving a community-wide goal of carbon neutrality by 2030. Carbon neutrality is the state of achieving net zero carbon emissions, generally by balancing a measured amount of carbon released with an equivalent amount sequestered or offset by the community.

There are two primary differences between this alternative and the proposed draft of PLAN Hermosa, which currently includes a goal to achieve carbon neutrality no later than the year 2040:

1) Expediting achievement of a carbon neutral goal by 10 years from 2040 to 2030.
2) Bypassing the use of carbon credits to offset carbon emissions that could not be eliminated.

- **Alternative 3 – Stronger Retention of Visual and Cultural Resources**: This alternative would focus on implementing additional policies or implementation actions that would facilitate greater retention of visual and cultural resources in Hermosa Beach. While PLAN Hermosa includes several goals and policies to address community character, historic buildings, and scenic views, they largely do so in a manner that encourages rather than mandates the protection of these resources. This alternative, with the added or modified policies, would result in greater levels of certainty that cultural and visual resources would be retained, compared to the policies and programs proposed in PLAN Hermosa.

1.0.4 POTENTIAL AREAS OF CONTROVERSY

This EIR is a comprehensive document that evaluates each environmental topic that could be applicable to PLAN Hermosa. The environmental topics covered, as potential areas of controversy, include impacts on public services, potential air quality effects, and sea level rise.

The City published and circulated a Notice of Preparation (NOP) from August 7, 2015, through September 8, 2015, which was distributed to local, regional, and state agencies and posted on the City's website at http://www.hermosabch.org/index.aspx?page=767. The NOP and written comments received on the NOP are included in **Appendix B**.

1.0.5 SUMMARY TABLE

Information in **Table 1.0-1** has been organized to correspond with the environmental issues discussed in Chapter 4.0. The table is arranged in four columns:

- Environmental Impacts
- Level of Significance Prior to Mitigation
- Mitigation Measure(s)
- Level of Significance After Mitigation

If an impact is determined to be significant or potentially significant after implementation of proposed PLAN Hermosa policies and implementation actions, mitigation measures are identified, where appropriate and feasible. More than one mitigation measure may be required to reduce the impact to a less than significant level. This EIR assumes that all applicable plans, policies, and regulations would be implemented, including but not necessarily limited to proposed PLAN Hermosa policies and implementation actions, as well as the laws and requirements or recommendations of the City of Hermosa Beach. Applicable plans, policies, and regulations are identified and described in the Regulatory Setting subsection of each resource section and in the relevant impact analysis. Further description of both the existing environmental setting and the existing regulatory setting in 2015 can be found in the Technical Background Report (TBR) prepared for PLAN Hermosa, which is provided as **Appendix C** to the EIR. A description of the organization of the environmental analysis, as well as key foundational assumptions regarding the approach to the analysis, is included in Chapter 4.0, Introduction to the Analysis.

For a complete description of potential impacts and recommended mitigation measures, please refer to the specific resource sections in Chapter 4.0.

TABLE 1.0-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.1 Aesthetics and Visual Resources			
4.1-1 Effects on Scenic Vistas. Future actions under PLAN Hermosa have the potential to encroach on views from prominent public viewpoints. Future actions also have the potential to degrade the visual quality of scenic vistas, through the introduction of incongruous features to the viewshed.	PS	**MM 4.1-1** Projects located within 50 feet and within the directional arrow of a prominent public viewpoint, or within the uninterrupted viewing areas, as identified in Figure 4.1-2, shall demonstrate that existing public views of scenic resources along the view corridors identified in Draft EIR Figure 4.1-2 are, at a minimum, maintained in their current condition and that no features are added in the viewshed that substantially obstruct or detract from the public views of the Pacific Ocean, the Palos Verdes Peninsula, the Santa Monica Mountains, and the Los Angeles Basin and the San Gabriel Mountains. This requirement shall be incorporated into the review process for precise development plans under Chapter 17.58 of the Zoning Ordinance**.**	LTS
4.1-2 Effects on Scenic Resources within a State Scenic Highway. There are no designated state scenic highways in or near Hermosa Beach. However, PLAN Hermosa directs the City to protect Pacific Coast Highway as a potentially scenic highway and would guide development and reuse projects in a manner that is consistent with the existing visual character of Pacific Coast Highway so that it may be designated as a scenic highway at some point in the future.	LTS	None required.	N/A
4.1-3 Degradation of Existing Visual Character. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not adversely alter the existing land use pattern or visual character of the city.	LTS	None required.	N/A
4.1-4 New Shade or Shadow That Substantially Affects Outdoor Recreation. PLAN Hermosa would allow development or reuse projects in a manner where new sources of shade or shadow may reach outdoor recreation facilities or public gathering areas. However, the voter-approved height limits effectively restrict the number of areas in which shade or	LTS	None required.	N/A

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	Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	shadow may have an adverse effect but do not eliminate all potential sources.			
4.1-5	**New Sources of Light or Glare**. PLAN Hermosa would guide development and reuse projects in a manner that could create new sources of glare, skyglow, and spillover lighting. However, PLAN Hermosa also includes specific policies and implementation actions that minimize adverse effects related to new sources of light and glare.	LTS	None required.	N/A
4.1-6	**Cumulative Adverse Effects Related to Visual Resources.** Of the categories of potential visual impacts addressed, only the impact of artificial lighting to the night sky (skyglow impact) is potentially cumulative in nature. All other impacts (to scenic vistas, scenic resources, visual character, shade and shadow effects, and lighting impacts of glare and spillover) are localized and confined within the city limits of Hermosa Beach.	LCC	None required.	N/A
	4.2 Air Quality			
4.2-1	**Conflict with or Obstruct Implementation of the Applicable Air Quality Plan.** Implementation of PLAN Hermosa would guide future development in the city in a manner that could result in air pollution emissions. Compliance with existing federal and state regulations and implementation of PLAN Hermosa policies would reduce conflicts with air quality plans.	LTS	None required.	N/A
4.2-2	**Short-Term Construction Emissions.** Implementation of PLAN Hermosa would guide future development in the city in a manner that could generate air pollutant emissions from short-term construction. Although PLAN Hermosa policies and programs and enforcement of current SCAQMD rules and regulations would help reduce short-term emissions, construction emissions would result in a potentially significant impact.	PS	**MM 4.4-2a** Construction projects within the city shall demonstrate compliance with all applicable standards of the Southern California Air Quality Management District, including the following provisions of District Rule 403: • All unpaved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust covers shall be used to reduce dust emissions and meet SCAQMD Rule 403. Wetting could reduce fugitive dust by as much as 50 percent. • The construction area shall be kept sufficiently dampened to control dust caused by grading and	SU

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Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		hauling, and at all times provide reasonable control of dust caused by wind. • All clearing, earth moving, or excavation activities shall be discontinued during periods of high winds (i.e., greater than 15 mph), so as to prevent excessive amounts of dust. • All dirt/soil loads shall be secured by trimming, watering, or other appropriate means to prevent spillage and dust. • All dirt/soil materials transported off-site shall be required to cover their loads as required by California Vehicle Code Section 23114 to prevent excessive amount of dust. • General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. • Trucks having no current hauling activity shall not idle but shall be turned off. **MM 4.4-2b** In accordance with Section 2485 in Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location. **MM 4.4-2c** Construction projects within the city shall comply with South Coast Air Quality Management District Rule 1113 limiting the volatile organic compound content of architectural coatings. **MM 4.4-2d** Construction projects within the city shall install odor-reducing equipment in accordance with South Coast Air Quality Management District Rule 1138. **MM 4.4-2e** Project applicants shall identify all measures to reduce air pollutant emissions below SCAQMD thresholds prior to the issuance of building permits. Should attainment of SCAQMD thresholds be determined to be infeasible, construction contractors shall provide evidence	

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Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		of this to the City and will be encouraged to apply for SCAQMD SOON funds.	
4.2-3 **Long-Term Operational Emissions.** Subsequent development associated with the implementation of PLAN Hermosa could generate air pollutant emissions from long-term operation. PLAN Hermosa policies and programs and enforcement of current SCAQMD rules and regulations would help reduce long-term emissions.	LTS	None required.	N/A
4.2-4 **CO Hot Spots.** Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that would reduce vehicle traffic to existing roadways, which could reduce the potential for CO hot spots. Traffic volumes anticipated at intersections throughout the city with implementation of PLAN Hermosa would not be large enough to cause a CO hot spot.	LTS	None required.	N/A
4.2-5 **Expose Sensitive Receptors to Substantial Pollutant Concentrations.** Implementation of PLAN Hermosa would guide future development and reuse projects in Hermosa Beach in a manner that would potentially generate additional diesel vehicle traffic and diesel stationary sources within the city.	LTS	None required.	N/A
4.2-6 **Odors.** Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that could generate odors or expose existing receptors to odors. However, PLAN Hermosa policies and programs and compliance with SCAQMD rules and regulations would result in a less than significant impact.	LTS	None required.	N/A
4.2-7 **Cumulative Air Quality Impacts.** Implementation of PLAN Hermosa in addition to anticipated growth in the South Coast Air Basin would increase the amount of air quality emissions occurring within the basin and affect the region's ability to attain ambient air quality standards.	CC	Implement mitigation measures **MM 4.2-2a** through **MM 4.2-2e**.	CC/SU
4.3 Biological Resources			
4.3-1 **Impacts to Special-Status Species.** PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in the development or expansion of	PS	**MM 4.3-1** Construction of facilities on the beach that must occur between the months of April and August (roosting season for snowy plovers) will require preconstruction	LTS

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Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
beach-supporting uses that could adversely affect western snowy plover and California least tern.		surveys to determine the presence of western snowy plovers or California least terns. If these species are present, no construction may occur until the species leave the roost based on review by a qualified biologist and consultation with the California Department of Fish and Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). If the project is within a Special Protection Zone, construction activities will not be allowed until western snowy plovers are no longer present. If the area is not within a Special Protection Zone, a qualified biologist will survey the area for western snowy plovers using established protocols and in coordination with the USFWS and CDFW to determine if plovers are present. If they are present, no work will occur until after snowy plovers leave the roost site for the season. The qualified biologist will also survey the area for California least terns using established protocols and in coordination with the USFWS and CDFW to determine if California least terns are present. If surveys are negative for western snowy plovers or California least terns, work may proceed during the roosting period and the biologist will be present to monitor the establishment of the beach landing sites to ensure that no western snowy plovers or California least terns are injured or killed, should they arrive in the area subsequent to work commencing. The project will include fencing/walls that will prevent western snowy plovers or California least terns from entering the work areas. The biologist will conduct weekly site visits to ensure that fencing/walls are intact until construction activities are finished at the sites and all equipment is removed from the beach. The results of the preconstruction survey will be submitted to the City prior to the establishment of beach landing sites. All biological monitoring efforts will be documented in monthly compliance reports to the City.	

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Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.3-2 **Impacts to Sensitive Biological Communities or Riparian Habitat.** Hermosa Beach does not contain any sensitive biological communities or riparian habitat that could be impacted by implementation of PLAN Hermosa.	NI	None required.	N/A
4.3-3 **Impacts to Federally Protected Wetlands.** PLAN Hermosa would guide future development and reuse projects in the city in a manner that could indirectly impact jurisdictional waters of the United States, particularly Santa Monica Bay. However, implementation of PLAN Hermosa policies and implementation actions and enforcement of existing grading and erosion regulations would result in a less than significant impact.	LTS	None required.	N/A
4.3-4 **Impacts to the Movement of Native Resident or Migratory Fish or Wildlife Species or Within an Established Migratory Corridor**. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could impede wildlife movement in the planning area.	LTS	None required.	N/A
4.3-5 **Conflict with Any Local Policies or Ordinances Protecting Biological Resources, Such as a Tree Preservation Policy or Ordinance**. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not result in a conflict with a local policy or ordinance protecting biological resources, including but not limited to Chapter 12.36 of the Hermosa Beach Municipal Code protecting certain trees.	LTS	None required.	N/A
4.3-6 **Cumulative Impacts to Biological Resources.** Implementation of PLAN Hermosa, in combination with existing, approved, proposed, and reasonably foreseeable development in the South Bay Cities COG planning area, could result in the conversion of habitat and impact biological resources. Biological impacts from PLAN Hermosa would be limited due to the small size of potential projects and the focus on urban infill sites, and PLAN Hermosa would not contribute to any cumulative impacts.	LCC	None required.	N/A

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Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.4 Cultural Resources			
4.4-1 **Impact on Archaeological Resources.** Implementation of PLAN Hermosa could provide for future development and reuse projects on previously undisturbed land throughout the city, which could cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5. However, PLAN Hermosa includes implementation actions that require archaeological investigations for discretionary projects on previously undisturbed lands determined sensitive for cultural resources, and require the preservation of any discovered archaeologically significant resources.	LTS	None required.	N/A
4.4-2 **Disturb Human Remains.** Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that could disturb human remains.	LTS	None required.	N/A
4.4-3 **Direct or Indirect Destruction of a Unique Paleontological Resource, Site, or Geologic Feature** Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that could damage previously unknown unique paleontological resources, sites, or unique geologic features.	PS	**MM 4.4-3** As a standard condition of approval for future development projects implemented under PLAN Hermosa that involve ground disturbance or excavation: • For any project where earthmoving or ground disturbance activities are proposed at depths that encounter older Quaternary terrace deposits, a qualified paleontologist shall be present during excavation or earthmoving activities. • If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and notify the City. The project applicant(s) shall retain a qualified paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate Paleontology guidelines (1996). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the lead	LTS

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Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.	
4.4-4 Substantially Change a Historic Resource. Implementation of PLAN Hermosa would provide for future development and reuse projects in the city in a manner that could cause a substantial change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.	PS	**MM 4.4-4a** The City shall establish an updated list of potential historic resources to be maintained by the Community Development Director. The list shall be updated every 10 years, at a minimum, to identify as-yet-unknown historical resources (as defined in CEQA Guidelines Section 15064.5) as potential resources are identified through citywide surveys and on a project-by-project basis. **MM 4.4-4b** The City shall require project applicants to conduct historical resources studies, surveys, and assessment reports on a project-by-project basis, when a project proposes to alter, demolish, or degrade a designated landmark or a potential historic resource. **MM 4.4-4c** The City shall maintain the "Historical Resources in Hermosa Beach" guide, and shall update the guide so that it is informed by current resource data and its goals and policies are consistent with the Land Use + Design Element. **MM 4.4-4d** The City shall develop procedures and nomination applications to facilitate and streamline the designation of local historic sites and historic districts. **MM 4.4-4e** Historical resources studies, surveys, and assessment reports shall be performed by persons who meet the Secretary of the Interior's Professional Qualification Standards for Archaeology and Historic Preservation (48 CFR 44716). **MM 4.4-4f** For historical resources that may be adversely impacted, conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties and application of the State Historical Building Code shall be required to protect significant character-defining features and protect the eligibility of potential historical resources.	SU

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Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.4-5 Cumulative Impact on Archaeological Resources. Implementation of PLAN Hermosa in addition to future development in the South Bay Cities COG planning area could cause a substantial change in the significance of an archaeological resource. The loss of some archaeological resources may be prevented through implementation of PLAN Hermosa policies and similar policies in other communities. PLAN Hermosa also includes implementation actions to minimize impacts by requiring archaeological investigations on previously undisturbed lands, and requiring the preservation of any discovered archaeologically significant resources. These implementation actions would ensure that these resources can be protected and preserved.	LCC	None required.	N/A
4.4-6 Cumulative Impact on Human Remains. Implementation of PLAN Hermosa in addition to anticipated future development in the South Bay Cities COG planning area could disturb human remains, including those interred outside of formal cemeteries. The loss of some human remains may be prevented through implementation of PLAN Hermosa policies and similar policies in other communities. Additionally, PLAN Hermosa includes implementation actions to minimize impacts by requiring archaeological investigations on previously undisturbed lands, and requiring the preservation of any discovered archaeologically significant resources. These implementation actions would ensure that these resources can be protected and preserved.	LCC	None required.	N/A
4.4-7 Cumulative Impact on Paleontological Resources. Ground disturbance, earthmoving, and excavation activities associated with implementation of PLAN Hermosa combined with construction activities in the South Bay Cities COG planning area could damage previously unknown unique paleontological resources.	CC	Implement mitigation measure **MM 4.4-3.**	LS
4.4-8 Cumulative Impact on Historical Resources. Implementation of PLAN Hermosa in addition to anticipated future development in the South Bay Cities COG planning area could cause a substantial change in the significance of a	CC	Implement mitigation measures **MM 4.4-4a** through **MM 4.4-f.**	CC/SU

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	Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	historical resource. The loss of some historical resources may be prevented through implementation of PLAN Hermosa policies and similar policies in other communities. However, this would not ensure that these resources can be protected and preserved.			
	4.5 Geology and Soils			
4.5-1	**Impacts Associated with Fault Rupture and Seismic Hazards.** PLAN Hermosa would provide for and regulate future development and reuse projects in the city, including buildings and structures that would potentially expose people and structures to seismic hazards. Implementation of existing laws, regulations, and policies, as outlined in the Regulatory Setting subsection, and PLAN Hermosa policies would minimize seismic hazards impacts to people and structures.	LTS	None required.	N/A
4.5-2	**Soil Erosion or Loss of Topsoil.** PLAN Hermosa would provide for and regulate future development and reuse projects in the city, which would entail ground-disturbing activities that could lead to soil loss. Compliance with existing policies regarding soil erosion and implementation of PLAN Hermosa policies would minimize impacts associated with erosion and loss of topsoil.	LTS	None required.	N/A
4.5-3	**Unstable and Expansive Soils.** PLAN Hermosa would provide for and regulate future development and reuse projects in the city. Because Hermosa Beach has a low potential for expansive soils and PLAN Hermosa contains policies to minimize development in areas with unstable or expansive soils, this impact would be less than significant.	LTS	None required.	N/A
4.5-4	**Cumulative Geologic and Soil Hazards.** Implementation of PLAN Hermosa, in addition to other existing, planned, proposed, approved, and reasonably foreseeable development projects in the South Bay Cities COG planning area, may result in cumulative soil erosion impacts. However, compliance with existing regulations intended to reduce soil erosion during construction would reduce this impact.	LCC	None required.	N/A

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Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.6 Greenhouse Gas Emissions			
4.6-1 Generate Greenhouse Gas Emissions That May Have a Significant Impact on the Environment and Inhibit the Goals of Assembly Bill 32. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in additional greenhouse gas emissions generated. However, the plan also includes numerous policies and actions to reduce or eliminate GHG emissions from both new and existing development through incentives and voluntary actions that will meet or exceed the long-term greenhouse gas reduction goals to reduce emissions at least 66 percent below 2005 levels by 2040 (excluding offsets) through direct and local programs. However, since the City is relying on incentive-based or voluntary actions to achieve GHG reduction goals, there is a lower degree of certainty that the emissions reductions thresholds would be met compared to regulatory or mandatory actions.	PS	**MM 4.6-1a** The City of Hermosa Beach will utilize the climate action plan, under development by the South Bay Cities Council of Governments, or other appropriate tools to research current data gaps, identify specific actions, and define the responsible parties and time frames needed to achieve the greenhouse gas reduction goals (monitoring milestones) identified in mitigation measure MM 4.6-1b. **MM 4.6-1b** The City of Hermosa Beach will re-inventory community GHG emissions and evaluate implementation progress of policies to reduce GHG emissions for the calendar year of 2020 and a minimum of every five years thereafter. The interim reduction goals to be achieved for consistency with long-term state goals include: • 2020: 15 percent below 2005 levels • 2025: 31 percent below 2005 levels • 2030: 49 percent below 2005 levels • 2035: 57 percent below 2005 levels • 2040: 66 percent below 2005 levels **MM 4.6-1c** The City will revise PLAN Hermosa and/or the City's Climate Action Plan when, upon evaluation required in mitigation measure MM 4.6-1b, the City determines that Hermosa Beach is not on track to meet the applicable GHG reduction goals. Revisions to PLAN Hermosa, the Climate Action Plan, or other City policies and programs will include additional regulatory measures that provide a higher degree of certainty that emissions reduction targets will be met. Use of an adaptive management approach would allow the City to evaluate progress by activity sector (e.g., transportation, energy, water, waste) and prescribe additional policies or programs to be implemented in the intervening five years for activity sectors that are not on track to achieve the GHG reduction goals.	LCC

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Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
4.6-2 Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases. PLAN Hermosa would guide future development and reuse projects in the city in a manner that is consistent with state and local plans, policies, or regulations adopted to reduce greenhouse gas emissions. The applicable plans, policies, and regulations include the AB 32 Scoping Plan, the City of Hermosa Beach Sustainability Plan, and the City of Hermosa Beach Municipal Carbon Neutral Plan. PLAN Hermosa includes goals, policies, and actions that would meet or exceed the goals established within each of these applicable plans.	LTS	None required.	N/A
4.7 Hazards and Hazardous Materials			
4.7-1 Transport, Use, or Disposal of Hazardous Materials. Implementation of PLAN Hermosa would guide future development in the city in a manner that could result in the public's exposure to hazardous materials from increased transport, use, or accidental release of hazardous materials. Compliance with existing federal and state regulations and implementation of PLAN Hermosa policies would reduce risks of accidents associated with the routine transport, use, or disposal of hazardous materials.	LTS	None required.	N/A
4.7-2 Release of Hazardous Materials Into the Environment. Implementation of PLAN Hermosa would guide future development in the city in a manner that could lead to accidental release of hazardous materials into the environment. Compliance with existing federal and state regulations and implementation of PLAN Hermosa policies would reduce risks associated with the accidental release of hazardous materials. However, development of the City's Maintenance Yard or other sites in the city could release known or unknown hazardous materials.	PS	**MM 4.7-2a** For any development activities that would encroach upon or take place at the City's Maintenance Yard, the City shall require the preparation and implementation of a Human Health Risk Assessment (HHRA) and a Remedial Action Plan (RAP) to be approved by the appropriate agencies. **MM 4.7-2b** Future discretionary projects involving the use of hazardous materials that may be accidentally released or encountered during construction shall be required to implement the following procedures: • Stop all work in the vicinity of any discovered contamination or release. • Identify the scope and immediacy of the problem.	LTS

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Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
		• Coordinate with responsible agencies (Department of Toxic Substances Control, Regional Water Quality Control Board, or US Environmental Protection Agency). • Conduct the necessary investigation and remediation activities to resolve the situation before continuing construction work as required by state and local regulations.	
4.7-3 Emission or Handling of Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School. PLAN Hermosa implementation would guide future development in the city. Such development, which could emit or handle hazardous waste, could occur in the proximity of new or existing schools. Compliance with existing regulations would reduce the risk of emissions or the handling of hazardous materials near schools.	LTS	None required.	N/A
4.7-4 Interference with an Adopted Emergency Response Plan. Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that would ensure conformance with countywide emergency response programs and continued cooperation with emergency response service providers.	LTS	None required.	N/A
4.7-5 Cumulative Effect on Transport, Use, or Disposal of Hazardous Materials. Implementation of PLAN Hermosa, along with increased urban development in Los Angeles County, would not result in cumulative hazards impacts.	LCC	None required.	N/A
4.8 Hydrology and Water Quality			
4.8-1 Water Quality Standards and Waste Discharge Requirements. Implementation of PLAN Hermosa would provide for future development and reuse projects that could alter existing stormwater runoff and associated pollutants. However, the potential for stormwater flows to affect water quality would be controlled through implementation of Municipal Code Chapter 8.44 (Stormwater and Urban Runoff Pollution Control Regulations), which includes the City's Low-	LTS	None required.	N/A

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Impact Development (LID) Ordinance (Municipal Code Section 8.44.095), and the City's Green Street Policy. Construction activities resulting from implementation of PLAN Hermosa would also temporarily increase the amount of sediments and pollutants in stormwater runoff. However, implementation of PLAN Hermosa policies and implementation actions and enforcement of existing grading and erosion regulations (Municipal Code Section 8.44.090 and NPDES Construction General Permit SWPPP requirements) would result in a less than significant impact.			
4.8-2 **Depletion of Groundwater Supplies or Substantial Interference with Groundwater Recharge.** Implementation of PLAN Hermosa would provide for future development and reuse projects that would minimally affect groundwater recharge because existing areas of open space would be preserved, and implementation of the City's LID Ordinance, Green Street Policy, and PLAN Hermosa policies and implementation actions would require permeable area in new development, redevelopment, and infrastructure improvements.	LTS	None required.	N/A
4.8-3 Alteration of the Existing Drainage Pattern of the Site or Area so as to Result in Substantial On- or Off-Site Erosion or Siltation. Implementation of PLAN Hermosa would provide for future development and reuse projects that would minimally alter drainage patterns and the amount of stormwater runoff, which would minimize the potential for erosion or siltation. Continued implementation and enforcement of existing grading, erosion, and flood control regulations, in combination with the City's LID Ordinance, Green Street Policy, and PLAN Hermosa policies and implementation actions, would result in a less than significant impact.	LTS	None required.	N/A
4.8-4 **Substantial Alteration of the Existing Drainage Pattern of the Site or Area so as to Result in On- or Off-Site Flooding.** Implementation of PLAN Hermosa would provide for future development and reuse projects that would minimally alter drainage patterns and the amount of stormwater runoff, which	LTS	None required.	N/A

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	Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
	would minimize the potential for on- and off-site flooding. Continued implementation and enforcement of existing grading, erosion, and flood control regulations, in combination with the City's LID Ordinance, Green Street Policy, and PLAN Hermosa policies and implementation actions, would result in a less than significant impact.			
4.8-5	**Create or Contribute Runoff Water Exceeding the Capacity of Existing or Planned Stormwater Drainage Systems or Providing Substantial Additional Sources of Polluted Runoff.** Implementation of PLAN Hermosa would provide for future development and reuse projects that would generate stormwater runoff that would be discharged to the storm drain system and would contain urban pollutants. Continued implementation and enforcement of existing grading and erosion regulations, in combination with the City's LID Ordinance and Green Street Policy, the Beach Cities EWMP, and PLAN Hermosa policies and implementation actions, would result in a less than significant impact.	LTS	None required.	N/A
4.8-6	**Substantial Degradation of Water Quality.** Implementation of PLAN Hermosa would provide for future development and reuse projects that would not result in substantial degradation of water quality with continued implementation of Municipal Code Chapter 8.44 (Stormwater and Urban Runoff Pollution Control Regulations), which includes the City's Low-Impact Design (LID) Ordinance (Municipal Code Section 8.44.095), the City's Green Street Policy, existing grading and erosion regulations (Municipal Code Section 8.44.090 and NPDES Construction General Permit SWPPP requirements), participation in the Beach Cities EWMP, and implementation of PLAN Hermosa policies and implementation actions.	LTS	None required.	N/A
4.8-7	**Placement of Housing Within a 100-Year Flood Hazard Area.** Implementation of PLAN Hermosa would not place housing within a 100-year flood hazard area. Additionally, PLAN Hermosa includes policies and implementation actions to decrease exposure to and impacts from flood hazards throughout the city.	LTS	None required.	N/A

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4.8-8 Placement Within a 100-Year Flood Hazard Area Structures That Would Impede or Redirect Flood Flows. Implementation of PLAN Hermosa would allow development or expansion of facilities to support coastal access in the 100-year flood hazard area. However, adoption and implementation of PLAN Hermosa policies and implementation actions and adherence to development regulations specific to flood hazard areas would result in a less than significant impact.	LTS	None required.	N/A
4.8-9 Exposure of People or Structures to a Significant Risk of Loss, Injury, or Death Involving Flooding. Implementation of PLAN Hermosa would not allow habitable development in locations currently designated as 100-year flood hazard areas, which generally precludes loss, injury, or death from flooding, including flooding from the failure of a dam or levee. However, sea level rise is more likely than not to expand the area exposed to flooding conditions in the future. Adoption and implementation of PLAN Hermosa policies and implementation actions that prepare the city for sea level rise and adherence to development regulations specific to flood hazard areas would result in a less than significant impact.	LTS	None required.	N/A
4.8-10 Inundation by Seiche, Tsunami, or Mudflow. Implementation of PLAN Hermosa would provide for future development and reuse projects that would be in locations that may be subject to inundation by tsunami or mudflow. However, adoption and implementation of PLAN Hermosa policies and implementation actions would result in a less than significant impact.	LTS	None required.	N/A
4.8-11 Cumulative Effects on Water Quality Standards or Waste Discharge Requirements. Anticipated regional growth in the Santa Monica Bay Watershed could increase the amount of impervious surface in the watershed, thereby potentially increasing the total volume, peak discharge rate of stormwater runoff, and associated pollutants. Additionally, construction activities resulting from regional growth could increase the amount of sediments and pollutants in stormwater runoff and could lead to water quality degradation. PLAN Hermosa's	LCC	None required.	N/A

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contribution would be less than cumulatively considerable because it would result in minimal changes in stormwater flows and pollutants with implementation of PLAN Hermosa policies and implementation actions, the City's LID Ordinance and Green Street Policy, participation in regional plans such as the Beach Cities EWMP, and compliance with existing regulations.			
4.8-12 Cumulative Effects on Groundwater Supply and Recharge. Anticipated regional growth overlying the West Coast subbasin of the Coastal Plain, Los Angeles Basin, could increase the amount of impervious surface, thereby potentially decreasing the area available for groundwater recharge. PLAN Hermosa's contribution would be less than cumulatively considerable because new areas of impervious surface as a result of implementing PLAN Hermosa would be minimal, and new development, redevelopment, and infrastructure improvements would be required to include more permeable surfaces than under baseline conditions. With implementation of PLAN Hermosa policies and implementation actions, the City's LID Ordinance and Green Street Policy, participation in regional plans such as the Beach Cities EWMP, and compliance with existing regulations, this impact would be less than cumulatively considerable.	LCC	None required.	N/A
4.8-13 Cumulative Alteration of Stormwater Drainage Systems and Patterns Resulting in Erosion. Anticipated regional growth throughout the Santa Monica Bay Watershed could increase the amount of impervious surface in the watershed, thereby potentially increasing the total volume and peak discharge rate of stormwater runoff and the potential for erosion and sedimentation. PLAN Hermosa's contribution would be less than cumulatively considerable because the planning area is generally built out, which would result in minimal changes in drainage patterns and therefore erosion potential with implementation of PLAN Hermosa policies and implementation actions, the City's LID Ordinance and Green Street Policy, participation in regional plans such as the Beach Cities EWMP, and compliance with existing regulations.	LCC	None required.	N/A

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4.8-14 Cumulative Exposure of People or Structures to a Significant Risk of Loss, Injury, or Death Involving Flooding. Anticipated regional growth throughout the Santa Monica Bay Watershed, in combination with PLAN Hermosa, could result in development in locations designated as 100-year flood hazard areas, which could result in loss, injury, or death from flooding, including flooding from the failure of a dam or levee. Impacts would be site-specific and would generally not combine to create a cumulative impact. However, with implementation of PLAN Hermosa policies and implementation actions and compliance with existing regulations, PLAN Hermosa's contribution would be less than cumulatively considerable.	LCC	None required.	N/A
4.8-15 Cumulative Impacts Related to Inundation by Seiche, Tsunami, or Mudflow. Anticipated regional growth throughout the Santa Monica Bay Watershed, in combination with PLAN Hermosa, could result in development in locations that may be subject to inundation by tsunami or mudflow. Impacts would be site-specific. PLAN Hermosa would not place new land uses in locations that could be subject to inundation by a tsunami, but existing uses could be at risk of tsunami. However, with implementation of PLAN Hermosa policies and implementation actions and compliance with existing regulations, PLAN Hermosa's contribution would be less than cumulatively considerable.	LCC	None required.	N/A
4.9 Land Use and Planning			
4.9-1 Physically Divide an Established Community. PLAN Hermosa includes limited land use changes and other improvements in the city that would allow for an increase in residential and nonresidential square footage. However, because the proposed changes follow established land use patterns, implementation of PLAN Hermosa would result in a less than significant impact.	LTS	None required.	N/A
4.9-2 Conflict with an Applicable Plan, Policy, or Regulation. PLAN Hermosa proposes limited land use changes and other improvements in the city and numerous land use policies to	LTS	None required.	N/A

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guide future development in Hermosa Beach. These changes would be consistent with existing local and regional planning documents.			
4.9-3 Cumulative Impact on Dividing a Community of Conflicting with an Applicable Plan, Policy, or Regulation. PLAN Hermosa, in addition to anticipated regional growth within the South Bay Cities Council of Governments planning area, would not contribute to cumulative land use impacts associated with the division of an established community or conflicts with land use plans and regulations that provide environmental protection.	LCC	None required.	N/A
4.10 Mineral Resources			
4.10-1 Loss of Availability of Mineral Resources. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not result in the loss of availability of a known mineral resource or of a locally important mineral resource recovery site.	NI	None required.	N/A
4.11 Noise and Vibration			
4.11-1 Exposure of Persons to or Generation of Noise Levels in Excess of Standards. PLAN Hermosa would guide future development and reuse projects in the city in a manner that may expose persons to or generate noise levels in excess of the standards established in the General Plan, Zoning Ordinance, or Noise Ordinance or in applicable standards of other agencies. However, PLAN Hermosa policies and implementation actions would reduce this impact to less than significant.	LTS	None required.	N/A
4.11-2 Exposure of Persons to or Generation of Excessive Groundborne Vibration or Groundborne Noise Levels. PLAN Hermosa would guide future development and reuse projects in the city in a manner that may expose persons to or generate excessive groundborne vibration or groundborne noise levels.	PS	**MM 4.11-2** For development located at a distance within which acceptable vibration standards would be exceeded, the City shall require the applicant to have a structural engineer prepare a report demonstrating the following: • Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels would not exceed acceptable levels where damage to	LTS

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		structures using vibration levels in Draft EIR Table 4.11-4 as standards. • Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded. • A monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of existing structures that would be impacted. Examples of measures that may be specified for implementation during demolition or construction include but are not limited to: • Prohibition of certain types of impact equipment. • Requirement for lighter tracked or wheeled equipment. • Specifying demolition by non-impact methods, such as sawing concrete. • Phasing operations to avoid simultaneous vibration sources. • Installation of vibration measuring devices to guide decision-making for subsequent activities.	
4.11-3 Substantial Permanent Increase in Ambient Noise Levels. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not create a substantial permanent increase in ambient noise levels above existing levels.	LTS	None required.	N/A
4.11-4 Substantial Temporary or Periodic Increase in Ambient Noise Levels. PLAN Hermosa would guide future development and reuse projects, as well as temporary events on public property, in a manner that could create a substantial temporary or periodic increase in ambient noise levels above levels existing without the project. However, implementation of PLAN Hermosa policies and implementation actions would reduce this impact to less than significant.	LTS	None required.	N/A
4.11-5 Cumulative Effects of Noise Sources. PLAN Hermosa implementation, in addition to anticipated growth in the	LCC	None required.	N/A

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region, would result in additional construction activity, as well as stationary and mobile noise sources throughout the city and in adjacent jurisdictions, thereby increasing overall ambient noise levels. Adoption and implementation of PLAN Hermosa policies and implementation actions would reduce the effects of increased noise levels on nearby sensitive receptors.			
4.12 Population, Housing, and Employment			
4.12-1 Induce Substantial Population Growth. Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not substantially increase population in Hermosa Beach. Since land use designations and allowable residential densities are only altered to bring consistency between the zoning and land use maps, the total allowable development potential in the city would not be changed with implementation of PLAN Hermosa. Providing for the orderly growth of Hermosa Beach is a basic purpose of PLAN Hermosa, which would direct expected growth.	LTS	None required.	N/A
4.12-2 Displace People or Housing. Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that would allow the construction of new residential, commercial, and industrial uses, as well as infrastructure, public service, and recreation improvements. However, there would be no substantial changes to the residential designated land use areas in the city that would result in a large displacement of existing residences or housing.	LTS	None required.	N/A
4.12-3 Cumulative Inducement of Population Growth. Implementation of PLAN Hermosa's policies, in addition to anticipated land use changes throughout the South Bay Cities COG planning area, would increase population, both directly and indirectly (through increased employment).	LCC	None required.	N/A
4.12-4 Cumulative Effects Displacing People or Housing. Adoption and implementation of PLAN Hermosa, in addition to anticipated changes throughout the South Bay Cities COG	LCC	None required.	N/A

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planning area, could directly or indirectly displace people or housing.			
4.13 Public Services, Community Facilities, and Utilities			
4.13.2-1 Increased Demand on Fire Protection Services. Subsequent development associated with implementation of PLAN Hermosa could increase demand for fire protection services. PLAN Hermosa policies and implementation actions would require that the City regularly update fire protection standards and new development to provide adequate fire flow and emergency access.	LTS	None required.	N/A
4.13.2-2 Cumulative Demand on Fire Protection Services. PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the South Bay Cities COG planning area, could increase the demand for fire protection and emergency medical services and could require additional staffing, equipment, and related facilities under cumulative conditions. PLAN Hermosa's contribution to the need for expanded fire protection and emergency medical services, the construction and operation of which could result in significant environmental impacts, would be less than cumulatively considerable.	LCC	None required.	N/A
4.13.3-1 Increased Demand for Law Enforcement Services. Subsequent development associated with implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that would result in an increase in population in the planning area, but it would not result in the need for additional and/or expanded police protection facilities. PLAN Hermosa policies and implementation actions would require the City to continue to provide adequate staffing, facilities, equipment, and technology to meet existing and projected service demands and response times.	LTS	None required.	N/A
4.13.3-2 Cumulative Demand for Law Enforcement Services. PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the South Bay Cities COG service area, could increase the	LCC	None required.	N/A

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demand for law enforcement services and could require additional staffing, equipment, and facilities under cumulative conditions. PLAN Hermosa's contribution to the need for expanded law enforcement services facilities, the construction and operation of which could result in significant environmental impacts, would be less than cumulatively considerable.			
4.13.4-1 Increased Demand for Additional School Facilities. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in an increase in student enrollment in public schools. New or expanded school high school facilities would not be required, but the addition of K–8 students in the Hermosa Beach City School District would contribute to existing and future overcrowding in the district's two schools. The HBCSD has identified options for providing additional capacity to address existing and future enrollment, which would be required regardless of whether PLAN Hermosa is adopted and implemented. Payment of applicable fees in accordance with SB 50 would fully mitigate the impacts associated with the development of additional school facilities.	LTS	None required.	N/A
4.13.4-2 Cumulative Increased Demand for Schools. Population growth associated with implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the Hermosa Beach City Unified School District, Manhattan Beach Unified School District, and Redondo Beach Unified School District, could result in a cumulative increase in student enrollment, which could result in the need for new or expanded public school facilities.	LCC	None required.	N/A
4.13.5-1 Increased Demand for Additional Park Facilities. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could increase demand for parks and recreation services. Existing park acreage would continue to meet the Quimby Act standard of 3 acres per 1,000 residents. PLAN Hermosa policies and implementation actions would require the provision of new parks and	LTS	None required.	N/A

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recreation facilities and ongoing parkland maintenance to prevent deterioration of existing facilities.			
4.13.5-2 Cumulative Increased Demand for Parks and Recreation Facilities. Implementation of PLAN Hermosa, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the South Bay Cities COG planning area, could increase the use of existing parks and require additional park and recreation facilities in the cumulative setting, the provision of which could have an adverse physical effect on the environment. However, PLAN Hermosa would continue to provide adequate parks and recreation facilities within the city to accommodate existing and future demand and would not result in the need to construct new or expanded facilities.	LCC	None required.	N/A
4.13.6-1 Increased Demand for Additional Library Facilities. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could increase the demand for library services. However, the City would not need to expand or construct library facilities to meet recommended standards.	LTS	None required.	N/A
4.13.6-2 Cumulative Increased Demand for Library Facilities. Population growth associated with implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the cumulative setting, would not result in a cumulative increase in demand for library services.	LCC	None required.	N/A
4.13.7-1 Demand for Wastewater Treatment. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could increase the amount of wastewater conveyed to and treated by the Joint Water Pollution Control Plant. However, the volume of flows would not cause the plant's permitted capacity to be exceeded, and the influent flows would continue to be domestic sewage, which would not change the quality of the influent compared to existing conditions.	LTS	None required.	N/A

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4.13.7-2 Demand for New or Expanded Water or Wastewater Treatment Facilities. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could increase the demand for potable water and would generate wastewater. However, the demand would not result in the need for the construction or expansion of water or wastewater treatment facilities that would result in significant environmental effects because the demand is within existing planned capacity projections of the utility providers.	LTS	None required.	N/A
4.13.7-3 Demand for Stormwater Drainage Facilities. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in redevelopment in the planning area but would generally not increase the amount of impervious surface. PLAN Hermosa policies and implementation actions would direct construction of development projects to include on-site drainage improvements, which would reduce the impact on existing stormwater drainage facilities.	LTS	None required.	N/A
4.13.7-4 Demand for Water Supplies. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could increase the demand for potable water. However, the demand is within the 2010 Urban Water Management Plan supply-demand projections adopted by the Cal Water Hermosa-Redondo District, and no new entitlements would be needed.	LTS	None required.	N/A
4.13.7-5 Capacity to Serve Wastewater Treatment. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in the need for additional wastewater treatment from increased flows. However, the anticipated increase in wastewater generated would not exceed the capacity of the JWPCP or result in the need for the construction or expansion of wastewater treatment facilities.	LTS	None required.	N/A
4.13.7-6 Cumulative Water Supply Impacts. Implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the Cal Water Hermosa-Redondo District service area,	LCC	None required.	N/A

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would increase the demand for water supply. However, PLAN Hermosa water demand is within the district's population-based supply/demand assumptions, and additional supplies would not be required.			
4.13.7-7 Cumulative Wastewater Impacts. Implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the service area of the JWPCP, would increase the demand for wastewater treatment. There is sufficient capacity at the JWPCP for projected future demand, which includes flows from Hermosa Beach, and new or expanded facilities would not be required.	LCC	None required.	N/A
4.13.8-1 Demand for Solid Waste Disposal. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in additional solid waste disposal needs. Adequate capacity exists in the landfills receiving waste generated in Hermosa Beach to accommodate these additional needs.	LTS	None required.	N/A
4.13.8-2 Compliance with Solid Waste Disposal Regulations. PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in additional solid waste disposal needs. The City would continue current programs and policies that result in a per capita disposal rate is better than target amounts.	LTS	None required.	N/A
4.13.8-3 Cumulative Solid Waste Impacts. Implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the Los Angeles Integrated Solid Waste Management Authority planning area, would increase the demand for solid waste facilities.	LCC	None required.	N/A
4.13.9-1 Increased Demand for Additional Energy Resources. PLAN Hermosa would guide future development and reuse projects in the city that would not result in the use of fuel or energy in a wasteful manner.	LTS	None required.	N/A
4.13.9-2 Cumulative Energy Consumption Impacts. Implementation of PLAN Hermosa, in combination with other existing,	LCC	None required.	N/A

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planned, proposed, approved, and reasonably foreseeable development in Los Angeles County, would increase the demand for energy resources.			
4.14 Transportation			
4.14-1 Exceedance of LOS Performance Standard. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not increase overall demand for travel within Hermosa Beach. Both the City's and Caltrans's existing level of service standards for intersections and roadway segments would be maintained at the majority of intersections and segments analyzed. Three intersections and one segment would experience a significant impact.	S	None available.	SU
4.14-2 Conflict with Los Angeles County Congestion Management Program. Adoption and implementation of PLAN Hermosa would maintain the level of service standard for the intersection located at Pacific Coast Highway and Artesia Boulevard and comply with the CMP.	LTS	None required.	N/A
4.14-3 Air Traffic Patterns. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not modify the planning or operations of Los Angeles International Airport or introduce land use patterns that may cause substantial safety risks to or from air operations.	LTS	None required.	N/A
4.14-4 Roadway Design Hazards. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not increase hazards due to design or incompatible uses.	LTS	None required.	N/A
4.14-5 Result in Inadequate Emergency Access. PLAN Hermosa would guide future development and reuse projects in the city that could result in inadequate emergency access. However, PLAN Hermosa policies would reduce emergency access program-level impacts to a less than significant level.	LTS	None required.	N/A
4.14-6 Public Transit, Bicycle, and Pedestrian Facilities. PLAN Hermosa would guide future development and reuse projects in the city in a manner that supports the maintenance and	LTS	None required.	N/A

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LCC = Less Than Cumulatively Considerable *CC = Cumulatively Considerable* *N/A = Not Applicable*

Environmental Impacts	Level of Significance Prior to Mitigation	Mitigation Measure(s)	Level of Significance After Mitigation
expansion of transit, bicycle, and pedestrian facilities consistent with adopted local and regional plans.			
4.14-7 Cumulative Contribution to Exceedance of Level of Service Performance Standard. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not increase overall demand for travel within Hermosa Beach. Both the City's and Caltrans's existing level of service standards for intersections and roadway segments would be maintained at the majority of intersections and segments analyzed. Nonetheless, three intersections and one segment would experience a cumulatively considerable impact.	CC	None feasible.	SU
4.14-8 Contribution to Cumulatively Considerable Conflict with Los Angeles County Congestion Management Program. Adoption and implementation of PLAN Hermosa would maintain the level of service standard for the intersection at Pacific Coast Highway and Artesia Boulevard and would comply with the CMP.	LCC	None required.	N/A
4.14-9 Cumulative Effect on Air Traffic Patterns. Adoption and implementation of PLAN Hermosa in addition to anticipated cumulative growth in the region would not modify the planning or operations of Los Angeles International Airport or introduce land use patterns that may cause substantial safety risks to or from air operations.	LCC	None required.	N/A
4.14-10 Cumulative Roadway Design Hazards. Adoption and implementation of PLAN Hermosa in addition to anticipated regional growth would not increase hazards due to design or incompatible uses.	LCC	None required.	N/A
4.16-11 Cumulative Contribution to Inadequate Emergency Access. Adoption and implementation of PLAN Hermosa policies in addition to anticipated regional growth would not result in inadequate emergency access.	LCC	None required.	N/A
4.14-12 Cumulative Contribution to Public Transit, Bicycle, and Pedestrian Facilities. PLAN Hermosa supports the maintenance and expansion of transit, bicycle, and pedestrian facilities consistent with adopted local and regional plans.	LCC	None required.	N/A

NI = No Impact *LTS = Less Than Significant* *PS = Potentially Significant* *S = Significant* *SU = Significant and Unavoidable*
LCC = Less Than Cumulatively Considerable *CC = Cumulatively Considerable* *N/A = Not Applicable*

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2.0 Introduction

2.0.1 PROJECT BACKGROUND

This Draft Program Environmental Impact Report (Draft EIR) examines the potential effects of PLAN Hermosa (proposed project). The term "proposed project," as used in this Draft EIR, refers to PLAN Hermosa (SCH No. 2015081009), which includes the implementation of a citywide General Plan and Local Coastal Program. The proposed project is described in detail in Chapter 3.0, Project Description, and included as **Appendix A**. The project background and the legal basis for preparing a program EIR are described below.

2.0.2 LEGISLATIVE BACKGROUND

This Draft EIR considers the environmental impacts that could result from implementation of the City of Hermosa Beach's General Plan and Local Coastal Program (PLAN Hermosa; proposed project).

GENERAL PLAN

State law (California Government Code Section 65300) requires that each California city and county adopt a comprehensive, long-term general plan to guide the physical development of the county or city. The following elements are required to be addressed as part of the general plan:

- Land Use
- Housing
- Open Space
- Safety
- Circulation
- Conservation
- Noise

The City's current General Plan was last comprehensively updated in 1979, and the accompanying Coastal Land Use Plan was certified in 1980. The City's Housing Element, which is also part of the General Plan, was last updated in 2013 and has been certified by the California Department of Housing and Community Development through 2021; therefore, it is not part of the proposed project.

LOCAL COASTAL PROGRAM

To ensure maximum public access to the coast and public recreation areas, the Coastal Act directs each local government in the Coastal Zone to prepare a Local Coastal Program (LCP) consistent with Section 30501 of the California Coastal Act, in consultation with the Coastal Commission and with public participation. The Governor's Office of Planning and Research (OPR) 2003 General Plan Guidelines suggest integration of the general plan and the local coastal program into a "coherent and internally consistent local general plan." As such, the City of Hermosa Beach has decided to update both the General Plan and the LCP together as an integrated document. The General Plan and LCP update addresses land use; mobility; parks, recreation, and open space; coastal access; coastal hazards; water quality; air quality and climate change; noise; and other issues that are important to the community. The LCP addresses portions of Hermosa Beach located in the Coastal Zone and consists of two parts:

- A Coastal Land Use Plan, which is presented as a component of the General Plan; and
- A Local Implementation Plan, which is presented as a component of the City's Municipal Code.

The Coastal Zone boundary is defined by the California Coastal Act as "extending seaward to the state's outer limit of jurisdiction, including all offshore islands, and extending inland generally 1,000 yards from the mean high tide line of the sea" (Public Resources Code Section 30103). The Coastal Zone in the city spans the entire length of the city from north to south and extends from the mean high tide line inland to roughly Ardmore Avenue with two exclusions—the area from Hermosa Avenue to Valley Drive between Longfellow Avenue and 31st Place, and the area east of Park Avenue or Loma Drive between 25th Street and 16th Street. **Figure 3.0-2 (Hermosa Beach Corporate Boundary)** shows the extent of the Coastal Zone in the city.

In order to achieve certification from the Coastal Commission and attain local control over the issuance of Coastal Development Permits, Hermosa Beach must update the Coastal Land Use Plan and prepare and adopt a Local Implementation Plan that collectively consider and address emerging coastal issues such as beach management, parking, water quality, sea level rise, and climate change.

2.0.3 ENVIRONMENTAL SETTING/DEFINITION OF THE BASELINE AND EIR ASSUMPTIONS

According to California Environmental Quality Act (CEQA) Guidelines Section 15125, an EIR must include a description of the existing physical environmental conditions in the project vicinity to provide the "baseline condition" against which project-related impacts are compared. Normally the baseline condition is the physical condition that exists when the Notice of Preparation (NOP) is published. The NOP for the PLAN Hermosa EIR was published on August 7, 2015, and a public scoping meeting was held on August 18, 2015 (see **Appendix B-1**). **Table 2.0-1 (Summary of NOP Comments)** summarizes the NOP comment letters received (see **Appendix B-2** for full comment letters).

TABLE 2.0-1
SUMMARY OF NOP COMMENTS

Commenter	Date of Comment	Summary of Comments
Scott Morgan, Acting Director Governor's Office of Planning and Research (OPR)	August 6, 2015	The letter was sent to responsible agencies and requested their comment on the NOP.
Jim Lissner, Hermosa Beach Resident	September 8, 2015	The commenter includes statistics for various crimes and states that they are increasing in Hermosa Beach and that crime rates are higher than in Manhattan Beach. Additionally, the commenter states that neighborhoods with more alcohol outlets tend to experience more violence and injury. Further, the commenter is concerned that Hermosa Beach's move toward requiring fewer on-site parking spaces for downtown restaurants will permit greater outlet density and bring increased crime.
Adriana Raza, Customer Service Specialist, Facilities Planning Department Sanitation Districts of Los Angeles County	September 8, 2015	Will-serve letter stating that the County will be able to accommodate the increase in population associated with the General Plan update. The commenter discusses the wastewater conveyance system (i.e., how much waste the conveyance system can accommodate). The commenter states that no known deficiencies exist in the districts' facilities that serve the city. The commenter further states that the district will provide wastewater service up to the levels that are legally permitted; however, the letter does not serve as a guarantee of wastewater service.

Commenter	Date of Comment	Summary of Comments
Kevin Johnson, Acting Chief, Forestry Division Prevention Services Bureau Los Angeles County Fire Department	August 25, 2015	The commenter states that statutory responsibilities of the Los Angeles County Fire Department include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archaeological and cultural resources, and the County Oak Tree Ordinance. The commenter states that potential impacts to these issue areas should be addressed.
Ping Chang, Program Manager II, Land Use and Environmental Planning Southern California Association of Governments	September 8, 2015	The commenting agency states that they review environmental documents for consistency with the adopted Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (2012). The commenter also states that the goals in the RTP/SCS may be pertinent to the project and should be reviewed. Strategies to achieve those goals are included in the SCS chapter.
Dianna Watson, IGR/CEQA Branch Chief California Department of Transportation (Caltrans), District 7	September 3, 2015	The commenter states that modifications made to Pacific Coast Highway will require a permit from Caltrans. The commenter also states that the traffic impact analysis (TIA) associated with the project should evaluate existing and long-term impacts of future development plans on the roadway system as well as active transportation facilities in the planning area and adjacent jurisdictions. The TIA should also include an evaluation of potential traffic impacts to the regional transportation system including Interstate 405, as it provides access to the city via the Artesia interchange.
Ken Chiang, Utilities Engineer, Safety and Enforcement Division California Public Utilities Commission (CPUC)	August 10, 2015	The project site includes active railroad tracks over which the CPUC has jurisdiction. The commenter recommends mitigation measures to reduce potential impacts associated with new development.
Alan Benson, Resident	August 18, 2015	The commenter requests that the City address an increase in alcohol outlet density and the correlation with the increase in the rate of violent crime and what changes to the General Plan could address these in the future. The commenter includes a report that examines the relationship between alcohol outlet density by community and alcohol-related harms.
Ian MacMillan, Planning and Rules Manager South Coast Air Quality Management District	August 13, 2015	The commenter suggests that any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project be analyzed.
Jeff Duclos, Resident	August 18, 2015	The commenter discusses concerns over lack of discussion of carbon neutrality and potential changes to land use/livable streets in the EIR. Also would like to look to the future, for a 20-year model instead of focusing on existing standards—as future residents will have different ideals from current residents. The commenter identified concerns over the planned residential development new units projected between 2015 and 2040. The commenter thinks that such projected growth is impossible to accommodate, "the housing stock does not exist."
Dency Nelson, Resident	August 18, 2015	The commenter wants the City to review reports about sea level rise and its effects on Hermosa Beach.

Commenter	Date of Comment	Summary of Comments
George Schmeltzer, Resident	August 18, 2015	The commenter asks if this EIR will prevent the need to do future EIRs in the future. The commenter expresses concern about other large development projects being covered under the EIR. The commenter asks what the term "alternative" means, and why the project is a project under CEQA. The commenter then asks if the EIR would allow a 300 net housing unit increase, and where that would take place. Further, the commenter discusses the importance of livable streets in Hermosa Beach and regulating building height.
Justin Massey, Resident	August 18, 2015	The commenter is glad that a programmatic EIR was chosen so that the City can tier off it in the future. The commenter thinks that the alternatives are very important to discuss and analyze. The commenter then says he is worried about the viewshed from various parts of the city, air and water pollution, how the plan will contribute to climate change, and mobility and transportation. The commenter says he doesn't just want to see raw numbers on walkability/mobility but is concerned with how it will affect the average community member walking down the street. The commenter says that the City must think about the quality of life of residents as well as the environment. Finally, the commenter wants to extend the period of comment beyond 45 days.

Source: Data compiled by Michael Baker International, 2015

For analytical purposes, impacts associated with implementation of PLAN Hermosa are derived from the existing environmental setting in 2015. This baseline year (2015) is used throughout this EIR to determine impacts.

Evaluations in this EIR are based on reasonable assumptions of development activity anticipated to occur over the next 25 years in the planning area, which consists of the existing city boundaries. To determine reasonable assumptions for the amount of new residential, commercial, and population growth, the City assumed a range of factors, including the physical capacity of the PLAN Hermosa Land Use Map, the projected growth assumed in the city and the region, specific policy direction in PLAN Hermosa, and socioeconomic trends. This analysis includes forecasts of the number of new residences, amount of new employment, and increase in population anticipated to occur under PLAN Hermosa.

This EIR presents a conservative scenario based on the potential development from 2015 through 2040. As a practical matter, as illustrated under the current General Plan, actual development in any city or county is typically less than the theoretical limit of development. This is a result of market forces, as well as building and zoning standards when applied to specific sites, which often results in the construction of less than the maximum allowable development.

This EIR also evaluates the physical environmental impacts of the implementation of PLAN Hermosa policy provisions.

2.0.4 PURPOSE OF THE PROGRAM ENVIRONMENTAL IMPACT REPORT

This EIR evaluates the impacts of PLAN Hermosa. It is a program EIR, as described in CEQA and the CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000 et seq. [14 CCR 15000 et seq.).

According to State CEQA Guidelines Section 15168(a), a state or local agency should prepare a program EIR, rather than a project EIR, when the lead agency proposes the following:

- A series of related actions that are linked geographically;
- Logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program; or
- Individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

A program EIR "may be prepared on a series of actions that can be characterized as one large project and are related...in connection with the issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program" (CEQA Guidelines Section 15168[a][3]). This program EIR considers a series of actions related to implementation of PLAN Hermosa.

As a program EIR, this document focuses on the overall effect of PLAN Hermosa. The analyses in this EIR do not examine the effects of site-specific projects that may occur under this plan in the future. The nature of general plans is such that many proposed policies are intended to be general, with details to be worked out during implementation. This EIR does, however, quantify impacts related to transportation, air quality, greenhouse gas emissions, noise, and other topics, making reasonable assumptions as to the amount, type, and character of land use change anticipated with implementation of PLAN Hermosa.

TIERING AND STREAMLINING

The City will make use of existing streamlining provided by CEQA, emerging streamlining techniques, such as those related to implementation of the Southern California Association of Governments (SCAG) Sustainable Communities Strategy (Public Resources Code [PRC] Section 21155), and other streamlining techniques that may become available in the future. The City has invested substantial resources in PLAN Hermosa and its EIR, and wishes to promote fiscally prudent use of this EIR, once it is certified, to accommodate development consistent with PLAN Hermosa.

Tiering refers to a multilevel approach to preparing environmental documents set forth in PRC Section 21083.3 and CEQA Guidelines Section 15152. This program EIR's analysis is considered the first tier of environmental review upon which future, project-specific CEQA documents can build, as necessary. Environmental analysis for future projects consistent with PLAN Hermosa can be streamlined to allow subsequent documents to focus on new or site-specific impacts (CEQA Guidelines Sections 15168[d] and 15183).

These provisions of CEQA allow a lead agency to narrow the focus of project-level analysis to effects upon the environment that are peculiar to the parcel or project. The Public Resources Code also limits the effects that can be considered peculiar in project-level analysis under the program EIR.

Section 15152 of the CEQA Guidelines provides that where a first-tier EIR has "adequately addressed" the subject of cumulative impacts, such impacts need not be revisited in second- and/or third-tier documents. According to Section 15152(f)(3), significant effects identified in a first-tier EIR are adequately addressed, for purposes of later approvals, if the lead agency determines that such effects have been either:

- Mitigated or avoided as a result of the prior [EIR] and findings adopted in connection with that prior [EIR]; or

- Examined at a sufficient level of detail in the prior [EIR] to enable those effects to be mitigated or avoided by site-specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project.

The Public Resources Code provides streamlining coverage to the City of Hermosa Beach and other public agencies that have authority to implement PLAN Hermosa. Public agencies can use uniformly applied policies or standards to mitigate effects of future projects, avoiding the need to analyze these effects, unless new information arises that changes the impact analysis (PRC Section 21083.3[d]). For this reason, this EIR includes references to PLAN Hermosa policies and implementation actions, where appropriate, to address environmental impacts. Future CEQA documents can reference the same PLAN Hermosa policies and actions, where appropriate, to demonstrate less than significant impacts. The City may consider specific plans, area plans, corridor plans, downtown core area plans, or other documents to implement PLAN Hermosa in a smaller geographic area of the city.

The City acknowledges and intends to make best use of the advantages to the programmatic approach to environmental analysis and reporting in this EIR. As noted in CEQA Guidelines Section 15168(b):

Use of a program EIR can provide the following advantages. The program EIR can:

1) *Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action;*
2) *Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis;*
3) *Avoid duplicative reconsideration of basic policy considerations;*
4) *Allow the Lead Agency to consider broad policy alternatives and program wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts; and*
5) *Allow reduction in paperwork.*

2.0.5 PUBLIC REVIEW OF DRAFT EIR AND LEAD AGENCY CONTACT

City of Hermosa Beach
Community Development Department (Planning Division)
1315 Valley Drive
Hermosa Beach, CA 92054

The public review and comment period is 70 days from October 26, 2016 through January 5, 2017. Written public comments on the Draft EIR must be received no later than 6:00 PM on January 5, 2017. Written comments or questions regarding the Draft EIR should be addressed to:

Ken Robertson
City of Hermosa Beach Community Development Department (Planning Division)
1315 Valley Drive
Hermosa Beach, CA 92054
generalplan@hermosabch.org

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period. The City Council will review and consider the Final EIR prior to their decision to approve, revise, or reject the proposed project.

2.0.6 SCOPE OF THIS DRAFT EIR

As lead agency, the City determined that this Draft EIR will address the following technical issue areas:

- Aesthetics and Visual Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise and Vibration
- Population and Housing
- Public Services, Community Facilities, and Utilities
- Transportation

The specific topics evaluated are described in each of the resource sections presented in Chapter 4.0.

2.0.7 HOW TO USE THIS REPORT

This report includes the following principal parts: Executive Summary, Project Description, Environmental Analysis (Impacts and Mitigation Measures), Other CEQA-Required Considerations, Alternatives, Abbreviations, Report Preparers, and Appendices.

- Executive Summary (Chapter 1.0) presents an overview of the results and conclusions of the environmental evaluation. This chapter identifies impacts of the proposed project and available mitigation measures.
- Project Description (Chapter 3.0) describes the location of the project, existing conditions in the planning area, and the nature and location of specific elements of the proposed project.
- Environmental Analysis (Chapter 4.0) includes a topic-by-topic analysis of impacts that would or may result from implementation of the proposed project or alternatives. The analysis is organized into 14 resource sections, each of which is organized into two major subsections: Environmental Setting and Regulatory Setting (a summary of existing conditions), and Impacts and Mitigation Measures. The Impacts and Mitigation Measures subsection also describes cumulative impacts and mitigation measures. **Appendix C**, the PLAN Hermosa Technical Background Report, provides additional detail regarding the environmental and regulatory setting for each resource section.
- Other CEQA-Required Considerations (Chapter 5.0) discusses issues required by CEQA: unavoidable adverse impacts, irreversible environmental changes, growth inducement, and a summary of cumulative impacts.
- Alternatives to the Proposed Project (Chapter 6.0) includes a description of the project alternatives. CEQA requires an EIR to provide adequate information for decision-makers to make a reasonable choice between alternatives based on the environmental aspects of the proposed project and alternatives. The impacts of the alternatives are qualitatively compared to those of the proposed project. This chapter also identifies the environmentally superior alternative.
- Report Preparers (Chapter 7.0) includes a list of the preparers of the EIR.

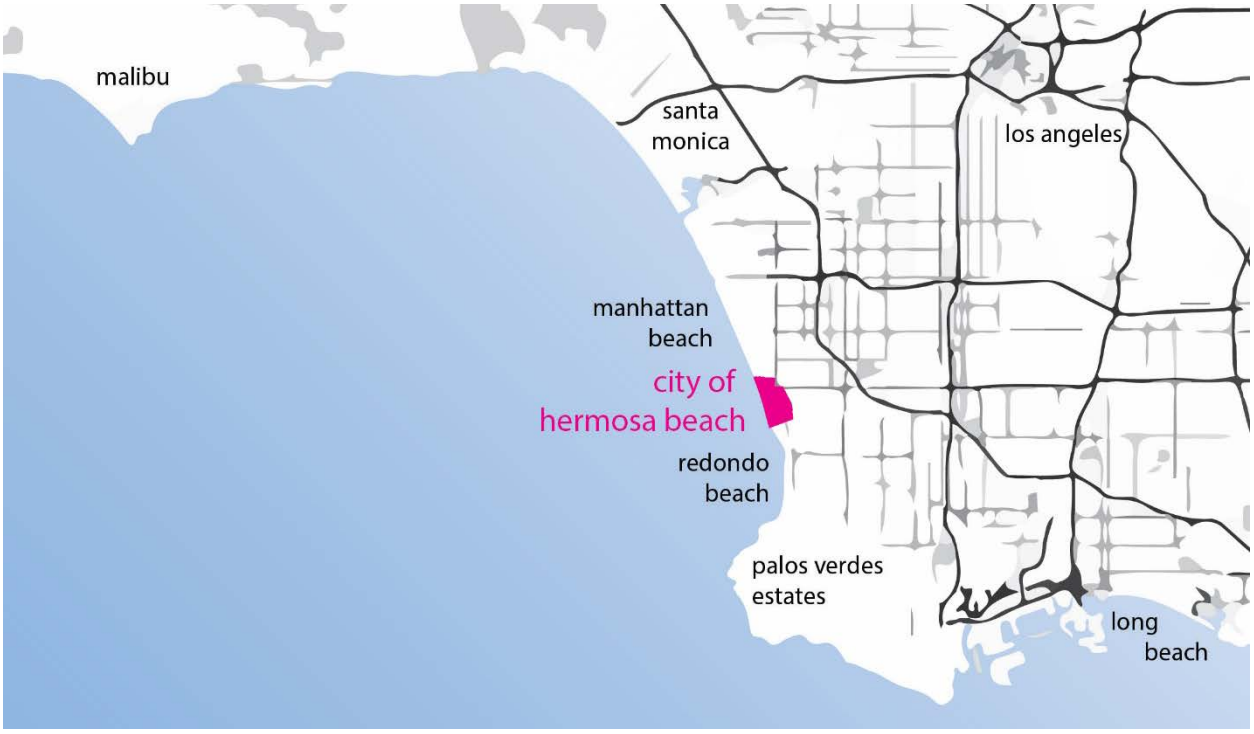
- The Appendices contain a number of reference items providing support and documentation of the analyses performed for this report. They are included on a CD inserted in the back cover of the EIR.

3.0 Project Description

3.0.1 REGIONAL SETTING

Hermosa Beach is located in southwest Los Angeles County and encompasses 1.4 square miles, or 979 acres, with 1.8 miles of coastline along Santa Monica Bay. Manhattan Beach borders Hermosa Beach to the north and northeast, and Redondo Beach is located to the south and east (see **Figure 3.0-1, Regional Location Map**). Pacific Coast Highway runs north/south through the entirety of Hermosa Beach. Roughly half of the city is located within the Coastal Zone.

FIGURE 3.0-1 REGIONAL LOCATION MAP



3.0.2 HERMOSA BEACH

The proposed project area, shown in **Figure 3.0-2 (Hermosa Beach Corporate Boundary)**, includes the entire corporate limits of the City of Hermosa Beach and the City's Coastal Zone. Existing land uses in the city include residential, commercial, institutional, industrial, and open space as shown in **Figure 3.0-3 (Hermosa Beach Existing Land Uses)** and **Table 3.0-1 (Hermosa Beach Existing Land Uses)**.

Residential uses comprise over 67 percent of the city's land area, with approximately 10,000 housing units encompassing 455 acres of the city. Residential uses include single-family residential, multi-family, mobile homes, and mixed-use property (with both residential and commercial). Single-family land uses are found throughout the city, with neighborhoods in the northeast, east, and southeast that are predominantly single-family uses. Multi-family housing units are predominantly found in the southwest area of Hermosa Beach, with additional multi-family housing found in the northwest and southeast portions of the city. The northwest portion of the city and The Strand have a mix of single-family and multi-family housing options. There are two mobile home areas—one located north of Pier Avenue, between Loma Drive and Valley Drive, which is a resident-owned park, and the other along 10th Street between Ardmore Avenue and Pacific Coast Highway, which also serves recreational vehicles.

Existing commercial uses comprise approximately 7 percent of the city's total land area including retail, restaurant, office, and other uses that provide goods or services. These uses can be found primarily along the city's corridors and in Downtown, with pockets of small-scale commercial found in residential neighborhoods. Commercial uses along Hermosa Avenue or Manhattan Avenue primarily consist of restaurants, stores, and services to serve the neighborhood and nearby beachgoers.

Light industrial or manufacturing uses in Hermosa Beach account for approximately 4 percent of the city's total land area and are generally located in a 4-acre industrial area near Cypress Avenue, including light manufacturing, warehouses, construction supply, surfboard manufacturing, auto shops, and air conditioning and heating manufacturing uses.

FIGURE 3.0-2 HERMOSA BEACH CORPORATE BOUNDARY

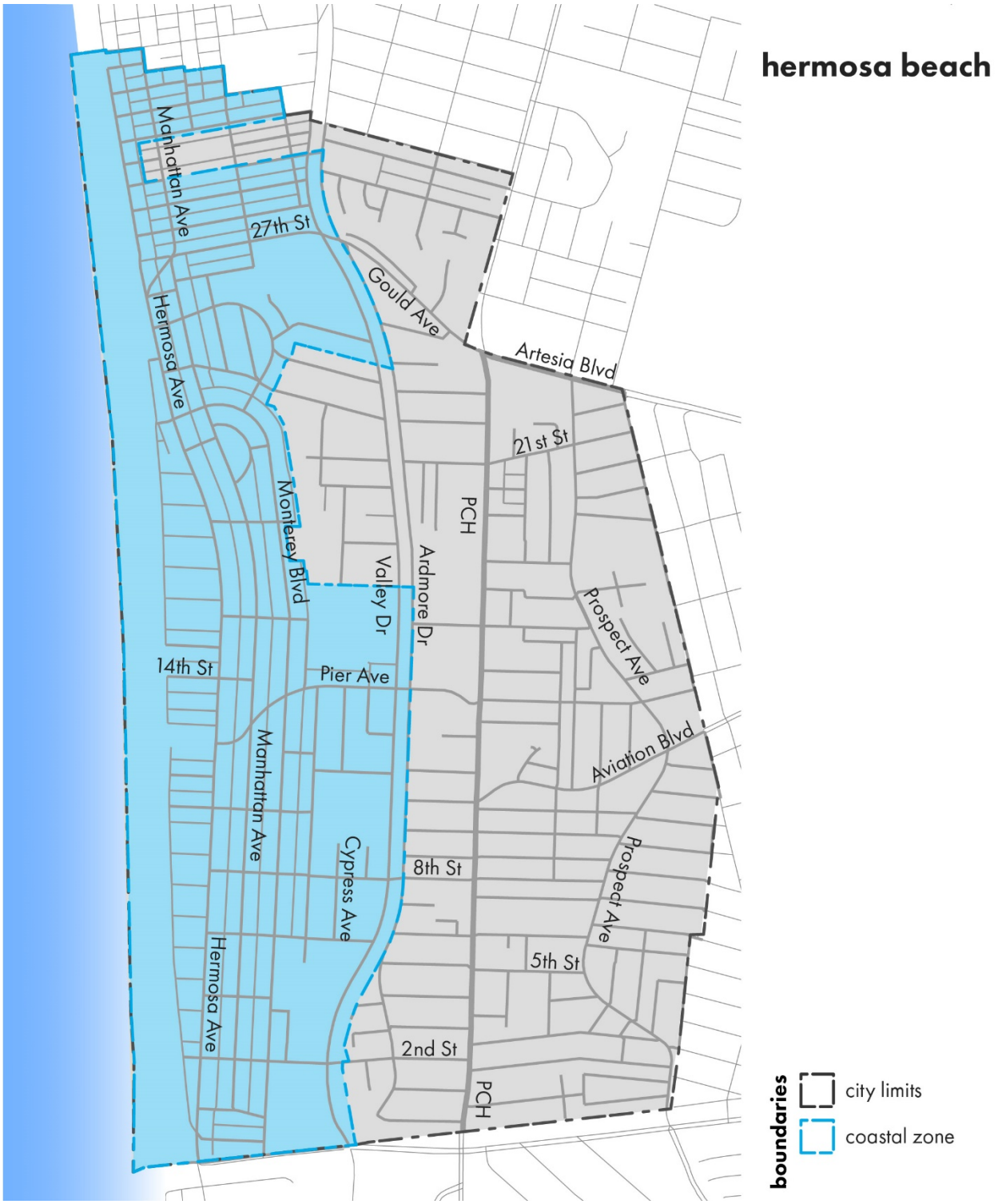


FIGURE 3.0-3 HERMOSA BEACH EXISTING LAND USES

Institutional land uses account for 147 acres or 22 percent of the total land area. Institutional land uses include schools, government-owned facilities, parks, the beach and open space, and essential operations areas such as parking, utility buildings, the City maintenance yard and other facilities, or utility easements.

TABLE 3.0-1
HERMOSA BEACH EXISTING LAND USES

Use	Number of Parcels	Total Acres	Percentage of Land Area
Residential Uses			
Single-Family	3,261	263.0	39.1%
Multi-Family	1,898	186.3	27.6%
Mobile Homes	3	4.6	0.7%
Mixed Residential and Commercial	17	1.5	0.2%
Residential Subtotal	5,179	455.4	67.6%
Commercial and Light Industrial Uses			
Commercial and Services	274	57.6	8.5%
General Office	40	7.9	1.1%
Industrial	26	4.1	0.6%
Mixed Commercial and Industrial	1	0.2	<0.1%
Commercial and Industrial Subtotal	341	69.8	10.2%
Institutional and Other Uses			
City Facilities	46	19.6	2.9%
Education	9	16.7	2.4%
Open Space and Recreation	52	104.5	15.5%
Transportation, Communication, and Utilities	8	4.2	0.6%
Vacant	33	2.6	0.4%
Institutional and Other Uses Subtotal	148	147.6	21.8%
Total	5,668	672.8	100%

Source: City of Hermosa Beach 2014

3.0.3 PROJECT OBJECTIVES

California Environmental Quality Act (CEQA) Guidelines Section 15124(b) requires that a project's environmental impact report (EIR) include a written statement of objectives that should include the underlying purpose of the project. The priorities underscored in PLAN Hermosa identified through the community outreach process form the basis of the project objectives.

1) Preserve the city's small beach town character through policies and design standards that maintain buildings at an appropriate scale and size with existing ones (including potentially historic buildings) and recognize the unique features of the city's eclectic residential neighborhoods.
2) Enhance and support a strong, diverse, and vibrant local economy through policies that stimulate sustainable businesses and jobs, enhance safe and beautiful commercial corridors, articulate clear and consistent standards for new businesses, and provide convenient services to residents, employees, and visitors.
3) Promote healthy and active lifestyles through land use and transportation improvements that enhance pedestrian, transit, and bike safety and access to a variety of destinations in the city.
4) Provide a safe and clean natural environment—including clean air and water—and stewardship of our ocean resources, open space, and other natural resources.
5) Achieve a low or no carbon future through the reduction of greenhouse gas emissions by reducing fuel consumption, diverting solid waste from landfills, conserving water and improving the efficiency of energy use and utilizing renewable energy sources.

3.0.4 PROJECT CHARACTERISTICS

The project consists of two components: the General Plan and the Local Coastal Program, collectively referred to as PLAN Hermosa. PLAN Hermosa's stated purpose is to guide development in the city for the next 25 years by balancing quality of life, economic prosperity, and environmental sustainability. PLAN Hermosa defines long-term community goals, decision-making policies, and implementation actions. PLAN Hermosa establishes an overall development capacity for the city and represents the City's policy for determining appropriate physical development and character. Any decision by the City affecting land use and development must be consistent with PLAN Hermosa. An action, program, or project would be considered consistent if, considering all of its aspects, it would further the goals and policies set forth in PLAN Hermosa and not obstruct their attainment.

PLAN Hermosa includes the subject matter required for the seven state-required elements, as well as subjects required for the Coastal Land Use Plan.

- Community Governance
- Land Use + Design
- Mobility
- Sustainability + Conservation
- Parks + Open Space
- Public Safety
- Infrastructure

PLAN Hermosa also includes a Vision Statement, an Introduction chapter, and an Implementation Plan that presents actions needed to achieve the vision.

The City's Housing Element, which is also part of the General Plan, was last updated in 2013 and has been certified by the California Department of Housing and Community Development through 2021; therefore, it is not part of the proposed project.

Community Governance Element

The Community Governance Element serves as the introduction to PLAN Hermosa. This element details the leadership, decision-making process, development requirements, and regional coordination necessary to achieve the proposed plan's objectives through goals, policies, and actions.

This element describes the system of governance and provides goals and policies for Hermosa Beach. In addition, the element identifies ways to continue community involvement and investment, while ensuring decision-making and leadership are conducted in an ethical, transparent, and innovative manner that reflects community values.

Land Use + Design Element

The Land Use + Design Element guides future development in Hermosa Beach; identifies the character-defining features of each neighborhood, corridor, or district; and provides policy guidance that supports the intended character of each area. The element establishes land use designations that provide direction to each individual property owner regarding allowed uses and densities. More specifically, the Land Use + Design Element:

- Defines a realistic long-term vision for the built form of Hermosa Beach through 2040.
- Expresses the desires of Hermosa Beach residents regarding the physical, social, economic, cultural, and environmental character of the community.
- Serves as a comprehensive guide for making decisions about land use, urban design, economic development, and other related topics, such as public facilities and services and parks and open space.
- Serves as the City's framework for land use and development decisions and provides the legal foundation for zoning, subdivisions, development plans, and facility plans.

The **PLAN Hermosa Land Use Designations Diagram (Figure 3.0-4)** establishes the general pattern of uses in the city and identifies minimum and maximum permitted land use densities and intensities. These parameters can be used to identify the anticipated level of development in the city between 2015 and 2040. As the density and intensity standards for each land use designation are applied to future development projects and land use decisions, properties will gradually transition from one use to another, and land uses and intensities will gradually shift to align with the intent of PLAN Hermosa.

Table 3.0-2 (PLAN Hermosa Land Use Designations) identifies the land use designations and allowable densities. **Table 3.0-3 (PLAN Hermosa Residential Development Projections)** identifies anticipated residential land use changes that would occur between 2015 and 2040 with implementation of PLAN Hermosa, while **Table 3.0-4 (PLAN Hermosa Nonresidential Development Projections)** identifies corresponding changes for nonresidential uses in the city. These projections were calculated based on specific trends in the city, including:

- Loss of housing units – Through demolition and reconstruction as single-family homes, the city experienced a decrease in the overall number of housing units from 10,162 to 10,110 between 2010 and 2015. This is consistent with a recent local trend in which properties with multi-family units are demolished and replaced with a single-family unit. This trend may be expected to continue in the near term.
- Growing size of households – Between 2008 and 2012, the city observed an increase in average household size from 2.00 to 2.08. This number is indicative of a growing number of families in Hermosa Beach, which affects the ratio of adult residents and subsequently the trip generation of family versus nonfamily households.

While the residential land use designations have the ability to accommodate an additional 440 total residential units, only a portion of those parcels are likely to redevelop. The City's residential program estimates that approximately 300 residential units may be added in Hermosa Beach over the next 25 years based on an analysis of vacant and underutilized parcels. In addition, Hermosa Beach could accommodate an additional 630,400 square feet of nonresidential development between 2015 and 2040 as shown in the tables below.

TABLE 3.0-2
PLAN HERMOSA LAND USE DESIGNATIONS

Land Use Designation	Definition	Density/Intensity
Low Density Residential	Single-family residential (attached or detached)	2.0–13.0 DU/AC
Medium Density Residential	Single-family residential and small-scale multi-family residential (duplex, triplex, condominium)	13.1–25.0 DU/AC
High Density Residential	Medium (8–20 unit buildings) and large-scale (20+ unit buildings) multi-family residential	25.1–33.0 DU/AC
Mobile Home	Mobile home parks, where two or more lots are rented or leased to accommodate mobile homes for human habitation	2.0–13.1 DU/AC
Neighborhood	Convenience stores, markets, eateries, laundromats, or similar uses to primarily serve local walk-in traffic	0.5–1.0 FAR
Community	Locally oriented uses including retail stores, restaurants, professional and medical offices, and personal services	0.5–1.25 FAR
Recreational	Coastal-related uses such as beach/bike rentals, restaurants, snack shops, lodging accommodations, entertainment, and similar uses	1.0–1.75 FAR
Gateway	*Lower-floor community or regionally oriented commercial uses with upper-floor high-visitor office or hotel uses*	*1.0–2.0 FAR*
Service	*Home improvement stores, furniture stores, auto dealerships, and light automotive service stations*	*0.25–0.5 FAR*
Light Industrial	Production uses for light manufacturing, creative art, or design services with professional office as an allowed accessory use	0.25–1.0 FAR
Public Facility	*Civic-related offices, community centers, operational facilities, and educational/institutional facilities*	*0.10–1.0 FAR*
Open Space	Passive and active park, recreational, and open space uses	0.0–0.1 FAR
Beach	*Coastal-related recreational activities and essential public facilities (lifeguard and restrooms)*	*0.0–0.05 FAR*

DU/AC = dwelling units per acre; FAR = floor area ratio

Italicized designations indicate the new or altered land use designations introduced through PLAN Hermosa.

FIGURE 3.0-4 PLAN HERMOSA LAND USE DESIGNATIONS DIAGRAM

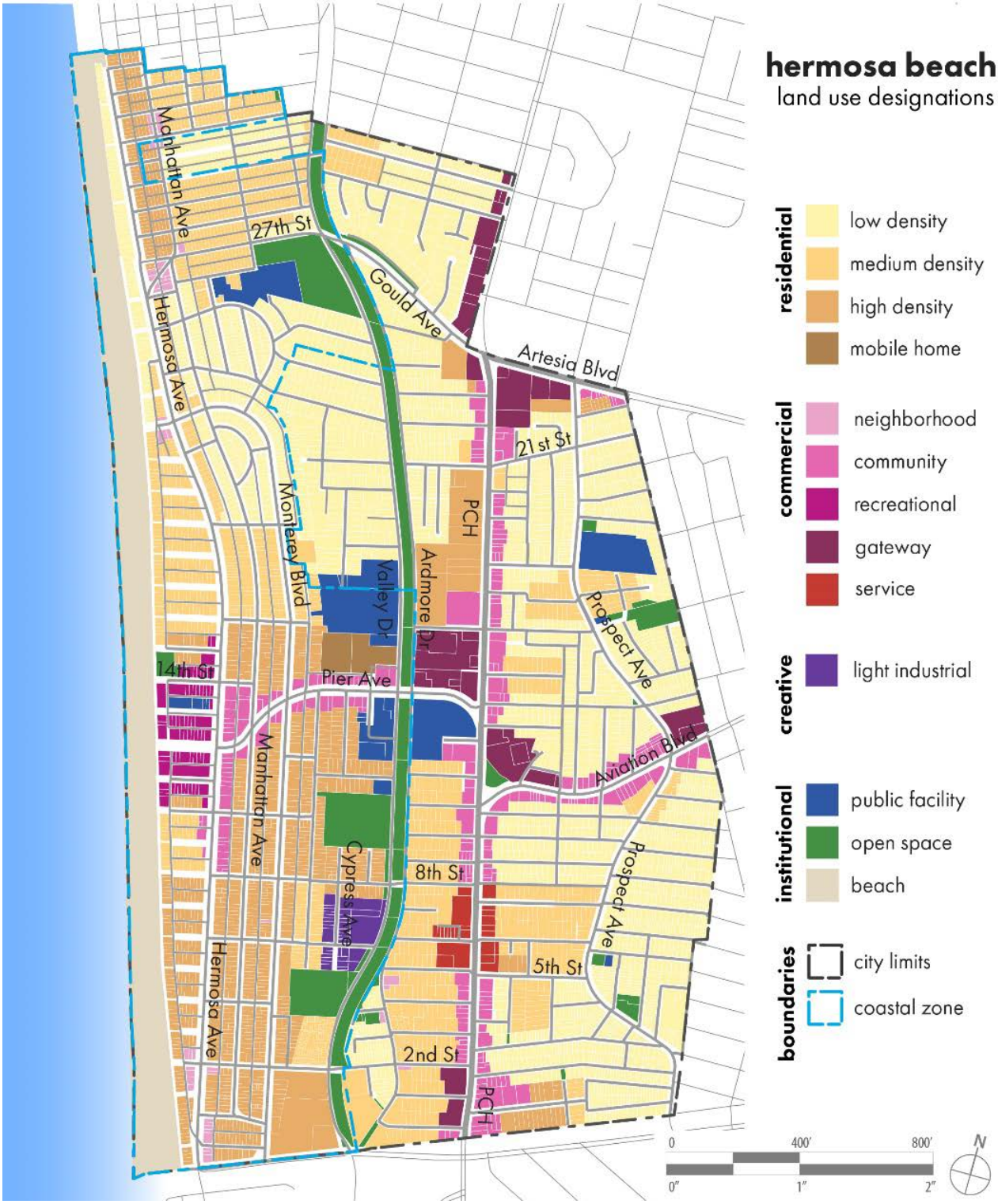


TABLE 3.0-3
PLAN HERMOSA RESIDENTIAL DEVELOPMENT PROJECTIONS

Land Use Designation	Acres	Existing Units (2015)	New Units (2015–2040)	Total Units (2040)
Low Density Residential	240	3,214	20	3,234
Medium Density Residential	198	2,593	150	2,743
High Density Residential	100	4,085	100	4,185
Neighborhood Commercial	3	50	30	80
Community Commercial	38	104	—	104
Recreational Commercial	7	36	—	36
Gateway Commercial	24	11	—	11
Service Commercial	5	12	—	12
Light Industrial	6	4	—	4
Total	621	10,109	300	10,409

*Note: This information is based on growth forecasts provided in the City's letter with the subject: Hermosa Beach Response to SCAG's Integrated Growth Forecast to the Southern California Association of Governments. See **Appendix A**.*

TABLE 3.0-4
PLAN HERMOSA NONRESIDENTIAL DEVELOPMENT PROJECTIONS

Land Use Designation	Acres	Existing Building Sq. Ft. (2015)	New Building Sq. Ft. (2015–2040)	Total Building Sq. Ft. (2040)
Neighborhood Commercial	3	93,900	8,800	102,700
Community Commercial	38	976,200	154,500	1,130,700
Recreational Commercial	7	226,300	176,500	402,800
Gateway Commercial	24	595,200	231,700	826,900
Service Commercial	5	82,800	22,100	104,900
Light Industrial	6	132,000	36,800	168,800
Total	83	2,106,400	630,400	2,736,800

*Note: This information is based on growth forecasts provided in the City's letter with the subject: Hermosa Beach Response to SCAG's Integrated Growth Forecast to the Southern California Association of Governments. See **Appendix A.***

Goals presented in the Land Use + Design Element include the following:

- **Livable Urban Pattern** – Create an urban form and land use pattern that supports a robust and resilient economy and high quality of life for residents.
- **Complete and Diverse Neighborhoods** – Neighborhoods provide for diverse needs of residents of all ages, socioeconomic groups and abilities, and are organized to support healthy and active lifestyles.
- **Unique and Vibrant Districts** – A series of unique, destination-oriented districts throughout Hermosa Beach.

- **Connected and Walkable Corridors** – A variety of mixed-use corridors throughout the city that provide opportunities for shopping, recreation, commerce, employment, and circulation.
- **Quality Urban Design** – Quality and authenticity in architecture and site design in all construction and renovation of buildings.
- **Public Realm and Pedestrian-Scale Design** – A pedestrian-focused urban form that creates visual interest and a comfortable outdoor environment.
- **Educational and Community Facilities** – Adequate space and appropriate integration of community and school facilities that support physical activity, civic life, and social connections for residents of all ages and interests.
- **Accommodations in the Coastal Zone** – A range of coastal-dependent and visitor-serving uses available to all income ranges and amenity desires.
- **Space for Renewable Energy** – Local energy independence through renewable energy generation.
- **Celebrated Examples of the City's Rich History** – A strong sense of cultural and architectural heritage.
- **A Vibrant Artistic Community** – A proud and visible identity as an arts and cultural community.
- **Venues and Space for Artistic Expression** – A mix of cultural facilities that support and encourage the community's vibrant range of art creation and presentation.

Each goal is supported by policies in the Land Use + Design Element and actions in the Implementation Plan describing how the goals will be achieved. The element's key implementation action is an update to the Zoning Ordinance and Local Coastal Implementation Plan.

Character areas—split into neighborhoods, corridors, and districts and shown in **Figure 3.0-5 (Character Areas)**—have been defined and described to highlight the unique features or characteristics of the different areas of Hermosa Beach. Each character area description includes the intended future vision and proposed guidelines to help maintain, enhance, or transform the building form and public realm of each area. A summary of each area is included in **Table 3.0-5 (Character Areas and Future Visions).**

FIGURE 3.0-5 CHARACTER AREAS

TABLE 3.0-5
CHARACTER AREAS AND FUTURE VISIONS

	Character Area	Future Vision
Neighborhoods	North End	To achieve the intent, buildings should preserve form and scale and maintain neighborhood connectivity and access to nearby commercial services.
	Hermosa View	To achieve the intent, buildings should preserve form, orientation, or scale and retain the unique streetscape with wide parkways and uninterrupted sidewalks.
	Walk Street	To achieve the intent, the City should maintain the high quality pedestrian connections through the walk streets and retain the form, scale, and orientation of buildings in this area.
	Sand Section	To achieve the intent, the City should enhance multimodal connectivity and access while preserving the building form, scale, and orientation in this neighborhood.
	Valley	To achieve the intent, the City should improve key pedestrian thoroughfares to enhance connectivity and access while preserving the single-family development pattern of this area.
	Herondo	To achieve the intent, the City should preserve the scale and building form of this neighborhood and maintain connections and access to nearby amenities.
	Greenbelt	To achieve the intent, the City should maintain the building scale and form of this neighborhood, while enhancing access to local neighborhood-serving commercial uses.
	Hermosa Hills	The intent is to improve key pedestrian thoroughfares to enhance connectivity and access while preserving the single-family development pattern of this area.
	Eastside	To achieve the intent, buildings should preserve form, orientation, and scale and retain the quiet nature and unique streetscape of this area.
Districts	Downtown	To achieve the intent, buildings should enhance form and orientation and maintain the pedestrian realm along Pier Avenue while transforming the realm on Hermosa Avenue.
	Civic Center	To achieve the intent, buildings should transform the orientation and design in the Civic Center, while enhancing the streetscape and circulation of all modes and users.
	Cypress	To achieve the intent, buildings should transform both the design and orientation as well as the public realm and streetscape within the Cypress area.
Corridors	Aviation	To achieve the intent, buildings should transform building design, form, and orientation while enhancing the streetscape and access for pedestrians and bicycles in this area.
	Pacific Coast Highway	To achieve the intent, the City should enhance building design and form, and transform streetscapes and gateways to serve pedestrians and improve vehicular circulation.

Mobility Element

The Mobility Element identifies the proposed major thoroughfares, transportation routes, and alternative transportation facilities necessary to support a multimodal transportation system. This element is intended to facilitate the movement of people and goods throughout Hermosa Beach by a variety of transportation modes. The element places a balanced emphasis on bicycle and pedestrian modes, alternative-fuel vehicle use, and parking management in the Coastal Zone. The Mobility Element outlines a transportation system needed to support the land uses outlined in the Land Use + Design Element and regional growth factors identified in county-wide and region-wide plans.

The Mobility Element describes each component of the city's transportation system and presents future enhancements to the system that advance the following goals:

- **Complete Streets** – Complete Streets that serve the diverse functions of mobility, commerce, recreation, and community engagement for all users whether they travel by walking, bicycling, transit, or driving.
- **Living Streets** – A public realm that is safe, comfortable, and convenient for travel via foot, bicycle, transit, and automobile and creates vibrant, people-oriented public spaces that encourage active living.
- **Streets for Everyone** – Public right-of-ways supporting a multimodal and people-oriented transportation system that provides diversity and flexibility on how users choose to be mobile.
- **Managed Parking** – A parking system that meets the parking needs and demand of residents, visitors, and employees in an efficient and cost-effective manner.
- **Low-Carbon Sustainable Transport** – A robust low-cost and low-carbon transportation system that promotes the City's environmental sustainability and stewardship goals in support of social and economic objectives.
- **Local and Regional Connectivity** – A regionally integrated transportation system that provides local and regional connections to regional transit services, bicycle facilities, and other intermodal facilities.
- **Vision Zero** – A transportation system that results in zero transportation-related fatalities and which minimizes injuries.
- **Efficient Commercial Goods Movement** – Facilitates sustainable, effective, and safe movement of goods and commercial vehicles.

Each goal is supported by policies in the Mobility Element and actions in the Implementation Plan describing how the goals will be achieved. The key implementation actions for the Mobility Element are organized around goals to improve safety, enhance access, and support greater choice in transportation options.

Street Classifications

Streets are not equal in function or in their service of different travel modes. The Mobility Element's system of street classifications will inform future roadway improvements and performance measurement for new and reconfigured streets to carry out mobility priorities more effectively and to balance the needs of all travel modes. Definitions of street classifications consider surrounding land uses and designate priority levels for different travel modes within each street type. Combined, the types represent a hierarchical network linked to typical design standards and anticipated traffic levels.

For each street type, the Mobility Element provides a definition and design guidelines that illustrate how the street space is divided among roadway, sidewalk, parkway, and other modes. The street classifications outline the rights-of-way required for each arterial and collector street to accommodate vehicle traffic, transit movement, bicycle system implementation, and pedestrian circulation needs. The classifications also provide design guidance, priorities, and requirements for each street type. These are considered general guidelines for street corridors. Each street classification is defined in **Table 3.0-6 (Proposed Transportation Network Descriptions)** and locations of each type of facility are illustrated in **Figure 3.0-6 (Proposed Street Classifications), Figure 3.0-7 (Proposed Pedestrian Network), Figure 3.0-8 (Proposed Bicycle and Multi-Use Network),** and **Figure 3.0-9 (Proposed Transportation Amenities)**.

TABLE 3.0-6
PROPOSED TRANSPORTATION NETWORK DESCRIPTIONS

Street Type	Description
Alleyway	Provide access to private properties, including parking spaces and garages.
Local Street	Provide connections within and between neighborhoods. Local streets are not intended to serve through vehicular traffic and are generally one lane in each direction with a lower volume of vehicles.
Arterial (major + minor)	Carry the majority of vehicles entering, leaving, or traveling through the city. Major and minor arterials are differentiated by the volume of vehicles using the street and width of the right-of-way.
Walk Street	A street segment designed to exclude vehicular use, for pedestrians and non-motorized transportation.
Local Sidewalk	Provide contiguous and level walking space primarily on low-volume residential streets.
Wide Sidewalk	Provide adequate space for a frontage zone, pedestrian zone, and buffer/greenspace zone on commercial streets.
Priority Sidewalk	Facilities essential to providing a safe, accessible, and well-connected pedestrian network.
Multi-Use Path	A two-way facility separated from motor vehicles (adjacent to or independent of roadways) for use by pedestrians, joggers, skaters, and bicyclists.
Shared Roadway	A street segment that functions as a space for multiple users and intermittently as a gathering space, without delineations for each mode.
Bike Lane	Provide preferential or exclusive use of a portion of the roadway for bicyclists through striping or markings.
Sharrows	Combine bicycle stencils with chevrons placed in the center of the travel lane. Bring awareness to drivers that bicycles share the lane and may use the full lane.
Bike Boulevard	Allow bicyclists and motorists to share the same travel lanes to facilitate safe and convenient bicycle travel. They are low-volume streets optimized for bicyclists and pedestrians.
Local Trolley	In coordination with parking facilities, provides enhanced access to the beach and downtown.
Electric Vehicle and Bike Parking	Electric vehicle and bike parking facilities support the use of alternative modes to key destinations.
Crossing Control	Crossing control facilities (stop sign, signal, traffic circle) ensure efficient and safe intersections for all travel modes.
Parking District	District-based parking helps manage parking supply and more efficiently use space dedicated for parking.

Multimodal Transportation System

The Mobility Element places a priority on the development of a multimodal transportation system in the city. The current street system comprises three functional systems: arterials, collectors, and local streets with low walking and biking priority. The goals and policies identified in the Mobility Element serve to encourage greater individual choice to walk and bike throughout the city by developing multi-use path connections to key destinations in order to reduce auto dependency and improve transit, bicycle, and pedestrian connectivity. This would serve to decrease traffic, increase mobility and access to jobs, reduce greenhouse gas emissions, and improve the Hermosa Beach community's overall health, wellness, and quality of life.

Concepts identified in the Mobility Element include redesign of Pacific Coast Highway to improve its local function as a community focal point and gathering place. Potential redesign for the roadway could include wider sidewalks, sharrows, buffered and painted bicycle lanes, and streetscape improvements such as benches and pedestrian-scale lighting. Enhancing a multimodal transportation system and shifting travel patterns away from the automobile to alternative modes of transportation, including public transit (both regional and local), walking, and biking, would alleviate auto congestion throughout the city.

FIGURE 3.0-6 PROPOSED STREET CLASSIFICATIONS

FIGURE 3.0-7 PROPOSED PEDESTRIAN NETWORK

FIGURE 3.0-8 PROPOSED BICYCLE AND MULTI-USE NETWORK

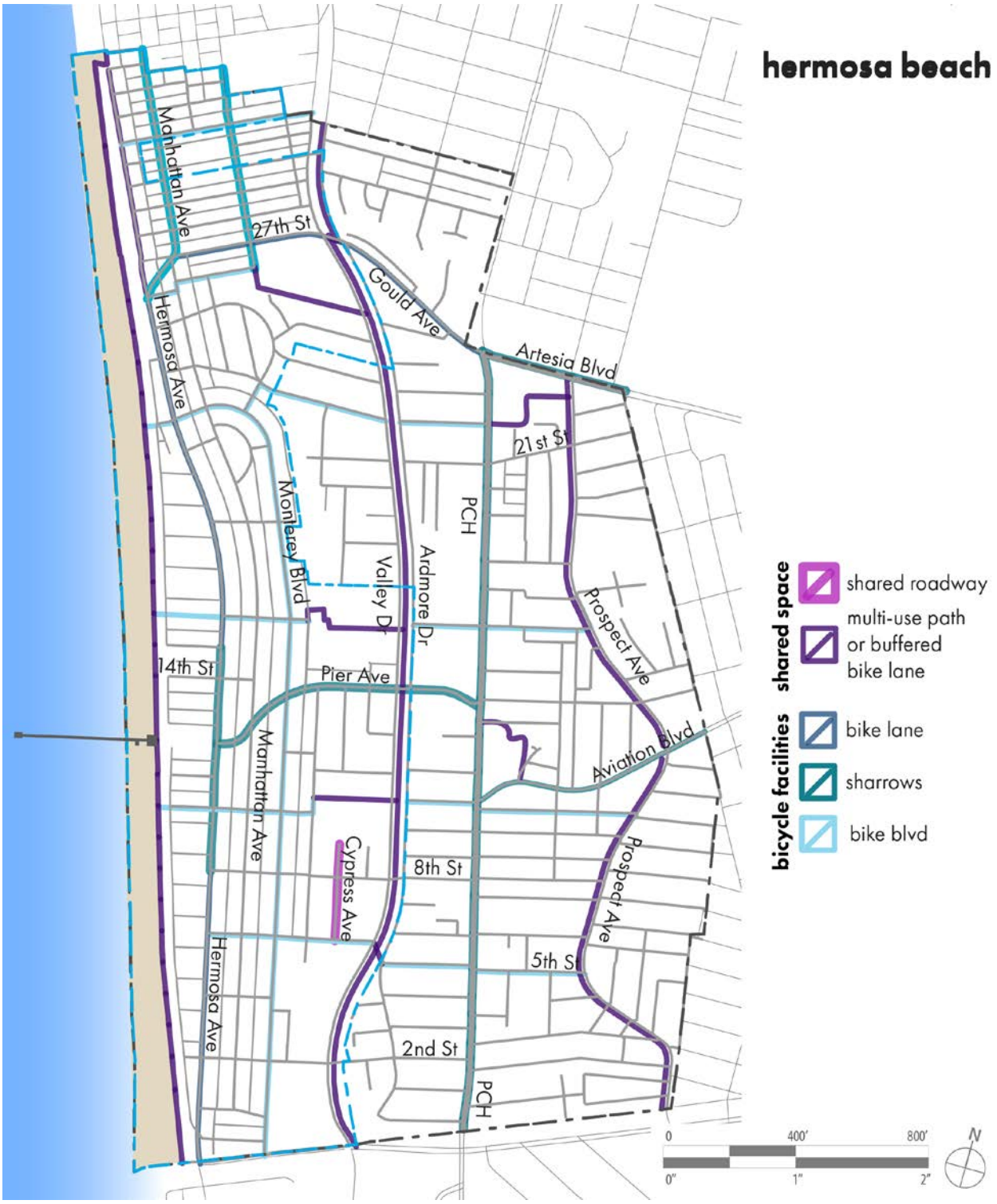


FIGURE 3.0-9 PROPOSED TRANSPORTATION AMENITIES

Sustainability + Conservation

The Sustainability + Conservation Element includes goals and policies to reduce greenhouse gas emissions, promote improved air quality and water quality, and promote energy-efficient green building practices. The element's primary objective is to set Hermosa Beach on a path toward a low- or no-carbon future, with stated goals of being a carbon-neutral municipal organization by 2020 and a carbon-neutral community by 2040.

The Sustainability + Conservation Element details measures to improve air quality in the city. This element also addresses the use of green building practices to reduce energy use and preserve the environment. Additionally, the element addresses the preservation of renewable and nonrenewable natural resources; managed production of resources, such as energy and groundwater; solid waste reduction and recycling; regional geology and soil erosion; provision of beach nourishment programs; and mineral resources.

The goals addressing the conservation of natural resources targeting water conservation, energy conservation, green building, air quality, and recycling and solid waste are as follows:

- **Carbon-Neutral Municipality** – Carbon neutral municipal operations by 2020 and sustained into the future.
- **A Carbon-Neutral Community** – Hermosa Beach is a carbon-neutral community by 2040.
- **Air Quality Improved** – Improved air quality and reduced quantities of air pollution emissions.
- **Energy Efficient Community** – A leader in reducing energy consumption and renewable energy production.
- **Leaders in Water Conservation** – Water conservation practices, recycled water use, and innovative water technologies support a carbon-neutral community.
- **Zero Waste to Landfills** – Hermosa Beach is a zero-waste community with convenient and effective options for recycling, composting, and diverting waste from landfills.
- **Retained Topsoil and Reduced Erosion** – Essential topsoil is retained and erosion is minimized.

Each goal is supported by policies in the Sustainability + Conservation Element and actions in the Implementation Plan describing how the goals will be achieved. The element's key implementation actions include a commitment to green building, energy conservation, and renewable energy production to maintain valuable resources over the long term, cut utility costs for businesses and residents, and reduce greenhouse gas emissions.

Parks + Open Space Element

The Parks + Open Space Element includes coastal policies and actions for beach programming, special events, the protection of scenic resources and views, and the preservation of natural habitat and wildlife. The City provides a high rate of parks/open space per resident, more than half of which is sandy beach. However, park space across the city is not evenly distributed among neighborhoods, especially those east of Pacific Coast Highway. See **Figure 3.0-10 (Parks and Public Facilities).**

The following goals are outlined in the Parks + Open Space Element:

- **Abundant Parks and Open Space** – Abundant parks, open space, and recreational facilities to serve the community.

- **First-Class Facilities** – First-class, well-maintained, and safe recreational facilities, parks, and open spaces.
- **Parks as a Place for Social Interaction** – Community parks and facilities encourage social activity and interaction.
- **Direct and Accessible Routes to Parks** – Direct and accessible routes and connections to parks, recreational facilities, and open space.
- **Enhanced Protection of Scenic Views and Vistas** – Scenic vistas, viewpoints, and resources are protected and enhanced.
- **Superior Access to the Coast** – The coast and its recreational facilities are easily accessible from many locations and by multiple transportation modes.
- **Balanced Management of the Beach** – The beach offers high quality recreational opportunities and amenities desired by the community.
- **Events for Everyone** – Balanced level of special events to support community recreation and economic development without restricting coastal access or impacting the community.
- **Abundant Trees and Green Space** – Abundant landscaping, trees, and green space provided throughout the community.
- **Habitats and Wildlife Protected** – Coastal and marine habitat resources and wildlife are protected.

Each goal is supported by policies in the Parks + Open Space Element and actions in the Implementation Plan describing how the goals will be achieved. The element's key implementation actions include development of a beach management program and a network of trails.

FIGURE 3.0-10 PARKS AND PUBLIC FACILITIES

Public Safety Element

The Public Safety Element establishes goals and policies that through their implementation would protect the community from risk associated with known natural and man-made hazards (e.g., geologic, flood, fire, and hazardous materials) and sets standards for emergency preparedness. The element places specific focus on coastal hazards that would be made more severe with anticipated sea level rise. This element also incorporates the State-required Noise Element, identifying goals, policies, and actions addressing major noise sources, existing and future noise levels, and the location and noise exposure of existing and proposed sensitive receptors. The element describes implementation of noise reduction methods and measures that employ current and innovative practices. The following Public Safety Element goals provide Hermosa Beach with a framework for keeping residents, businesses, and visitors safe from natural and human hazards, including excessive noise levels.

- **Minimize Hazard Risk** – Injuries and loss of life are prevented, and property loss and damage are minimized.
- **Consideration of Sea Level Rise** – The anticipated effects of sea level rise are understood, prepared for, and successfully mitigated.
- **Protection from Hazardous Materials** – Hermosa Beach residents, businesses, and coastal resources are protected from hazardous materials.
- **Community Capacity and Preparedness** – Community capacity and preparedness for unavoidable hazards.
- **Highly Responsive Emergency Response Services** – High quality police and fire protection services provided to residents and visitors.
- **A Resilient Community** – Hermosa Beach is prepared for and recovers quickly from natural disasters.
- **Noise Compatibility** – Noise compatibility is considered in the land use planning and design process.
- **Reduced Transportation Noise** – Transportation noise sources are minimized.

In addition, the City's Local Hazard Mitigation Plan is incorporated in the Public Safety Element by reference. Each goal is supported by policies in the element and actions in the Implementation Plan describing how the goals will be achieved.

Infrastructure Element

The Infrastructure Element outlines policies and guidelines to maintain and improve infrastructure systems, including the water supply system, sewer system, storm drain system, and telecommunications and utilities in the city. This element recommends new development approaches that incorporate low-impact development standards to manage stormwater runoff and identifies new and innovative technologies to be incorporated in new development. The goals addressing the City's provision of high quality infrastructure and maintenance of infrastructure in a way that reduces ongoing costs include:

- **High Quality Infrastructure Systems** – Infrastructure systems are functional, safe, and well maintained.
- **Well-Maintained and Attractive Streets** – Roadway infrastructure maintenance supports convenient, attractive, and complete streets and associated amenities.
- **Resilient Water Supply** – Adequate water supplies from diverse sources provide for the needs of current and future residents, businesses, and visitors.

- **Modernized Sewer System** – The sewer system infrastructure is modernized and resilient.
- **Innovative Stormwater Management** – The stormwater management system is safe, sanitary, and environmentally and fiscally sustainable.
- **Reliable and Environmentally Sustainable Utility Services** – Utility services are reliable, affordable, and renewable.
- **Advanced Telecommunication Network** – A reliable and efficient telecommunications network available to every resident, business, and institution.

Each goal is supported by policies in the Infrastructure Element and actions in the Implementation Plan describing how the goals will be achieved.

GENERAL PLAN IMPLEMENTATION PLAN

The Implementation Plan outlines actions that will guide the City's elected officials, commission and committee members, staff, and the public in the overall effort to implement PLAN Hermosa goals and policies. Each outlined action is a procedure, program, or technique that requires the City to act, either alone or in collaboration with non-City organizations or with federal and state agencies. Some of the actions describe processes or procedures the City currently administers on a day-to-day basis (such as review of development projects), while others require new programs or projects. Completion of each of the identified actions is subject to funding availability.

Additionally, some implementation actions require physical improvements to existing infrastructure and facilities. The PLAN Hermosa policies and the Implementation Plan were all studied in this EIR at the programmatic level. However, some of the implementation actions listed in **Table 3.0-6** (**Implementation Actions with Direct Physical Changes)** that will require direct physical changes to the environment may require future project-level CEQA review when implemented, because it is too speculative at this time to know the detail of the project (location, size, construction methods, etc.).

TABLE 3.0-6
IMPLEMENTATION ACTIONS WITH DIRECT PHYSICAL CHANGES

Mobility
MOBILITY-1. Conduct an inventory and assessment of the City's sidewalk network to identify gaps, assess ADA accessibility, and prioritize improvements within the Capital Improvement Program.
MOBILITY-2. Evaluate City right-of-ways and establish or update width and design standards for the construction or maintenance of sidewalks, curbs, gutters, and parkways.
MOBILITY-4. Install new signage and instructions for accessing transit locations, local and regional bicycle routes, and parking meters/machines in the Coastal Zone where existing meters and machines have been shown to cause confusion for visitors.
MOBILITY-6. Install traffic calming devices in areas appropriate to mitigate an identified and documented traffic concern, as determined by the City Public Works Director or designee. Potential traffic calming applications include clearly marked and/or protected bike and pedestrian zones, bike boulevards, bulb outs, median islands, speed humps, traffic circles, speed tables, raised crosswalks, signalized crosswalks, chicanes, chokers, raised intersections, realigned intersections, and textured pavements, among other effective enhancements.
MOBILITY-13. Install and maintain transportation amenities such as bicycle parking and electric vehicle charging stations so that they are available at each commercial district or corridor, park, and public facility.
MOBILITY-14. Facilitate the operation of bicycle rental concessions in the Coastal Zone.
MOBILITY-15. Install additional bicycle parking facilities and wayfinding signage near the beach, the Pier, and The Strand.

MOBILITY-16. Identify access improvements including, but not limited to, additional bus stop pullouts, bus parking locations, a seasonal shuttle system, and drop off/pick up areas, and prioritize these improvements in the five-year Capital Improvement Program.
Sustainability + Conservation
SUSTAINABILITY-4. Identify, prioritize, and implement greenhouse gas reduction projects utilizing the City's carbon reduction planning tools for community and municipal operations.
SUSTAINABILITY-15. In City-sponsored renovation or remodeling projects, contract with companies that offer salvage services and maximize the use of such services.
SUSTAINABILITY-18. Where feasible, new development or redevelopment shall be sited and designed to minimize alteration of natural landforms by conforming to the local topography; preventing substantial grading or reconfiguration of the project site; requiring that man-made contours mimic natural contours; ensuring that graded slopes blend with the existing terrain of the site and surrounding areas; and clustering structures to minimize site disturbance and to minimize development area.
Parks + Open Space
PARKS-5. Construct parkettes, open space, and pedestrian amenities at street ends as they intersect with The Strand.
PARKS-9. Install accessible walkways at parks and onto the beach while minimizing or avoiding negative effects on the aesthetics and ecology of the beach environment.
PARKS-16. Develop and implement a uniform coastal access sign program to assist the public to locate and use coastal access points. Consider adding signs to walk streets that intersect with Hermosa Avenue.
PARKS-17. Identify and remove any unauthorized/unpermitted structures, including signs and fences that inhibit visibility of public coastal access points.
Public Safety
SAFETY-15. Develop a long-term adaptive shoreline management program with a strong preference for beach replenishment over shoreline protective structures.
SAFETY-21. Enhance and maintain Police Department staffing and facilities to meet established proactive time targets and clearance rates that exceed national averages.
SAFETY-28. Review critical facilities proposed for development or expansion to ensure that hazardous conditions are mitigated or hazard reduction features are incorporated to the satisfaction of the responsible agencies.
Noise
NOISE-1. Incorporate or request the inclusion of soundwalls, earthen berms, or other acoustical barriers as part of any roadway improvement project adjacent to a residential area, school, or other sensitive land use, where necessary to mitigate identified adverse significant noise impacts.
Infrastructure
INFRASTRUCTURE-1. Create a comprehensive, long-range (20-year) infrastructure plan integrating roadway, water, wastewater, stormwater, waste disposal, and utility infrastructure systems. • Consider the best available science describing potential climate change impacts as a basis for preparing the infrastructure plan. • Use the infrastructure plan as a resource when preparing five-year Capital Improvement Plans (CIPs) and setting and enforcing discretionary development requirements. • Incrementally update the infrastructure plan following the preparation of each CIP to ensure it remains consistent with changes in growth, traffic, funding sources, climate change impacts, and state and regional regulation.
INFRASTRUCTURE-5. Require, as a part of development review, new development and redevelopment projects to designate areas where public infrastructure must be accommodated and to require either a land dedication or provision of the needed infrastructure by the project applicant.

INFRASTRUCTURE-8. Improve the environmental compatibility of utility and infrastructure facilities by establishing and applying the following standards to new development and redevelopment projects involving utility installation or relocation: • New utilities must be located away from, or constructed in a manner compatible with, critical habitat areas, resources, and the shoreline. Physical and service constraints may not allow relocation away from or full compatibility with such areas and resources.
INFRASTRUCTURE-10. Install greywater systems and rainwater collection cisterns in parks and community facilities.
INFRASTRUCTURE-11. Support efforts by Cal Water to construct necessary pump and storage facilities to ensure adequate water supply and proper water system balance.
INFRASTRUCTURE-20. Complete municipal demonstration projects showing residential and business property best practices in urban runoff, green streets, and LID.
INFRASTRUCTURE-22. Continue to install educational signs or symbols on major public storm drains.
INFRASTRUCTURE-23. Develop a process for identifying sites deemed appropriate for alternative renewable energy power generation facilities, and provide such information to utility providers and potential developers.
INFRASTRUCTURE-24. Continue to implement energy-efficient lighting throughout City facilities.

Government Code Section 65400 dictates that the Implementation Plan will be used to prepare the Annual Report to the City Council. The Annual Report will demonstrate the status of the City's progress in implementing the General Plan. Because many of the individual actions also act as mitigation for environmental impacts resulting from implementation of PLAN Hermosa, the Annual Report can also serve as a means of monitoring application of mitigation measures specified in this EIR, in compliance with the requirements for Mitigation Monitoring and Reporting Programs, as specified by Public Resources Code Section 21081.6. **Table 3.0-7 (Implementation Actions Used in this EIR)** outlines the implementation actions that are used in this EIR to support mitigation of potential environmental impacts.

TABLE 3.0-7
IMPLEMENTATION ACTIONS USED IN THIS EIR

Aesthetics
LAND USE-3. Develop building design guidelines to illustrate and articulate the appropriate building form, scale, and massing for each established character area. The Design Guidelines shall be tailored to: • Identify and safeguard the prominent visual characteristics of each character area in accordance with those key features and characteristics to ensure that the overall visual character of the neighborhoods, centers, and districts is preserved. • Include provisions that ensure avoidance of significant shadow impacts from new structures onto public recreational areas, parks or other public gathering places during the hours of 10 AM to 2 PM.
PARKS-10. Develop and apply design standards and evaluation procedures for development projects that have the potential to degrade regionally important views or interfere with prominent public viewpoints, as identified in PLAN Hermosa.
PARKS-11. Protect public views of the Pacific Ocean by establishing and applying the following development review requirements: • Locate new and relocated utilities underground when possible. Place and screen all other utilities to minimize public visibility. • Replace automobile-scale streetlights with shorter, pedestrian-scale streetlights where safe and appropriate. • Fences, walls, and landscaping shall not block views of scenic areas from designated viewpoints, scenic roads, parks, beaches, and other public viewing areas.

PARKS-12. Protect visual and aesthetic resources through design review and by establishing and applying the following development review requirements: • New development in areas visible from prominent public viewpoints shall incorporate colors and exterior materials that are compatible with the surrounding landscape. • Public works projects adjacent to prominent public viewpoints that include hardscape elements such as retaining walls, cut-off walls, abutments, bridges, and culverts shall incorporate veneers, texturing, and colors that blend with the surrounding earth materials or landscape. • Landscaping material shall be used to screen uses that detract from the scenic quality of the coast from prominent public viewpoints.
PARKS-13. Minimize nighttime light pollution by establishing and applying the following development review requirements: • Exterior lighting (except traffic lights, navigational lights, and other similar safety lighting) shall be minimized, restricted to low intensity fixtures, shielded (full cutoff), and downcast (emitting no light above the horizontal plane of the fixture) concealed to the maximum feasible extent so that no light source is directly visible from public viewing areas, there is no glare or spill beyond the property lines and the lamp bulb is not directly visible from within any residential unit.
PARKS-14. Minimize the negative aesthetic impacts of signs by establishing or revising and applying the following design requirements: • Enforce appropriate limits on height, size, design, and materials of signs. • Prohibit signs other than traffic or public safety signs that would obstruct views to the ocean, beach, parks, or other scenic areas. • Enforce sign maintenance controls. • Continue restrictions on the use of lights and moving parts in signs, billboards, and rooftop signs.
Air Quality
LAND USE-13. Create a checklist and resource guide comprising local, state, and federal requirements for the development of offshore renewable energy facilities to streamline permitting requirements and improve public awareness.
MOBILITY-6. Install traffic calming devices in areas appropriate to mitigate an identified and documented traffic concern, as determined by the City Public Works Director or designee. Potential traffic calming applications include clearly marked and/or protected bike and pedestrian zones, bike boulevards, bulb outs, median islands, speed humps, traffic circles, speed tables, raised crosswalks, signalized crosswalks, chicanes, chokers, raised intersections, realigned intersections, and textured pavements, among other effective enhancements.
MOBILITY-12. Maintain and periodically update the Transportation Demand Management (TDM) Ordinance with activities that will reduce auto trips associated with new development.
MOBILITY-13. Install and maintain transportation amenities such as bicycle parking and electric vehicle charging stations so that they are available at each commercial district or corridor, park, and public facility.
MOBILITY-14. Facilitate the operation of bicycle rental concessions in the Coastal Zone.
MOBILITY-18. Develop congestion management performance measures and significant impact thresholds that are in accordance with the California Environmental Quality Act (CEQA) and Senate Bill 743 (SB 743) requirements for roadway segments and intersections.
SUSTAINABILITY-1. Establish a local greenhouse gas impact fee for projects to offset their fair share of greenhouse gas emissions generated, by providing funding for implementation of local GHG reduction projects.
SUSTAINABILITY-2. Establish greenhouse gas emissions thresholds of significance and standardize potential mitigation measures for both discretionary and ministerial actions.
SUSTAINABILITY-6. Implement the City's clean fleet policy through the purchase or lease of vehicles and equipment that reduce greenhouse gas emissions and improve air quality.
SUSTAINABILITY-7. Concurrent with new State Building Code adoptions, periodically update or amend Green Building Standards and conduct cost effectiveness studies to incorporate additional energy-efficient features.

SUSTAINABILITY-8. Develop and market a program to offer incentives such as rebates, fee waivers, or permit streamlining to facilitate the installation of renewable energy, energy efficient, or water conservation equipment.
SUSTAINABILITY-16. Revise the Municipal Code as necessary to ensure it reflects up-to-date practices to reduce potential for soil erosion and ways to minimize or eliminate the effects of grading on the loss of topsoil.
SUSTAINABILITY-17. Develop a citywide expansive and corrosive soils screening tool to reduce the need for site-specific soil reports.
SUSTAINABILITY-18. Where feasible, new development or redevelopment shall be sited and designed to minimize alteration of natural landforms by conforming to the local topography; preventing substantial grading or reconfiguration of the project site; requiring that man-made contours mimic natural contours; ensuring that graded slopes blend with the existing terrain of the site and surrounding areas; and clustering structures to minimize site disturbance and to minimize development area.
PARKS-22. Amend the Local Implementation Plan/Zoning Code to require applicants for summer events occurring on weekends or holidays between Memorial Day and Labor Day with greater than 1,000 participants to provide and advertise predetermined shuttle services and bicycle corrals.
SAFETY-17. Provide information, opportunities, and incentives to the community for the proper disposal of toxic materials to avoid environmental degradation to the air, soil, and water resources from toxic materials contamination.
INFRASTRUCTURE-23. Develop a process for identifying sites deemed appropriate for alternative renewable energy power generation facilities, and provide such information to utility providers and potential developers.
INFRASTRUCTURE-24. Continue to implement energy-efficient lighting throughout City facilities.
Biological Resources
LAND USE-13. Create a checklist and resource guide comprising local, state, and federal requirements for the development of offshore renewable energy facilities to streamline permitting requirements and improve public awareness.
PARKS-24. Partner with local nonprofits such as the Santa Monica Bay Restoration Commission or the University of California, Los Angeles, to conduct education demonstration projects or presentations on coastal and marine habitat conservation.
PARKS-25. Evaluate existing beach conditions and identify areas that may be appropriate to restore vegetated dune habitat. Pursue grant funding.
PARKS-26. Review and revise as needed, the City's tree ordinance to ensure protection of existing parkway trees, and update the master tree list.
PARKS-27. Complete and maintain a citywide public tree inventory, including quantity, species type, diameter, condition, trimming strategies and geo-codes and recommendations.
PARKS-28. Maintain a list of approved plantings for trees and landscaping within City parkways.
PARKS-29. Amend the Municipal Code to incorporate tree removal and replacement requirements. If preservation of existing mature trees is not feasible, removed trees shall be replaced at a minimum 2:1 ratio either on-site or elsewhere as prescribed by the City.
Cultural Resources
GOVERNANCE-5. Incorporate guidance related to Native American consultation and treatment of prehistoric and Native American resources into local CEQA guidelines for Hermosa Beach.
LAND USE-2. Establish development standards to correspond with any new land use designations with consideration of neighborhood character areas.
LAND USE-3. Develop building design guidelines to illustrate and articulate the appropriate building form, scale, and massing for each established character area. The Design Guidelines shall be tailored to: • Identify and safeguard the prominent visual characteristics of each character area in accordance with those key features and characteristics to ensure that the overall visual character of the neighborhoods, centers, and districts is preserved. • Include provisions that ensure avoidance of significant shadow impacts from new structures onto public recreational areas, parks or other public gathering places during the hours of 10 AM to 2 PM.

LAND USE-14. Amend the CEQA documentation and initial study process to ensure cultural and historical resources are studied in accordance with CEQA and any local historic preservation program
LAND USE-15. Develop eligibility criteria to use in the designation of local historic sites or historic districts.
LAND USE-16. Develop emergency preparedness and disaster response plans for cultural resources, including a recovery action plan that addresses long-range decisions likely to be faced by the City following a major disaster, including economic recovery, protocols for demolition or restoration of damaged historic structures, and fee deferral for repair permits.
LAND USE-17. Create a program to provide for the voluntary installation of plaques and/or public art related to historic buildings and sites in the city.
LAND USE-18. Establish design review procedures and establish effective means to protect architectural features that have historical significance. Use the Secretary of Interior's Standards to evaluate impacts of alterations or new development on historical resources.
LAND USE-19. Prepare design guidelines that illustrate and highlight important historic design features of buildings.
LAND USE-20. Research and develop innovative policies for preserving historic properties.
LAND USE-21. Work with community organizations to develop brochures, guides, walking tours, and other marketing materials to highlight existing public art in Hermosa Beach.
LAND USE-22. Develop historic preservation expertise among staff and decision makers on the Secretary of the Interior's Standards for Rehabilitation, preservation ordinances, the State Historical Building Code, environmental review for historical resources, and tax credits and incentives.
LAND USE -23. The City shall require archaeological investigations for all applicable discretionary projects, in accordance with CEQA regulations, for areas not previously surveyed and/or that are determined sensitive for cultural resources. The City shall require the preservation of discovered archaeologically significant resources (as determined based on city, state, and federal standards by a qualified professional) in place if feasible or provide mitigation (avoidance, excavation, documentation, curation, data recovery, or other appropriate measures) prior to further disturbance.
SAFETY-26. Develop a recovery action plan that addresses long-range decisions likely to be faced by the City following a major disaster, including economic recovery, protocols for demolition or restoration of damaged historic structures, and fee deferral for repair permits.
Geology and Soils
SUSTAINABILITY-16. Revise the Municipal Code as necessary to ensure it reflects up-to-date practices to reduce potential for soil erosion and ways to minimize or eliminate the effects of grading on the loss of topsoil.
SUSTAINABILITY-17. Develop a citywide expansive and corrosive soils screening tool to reduce the need for site-specific soil reports.
SUSTAINABILITY-18. Where feasible, new development or redevelopment shall be sited and designed to minimize alteration of natural landforms by conforming to the local topography; preventing substantial grading or reconfiguration of the project site; requiring that man-made contours mimic natural contours; ensuring that graded slopes blend with the existing terrain of the site and surrounding areas; and clustering structures to minimize site disturbance and to minimize development area.
SAFETY-1. Continue to adopt and enforce the most up-to-date California Building Standards Code and California Fire Code, with appropriate local amendments.
SAFETY-2. Continue to inventory unreinforced brick masonry, soft-story, and other seismically vulnerable private buildings. Identify potential funding sources to assist with seismic retrofits.
SAFETY-3. Enforce seismic design provisions of the current California Building Standards Code related to geologic, seismic, and slope hazards, with appropriate local amendments.
SAFETY-4. For properties identified as possibly containing acidic, expansive, or collapsible soils, require site-specific soil condition reports and appropriate mitigation as a condition of new development.

SAFETY-6. Evaluate the landslide potential of a project site and require implementation of landslide mitigation measures when, during the course of a geotechnical investigation, areas prone to landslide are found. Potential landslide mitigation measures include, but are not limited to the following: • Avoidance: Developments should be built sufficiently far away from the threat that they will not be affected even if a landslide does occur. • Reduction: Reduction of landslide hazards should be achieved by increasing the factor of safety of the landslide area to an acceptable level, based on current engineering standards and practices. This can be accommodated by eliminating slopes with active/inactive landslides, removing the unstable soil and rock materials, or applying one or more appropriate slope stabilization methods (such as buttress fills, subdrains, soil nailing, crib walls, etc.)
SAFETY-7. Require projects located within the Liquefaction Areas identified in PLAN Hermosa to evaluate the liquefaction potential and require implementation of mitigation measures when, during the course of a geotechnical investigation, shallow groundwater (60 feet or less) and potentially liquefiable soils are found. Potential liquefaction mitigation measures include, but are not limited to, soil densification or compaction, displacement or compaction grouting, and use of post-tensioned slab foundations, piles, or caissons.
Greenhouse Gas Emissions
SUSTAINABILITY-1. Establish a local greenhouse gas impact fee for projects to offset their fair share of greenhouse gas emissions generated, by providing funding for implementation of local GHG reduction projects.
SUSTAINABILITY-2. Establish greenhouse gas emissions thresholds of significance and standardize potential mitigation measures for both discretionary and ministerial actions.
SUSTAINABILITY-4. Identify, prioritize, and implement greenhouse gas reduction projects utilizing the City's carbon reduction planning tools for community and municipal operations.
SUSTAINABILITY-5. Regularly monitor and evaluate the City's greenhouse gas emissions inventory and report on progress toward greenhouse gas reduction goals.
Hazards and Hazardous Materials
SAFETY-16. Include updated hazardous materials considerations in regular Emergency Operation Plan updates and work with the County of Los Angeles to update local Hazardous Materials Area Plans on a regular basis.
SAFETY-17. Provide information, opportunities, and incentives to the community for the proper disposal of toxic materials to avoid environmental degradation to the air, soil, and water resources from toxic materials contamination.
SAFETY-18. Designate an emergency response team to monitor and respond to regional disasters such as oil spills and other shoreline disasters. Such a team must maintain an emergency response plan that includes coordination with other agencies and jurisdictions in the region on initial response, aid, and recovery.
SAFETY-24. Periodically update the emergency operations plan.
SAFETY-25. Periodically update the Local Hazard Mitigation Plan and concurrently amend the Public Safety Element to maintain eligibility for maximum grant funding.
SAFETY-29. Identify hazard-specific evacuation routes and share with the public, businesses, and other government agencies.
Hydrology and Water Quality
SUSTAINABILITY-9. Maintain and periodically update the Water Efficient Landscape Ordinance and Water Conservation and Drought Management Plan sections of the Municipal Code to facilitate the use of new technologies or practices to conserve water.
SAFETY-5. Evaluate tsunami preparation, evacuation, and response policies/practices to reflect current inundation maps and design standards. Include updated information in the periodically updated Local Hazard Mitigation Plan.
SAFETY-9. Continue working with regional partners to develop a local sea level rise model that evaluates erosion potential, provides detailed inundation maps, and provides combined sea level rise and tsunami maps.
SAFETY-10. When the mean high water level exceeds 1 foot above the baseline level, partner with FEMA as a cooperating technical partner to conduct a Hydrologic and Hydraulic Study, and facilitate necessary revisions to applicable Flood Insurance Rate Maps.

SAFETY-11. Prepare for changing shoreline conditions by establishing and applying the following development review requirements: • Require new development or redevelopment project proposals within the designated area subject to flooding, inundation, or erosion due to sea level rise to describe and illustrate in site plans how the proposed project considers and mitigates potential flood hazards during the economic lifespan of the structure. Potential flood mitigation measures include, but are not limited to, flood proofing; increased ground floor elevation (a minimum of 1-foot freeboard); ground-floor, flood-resistant exterior materials; and restricting fencing or yard enclosures that cause water to pond. • Require new development or redevelopment projects to assure stability and structural integrity and neither create nor contribute significantly to erosion, geologic instability, or destruction of the project site or surrounding area. • As local flood, erosion, and tsunami data becomes more precise, amend the General Plan and Zoning Code to establish more specific development standards and conditions.
SAFETY-12. Amend the Municipal Code to establish a definition of "economic lifespan" for structural development as between 75 to 100 years, unless otherwise specified, and provide restrictions for specific development proposals.
SAFETY-13. Amend the Municipal Code to require flood risk disclosure and active acknowledgment of expanded flood risk when properties subject to inundation or flooding are developed or redeveloped.
SAFETY-14. Continue to participate in regional sediment management planning.
SAFETY-15. Develop a long-term adaptive shoreline management program with a strong preference for beach replenishment over shoreline protective structures.
INFRASTRUCTURE-9. Consult with Cal Water to estimate and evaluate water supplies, provide public information and incentives for water conservation best practices.
INFRASTRUCTURE-10. Install greywater systems and rainwater collection cisterns in parks and community facilities.
INFRASTRUCTURE-11. Support efforts by Cal Water to construct necessary pump and storage facilities to ensure adequate water supply and proper water system balance.
INFRASTRUCTURE-12. Amend the Municipal Code to require the installation of dual water plumbing hookups for landscaping irrigation, grading, and other non-contact uses in new development and redevelopment projects where recycled water is available or expected to be available.
INFRASTRUCTURE-13. Continue to implement the Water Conservation and Drought Management Plan and any implementing ordinances, including imposition of fines and other appropriate enforcement tools, for violations of water conservation rules.
INFRASTRUCTURE-18. Continue to implement and incorporate revisions to the Clean Bay Restaurant Program and Grease Control Ordinance.
INFRASTRUCTURE-19. Update program requirements to integrate the latest available Best Management Practices into the City Stormwater Management and Discharge Control Ordinance, Low Impact Development (LID) Ordinance, and Green Streets Policy and regularly monitor results.
INFRASTRUCTURE-20. Complete municipal demonstration projects showing residential and business property best practices in urban runoff, green streets, and LID.
INFRASTRUCTURE-21. Continue to require new development and redevelopment projects to incorporate green street BMPs that address stormwater runoff from the project area using the Green Street BMP Selection Guidelines identified in Attachment A of the City's Green Street Policy.
INFRASTRUCTURE-22. Continue to install educational signs or symbols on major public storm drains.
Land Use and Planning
LAND USE-1. Amend the Zoning Map to bring consistency between PLAN Hermosa Land Use Designations and Zoning Ordinance Zoning Districts.
LAND USE-2. Establish development standards to correspond with any new land use designations with consideration of neighborhood character areas.

Noise and Vibration
NOISE-1. Incorporate or request the inclusion of soundwalls, earthen berms, or other acoustical barriers as part of any roadway improvement project adjacent to a residential area, school, or other sensitive land use, where necessary to mitigate identified adverse significant noise impacts.
NOISE-2. Enforce and periodically evaluate truck and bus movements and routes to reduce impacts on sensitive areas, and promote coordination between the Police Department and the California Highway Patrol to enforce the State Motor Vehicle noise standards, to minimize or reduce noise impacts on residential and other sensitive land uses.
NOISE-3. Apply the Noise Element standards of compatibility described in PLAN Hermosa to new development proposals. Require the mitigation of anticipated impacts through design features such as building orientation and acoustical barriers, to ensure compatibility.
NOISE-4. Require new multi-family development, single-family development, and condominium conversion projects to meet the California Noise Insulation Standards (Title 24 of the California Administrative Code) for interior and exterior noise levels.
NOISE-5. Acoustical analysis reports prepared by a qualified acoustical consultant shall be required for new sensitive land uses within noise impact areas (i.e., those areas where the existing or future CNEL exceeds 60 dB).
NOISE-6. Adopt and enforce a quantitative Noise and Vibration Ordinance to reduce excessive noise and vibration from site-specific sources such as construction activity, mechanical equipment, landscaping maintenance, loud music, truck traffic, loading and unloading activities, and other sources.
NOISE-7. Periodically review adopted noise standards, policies and regulations affecting noise in order to conform to changes in legislation and/or technologies.
NOISE-8. Comply with all state and federal OSHA noise standards, and all new equipment purchases shall comply with state and federal noise standards.
Population and Housing
LAND USE-1. Amend the Zoning Map to bring consistency between PLAN Hermosa Land Use Designations and Zoning Ordinance Zoning Districts.
Public Services
LAND USE-6. Develop an inventory of underutilized or surplus property that may be appropriate for City or School District use or purchase to serve community education and recreational needs in the future.
MOBILITY-12. Maintain and periodically update the Transportation Demand Management (TDM) Ordinance with activities that will reduce auto trips associated with new development.
MOBILITY-13. Install and maintain transportation amenities such as bicycle parking and electric vehicle charging stations so that they are available at each commercial district or corridor, park, and public facility.
MOBILITY-17. In conjunction with the Hermosa Beach City School District, the City will identify school access points, a proposed network, education and enforcement programs to provide a comprehensive Safe Routes to School Program.
SUSTAINABILITY-7. Concurrent with new State Building Code adoptions, periodically update or amend Green Building Standards and conduct cost effectiveness studies to incorporate additional energy-efficient features.
SUSTAINABILITY-8. Develop and market a program to offer incentives such as rebates, fee waivers, or permit streamlining to facilitate the installation of renewable energy, energy efficient, or water conservation equipment.
SUSTAINABILITY-9. Maintain and periodically update the Water Efficient Landscape Ordinance and Water Conservation and Drought Management Plan sections of the Municipal Code to facilitate the use of new technologies or practices to conserve water.
SUSTAINABILITY-10-. Create and adopt a Zero Waste Action Plan to reach 100% waste diversion from landfills.
SUSTAINABILITY-11. Amend the Municipal Code to require that all commercial facilities make full-service recycling available for both customer use and business use, placing attractive and convenient bins in clear locations.
SUSTAINABILITY-12. Require that all multi-family residential uses provide an adequate number of attractive and convenient recycling bins to serve the number of units in the complex.

SUSTAINABILITY-13. Require that all restaurants use compostable single-use items like takeout boxes.
SUSTAINABILITY-14. Create and update a standard requirement for the use of recycled materials in new development and redevelopment projects.
PARKS-1. Conduct needs assessments and evaluate recreational program offerings to ensure community needs and priorities are being met. Conduct regular updates to the Parks and Recreation Master Plan.
PARKS-2. Conduct periodic assessments of public facilities and maintain a list of priority replacement or new facilities projects.
PARKS-3. Establish parks level of service and level of access standards to prioritize the development, upgrade, and renovation of parks and open space facilities.
PARKS-4. Update City standards and fees related to the provision of parks and open space and sustainable funding source for providing high quality and well maintained facilities.
PARKS-5. Construct parkettes, open space, and pedestrian amenities at street ends as they intersect with The Strand.
PARKS-6. Continue, renew, and expand as needed, joint use agreements with the School District to allow community use of school fields and facilities.
PARKS-7. Partner with the School District, community groups, and neighboring communities to identify and apply for grant opportunities to maintain, enhance, and expand park and recreational opportunities.
SAFETY-1. Continue to adopt and enforce the most up-to-date California Building Standards Code and California Fire Code, with appropriate local amendments.
SAFETY-8. Support community safety and fire protection standards by establishing and applying the following development review requirements to be reviewed by HBFD and HBPD as appropriate: • New development and significant redevelopment projects shall coordinate with HBFD and Cal Water to provide and maintain adequate peak flow rates for firefighting. • New development, significant redevelopment, and public improvement projects shall ensure that building designs provide for adequate emergency access and that changes to the right-of-way do not impede access for emergency responder's apparatus or personnel.
SAFETY-20. Establish and meet EMS and Fire response time standard of 7 minutes or less for 90% of incidents.
SAFETY-22. Continue to support existing mutual and automatic aid agreements providing additional fire and police resources needed during an emergency, as feasible.
SAFETY-21. Enhance and maintain Police Department staffing and facilities to meet established proactive time targets and clearance rates that exceed national averages.
SAFETY-22. Continue to support existing mutual and automatic aid agreements providing additional fire and police resources needed during an emergency, as feasible.
INFRASTRUCTURE-1. Create a comprehensive, long-range (20-year) infrastructure plan integrating roadway, water, wastewater, stormwater, waste disposal, and utility infrastructure systems. • Consider the best available science describing potential climate change impacts as a basis for preparing the infrastructure plan. • Use the infrastructure plan as a resource when preparing five-year Capital Improvement Plans (CIPs) and setting and enforcing discretionary development requirements. • Incrementally update the infrastructure plan following the preparation of each CIP to ensure it remains consistent with changes in growth, traffic, funding sources, climate change impacts, and state and regional regulation.
INFRASTRUCTURE-8. Improve the environmental compatibility of utility and infrastructure facilities by establishing and applying the following standards to new development and redevelopment projects involving utility installation or relocation: • New utilities must be located away from, or constructed in a manner compatible with, critical habitat areas, resources, and the shoreline. Physical and service constraints may not allow relocation away from or full compatibility with such areas and resources.

INFRASTRUCTURE-9. Consult with Cal Water to estimate and evaluate water supplies, provide public information and incentives for water conservation best practices.
INFRASTRUCTURE-10. Install greywater systems and rainwater collection cisterns in parks and community facilities.
INFRASTRUCTURE-11. Support efforts by Cal Water to construct necessary pump and storage facilities to ensure adequate water supply and proper water system balance.
INFRASTRUCTURE-12. Amend the Municipal Code to require the installation of dual water plumbing hookups for landscaping irrigation, grading, and other non-contact uses in new development and redevelopment projects where recycled water is available or expected to be available.
INFRASTRUCTURE-13. Continue to implement the Water Conservation and Drought Management Plan and any implementing ordinances, including imposition of fines and other appropriate enforcement tools, for violations of water conservation rules.
INFRASTRUCTURE-14. Ensure adequate and resilient sewer system capacity by establishing and applying the following development review requirements: • New development or redevelopment projects involving construction of 8-inch diameter or larger sewers that connect directly or indirectly to the Los Angeles County Sanitation Districts' sewer system must prepare a sewer plan identifying that the existing sewer collection and treatment systems have available capacity to support such an increase, or provide for necessary system upgrades as part of the proposed project.
INFRASTRUCTURE-16. Implement a financing plan, including use of the adopted sewer fee and loans, to ensure that resources are available for investment in annual rehabilitation projects to improve sanitary sewer pipes.
INFRASTRUCTURE-17. Prepare an annual report for City Council documenting sewer system operations, actions to minimize overflows, incidents of overflows, and their impacts on receiving waters and public health and safety.
INFRASTRUCTURE-23. Develop a process for identifying sites deemed appropriate for alternative renewable energy power generation facilities, and provide such information to utility providers and potential developers.
INFRASTRUCTURE-24. Continue to implement energy-efficient lighting throughout City facilities.
INFRASTRUCTURE-25. Survey all streetlights periodically for functionality and create a response protocol to respond to reports of streetlight outages within a 24-hour time period.
Transportation
GOVERNANCE-4. Continue to participate and partner with neighboring cities and regional organizations to implement projects and achieve goals that enhance the livability of Hermosa Beach.
MOBILITY-1. Conduct an inventory and assessment of the City's sidewalk network to identify gaps, assess ADA accessibility, and prioritize improvements within the Capital Improvement Program.
MOBILITY-2. Evaluate City right-of-ways and establish or update width and design standards for the construction or maintenance of sidewalks, curbs, gutters, and parkways.
MOBILITY-3. Add definitions to the Municipal Code for street classifications, pedestrian facilities, bicycle and multi-use facilities, and transportation amenities.
MOBILITY-4. Install new signage and instructions for accessing transit locations, local and regional bicycle routes, and parking meters/machines in the Coastal Zone where existing meters and machines have been shown to cause confusion for visitors.
MOBILITY-5. Evaluate operations in local neighborhood streets with considerations to speed management strategies and traffic calming measures to increase safety for all people using the street.
MOBILITY-6. Install traffic calming devices in areas appropriate to mitigate an identified and documented traffic concern, as determined by the City Public Works Director or designee. Potential traffic calming applications include clearly marked and/or protected bike and pedestrian zones, bike boulevards, bulb outs, median islands, speed humps, traffic circles, speed tables, raised crosswalks, signalized crosswalks, chicanes, chokers, raised intersections, realigned intersections, and textured pavements, among other effective enhancements.
MOBILITY-7. Work with commercial property owners to conduct an assessment for utilization of private parking supplies to supplement private and public parking needs and evaluate the potential for shared use agreements or MOUs.

MOBILITY-8. Implement a contingency-based overflow parking plan to address seasonal and even- based parking demands.
MOBILITY-9. Periodically conduct a city-wide parking study to analyze existing parking infrastructure in order to effectively address and manage current and future parking needs.
MOBILITY-10. Set utilization and turnover rate goals and implement dynamically adjusted (demand-based) pricing strategies for public parking supplies.
MOBILITY-11. Develop a smart technology street parking system in the Coastal Zone that includes but is not limited to the following features: • Variable-cost parking linked to demand; • Smart phone application identifying available metered spaces; and • Parking pay-by-card and pay-by-phone programs.
MOBILITY-12. Maintain and periodically update the Transportation Demand Management (TDM) Ordinance with activities that will reduce auto trips associated with new development.
MOBILITY-13. Install and maintain transportation amenities such as bicycle parking and electric vehicle charging stations so that they are available at each commercial district or corridor, park, and public facility.
MOBILITY-14. Facilitate the operation of bicycle rental concessions in the Coastal Zone.
MOBILITY-15. Install additional bicycle parking facilities and wayfinding signage near the beach, the Pier, and The Strand.
MOBILITY-16. Identify access improvements including, but not limited to, additional bus stop pullouts, bus parking locations, a seasonal shuttle system, and drop off/pick up areas, and prioritize these improvements in the five-year Capital Improvement Program.
MOBILITY-17. In conjunction with the Hermosa Beach City School District, the City will identify school access points, a proposed network, education and enforcement programs to provide a comprehensive Safe Routes to School Program.
MOBILITY-18. Develop congestion management performance measures and significant impact thresholds that are in accordance with the California Environmental Quality Act (CEQA) and Senate Bill 743 (SB 743) requirements for roadway segments and intersections.
SUSTAINABILITY-6. Implement the City's clean fleet policy through the purchase or lease of vehicles and equipment that reduce greenhouse gas emissions and improve air quality.
PARKS-8. Identify and evaluate the ADA compliance of parks, public facilities, and coastal public access points.
PARKS-9. Install accessible walkways at parks and onto the beach while minimizing or avoiding negative effects on the aesthetics and ecology of the beach environment.
PARKS-16. Develop and implement a uniform coastal access sign program to assist the public to locate and use coastal access points. Consider adding signs to walk streets that intersect with Hermosa Avenue.
PARKS-17. Identify and remove any unauthorized/unpermitted structures, including signs and fences that inhibit visibility of public coastal access points.
PARKS-22. Amend the Local Implementation Plan/Zoning Code to require applicants for summer events occurring on weekends or holidays between Memorial Day and Labor Day with greater than 1,000 participants to provide and advertise predetermined shuttle services and bicycle corrals.
INFRASTRUCTURE-6. Aggressively seek regional, state, and federal funds to leverage local money earmarked for projects listed in the CIP.
INFRASTRUCTURE-7. Periodically review, and if needed revise, the development fee schedule and impact fee process to ensure they are adequate and reflective of proposed projects' impacts and required services.

LOCAL COASTAL IMPLEMENTATION PLAN

The proposed project covers the development of the City's Coastal Implementation Plan, which will provide development standards and regulations applicable in the Coastal Zone and will outline an administrative process for the issuance of coastal development permits. The Implementation Plan will include revisions to the City of Hermosa Beach Municipal Code regarding permitting procedures, visitor-serving accommodations, special events, transportation demand management, coastal-dependent or coastal-related commercial uses, increased flood risk under anticipated sea level rise scenarios, and water quality. While the Coastal Implementation Plan will be approved at a later date, PLAN Hermosa includes a series of actions that detail the types of changes to be made to the Hermosa Beach municipal code. The implementation actions, identified in **Table 3.0-8 (Actions Related to the Coastal Implementation Plan)**, provide sufficient detail to evaluate the potential physical impacts of the Coastal Implementation Plan in conjunction with PLAN Hermosa and are analyzed in this EIR.

TABLE 3.0-8
ACTIONS RELATED TO THE COASTAL IMPLEMENTATION PLAN

LAND USE-1. Amend the Zoning Map to bring consistency between PLAN Hermosa Land Use Designations and Zoning Ordinance Zoning Districts.
LAND USE-7. Establish within the Zoning Code/Local Implementation Plan a method to define and classify existing facilities and proposed projects providing overnight accommodations in the Coastal Zone as low, mid-range, or high cost, and apply this method to the Coastal Development Permit review process. The method should compare hotel room rates to the California statewide and regional averages, and should be updated as the City's fee schedule is updated.
LAND USE-8. Modify the Zoning Code/Local Implementation Plan and Zoning Map to better accommodate coastal-dependent and coastal-related uses, as follows: • Establish definitions for coastal-dependent and coastal-related uses consistent with the California Coastal Act. For each, identify a list of priority uses that meets the definition. • Contract the C-2 (Downtown Commercial) zone district to match the Recreational Commercial land use designation. • Modify the permitted use tables to allow specific coastal-dependent commercial uses in the C-1, C-2, and SPA 11 zone districts. • Modify the permitted use tables to allow coastal-dependent and coastal-related industrial uses in the M-1 zone district.
LAND USE-9. Modify the Zoning Code/Local Implementation Plan to require any proposal for visitor-serving accommodations providing a majority of units at mid-range or high-cost levels to include public amenities such as plazas and spaces, restaurants, retail units, garden viewing areas, or other day-use features that may be used by the general public at no or relatively low cost. The quality and quantity of required amenities will be determined in the Coastal Development Permit review process. This requirement does not prohibit the proposed project from charging a user fee or resort fee for active amenities such as pool and spa access, recreation activities and equipment, or organized group activities on the property.
LAND USE-10. Establish a visitor-serving accommodations fee program for new high-cost overnight accommodations. Fee revenues may provide funding to support specific projects that preserve (first priority) or establish (second priority) low- or mid-cost overnight visitor accommodations that improve access to the coast by providing visitors with an affordable place to stay overnight. Collaborating with the Coastal Commission, the City shall prepare and maintain a list of specific projects that fee revenues may be used to support.

LAND USE-11. Require new visitor-serving accommodations within the Coastal Zone to maintain or improve public access to the coast by establishing and applying the following development review requirements in the Zoning Code/Local Implementation Plan: • Where a new hotel or motel development project would consist entirely of high-cost overnight accommodations, the development shall be required to provide mitigation as a condition of approval of a Coastal Development Permit. Such mitigation may include, but is not limited to, a mitigation payment consistent with the City's visitor-serving accommodations fee program. • If a hotel or motel project proposes a certain number or percentage of on-site low or mid-range cost units, such units shall remain available as low or mid-range cost units for the life of the project.
LAND USE-12. Protect existing visitor-serving accommodations within the Coastal Zone by establishing and applying the following development review requirements in the Zoning Code/Local Implementation Plan: • Any development project that directly displaces existing low and mid-range cost accommodations in the Coastal Zone shall provide an equivalent number of rooms or accommodations at an equivalent nightly rate in the Coastal Zone, or elsewhere within the City of Hermosa Beach. • Replacement units must be subject to deed restrictions recorded against the title of the property so that they mitigate the displacement of lower- and mid-range cost accommodations for the life of the project.
MOBILITY-14. Facilitate the operation of bicycle rental concessions in the Coastal Zone.
MOBILITY-15. Install additional bicycle parking facilities and wayfinding signage near the beach, the Pier, and The Strand.
PARKS-11. Protect public views of the Pacific Ocean by establishing and applying the following development review requirements: • Locate new and relocated utilities underground when possible. Place and screen all other utilities to minimize public visibility. • Replace automobile-scale streetlights with shorter, pedestrian-scale streetlights where safe and appropriate. • Fences, walls, and landscaping shall not block views of scenic areas from designated viewpoints, scenic roads, parks, beaches, and other public viewing areas.
PARKS-12. Protect visual and aesthetic resources through design review and by establishing and applying the following development review requirements: • New development in areas visible from prominent public viewpoints shall incorporate colors and exterior materials that are compatible with the surrounding landscape. • Public works projects adjacent to prominent public viewpoints that include hardscape elements such as retaining walls, cut-off walls, abutments, bridges, and culverts shall incorporate veneers, texturing, and colors that blend with the surrounding earth materials or landscape. • Landscaping material shall be used to screen uses that detract from the scenic quality of the coast from prominent public viewpoints.
PARKS-15. Modify the Zoning Code/Local Implementation Plan to prohibit use of the public beach for private commercial purposes without a Coastal Development Permit.
PARKS-18. Protect public access to the coast by establishing and applying the following development review requirements: • Require a direct dedication of an easement for access in all new development projects that cause or contribute to adverse public access impacts. Access ways shall be a sufficient size to accommodate two-way pedestrian passage and landscape buffer. • Implement building design and siting regulations to protect public access through setbacks and other property development regulations that control building placement. • New development and redevelopment projects shall protect public accessibility to walk streets and street ends that provide access to the shoreline, the beach, and The Strand. • New or improved beach access facilities shall accommodate persons with physical disabilities.

PARKS-20. Amend the Municipal Code to update administrative procedures for special events occurring in the Coastal Zone. New administrative procedures include, but are not limited to, the following: • The City will continue to utilize the Parks, Recreation, and Community Resources Advisory Commission for event oversight. • The Recreation and Community Resources Department will continue to administer the special event process, and in coordination with the Community Development Department, will determine whether a proposed special event requires a Coastal Development Permit. • If required, a Coastal Development Permit application will be processed by the Community Resources Department. The Parks, Recreation, and Community Advisory Commission will consider the application and make a recommendation of the Coastal Development Permit to the City Council. • The City Council will consider Coastal Development Permit applications following review by the Parks, Recreation, and Community Resources Advisory Commission and may grant the permit following a public hearing. City Council actions related to Coastal Development Permits may be appealed to the Coastal Commission.
PARKS-21. Amend the Local Implementation Plan/Zoning Code requirements to implement the following provisions for special events: • Coastal Development Permits are not required for events that: – are within the adopted days used by event standard, – require fewer than 10 reserved parking spaces in the Coastal Zone on any setup or event day, and – require payment of an admission fee for no more than 25% of scheduled event activities. • Special Events not requiring a Coastal Development Permit are subject to prescriptive traffic, parking, resource, access, and cleanup mitigation strategies identified in the Local Implementation Plan/Zoning Code. The City will list each event and identify the number of event days used and dedicated parking spaces required on the annual Master Events Calendar. • A Coastal Development Permit is required for events that: – exceed the adopted Days Used by Event (DUE) standard, – require 10 or more reserved parking spaces in the Coastal Zone on any setup or event day, or – require payment of an admission fee for 25% or more of scheduled event activities. • Such events requiring a Coastal Development Permit shall incorporate event-specific mitigation strategies to be specified in the Coastal Development Permit. The Coastal Development Permit may be recommended by the Parks, Recreation, and Community Advisory Commission to the City Council for approval and may be appealed to the Coastal Commission.
PARKS-22. Amend the Local Implementation Plan/Zoning Code to require applicants for summer events occurring on weekends or holidays between Memorial Day and Labor Day with greater than 1,000 participants to provide and advertise predetermined shuttle services and bicycle corrals.
SAFETY-12. Amend the Municipal Code to establish a definition of "economic lifespan" for structural development as between 75 to 100 years, unless otherwise specified, and provide restrictions for specific development proposals.
SAFETY-13. Amend the Municipal Code to require flood risk disclosure and active acknowledgment of expanded flood risk when properties subject to inundation or flooding are developed or redeveloped.

3.0.5 PROJECT APPROVALS

Project approval requires the following actions by the Hermosa Beach City Council:

- Certification of this EIR
- Adoption of a Mitigation Monitoring and Reporting Program

The EIR will be used in the consideration of subsequent actions, including:

- Certification of the City's Coastal Local Implementation Plan
- Zoning amendments
- Subdivision maps
- Community plans
- Specific plans
- Special planning districts
- Special permits
- Historic preservation actions
- Planning actions
- Infrastructure and public facilities siting and project approvals
- Climate Action Plan
- Other related actions

3.0.6 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

LEAD AGENCY

In conformance with CEQA Guidelines Sections 15050 and 15367, the City of Hermosa Beach is the lead agency for preparation of the PLAN Hermosa environmental analysis. The City, as the lead agency, is responsible for scoping the analysis, preparing the EIR, and responding to comments received on the Draft EIR.

RESPONSIBLE AGENCIES

Responsible agencies are other state and local public agencies that have authority to carry out or approve a project or that are required to approve a portion of the project for which a lead agency is preparing or has prepared an EIR or initial study/negative declaration. Because the proposed project is a General Plan, no agencies other than the City of Hermosa Beach have approval or permitting authority for the plan's adoption.

Implementation of PLAN Hermosa would involve many additional responsible agencies, depending on the specifics of the nature of subsequent projects. The following are some of the agencies that may be required to act as responsible agencies for subsequent projects:

- California Department of Transportation (Caltrans)
- California Coastal Commission
- California Air Resources Board
- California Department of Housing and Community Development
- California Office of Historic Preservation

- State Reclamation Board
- California Department of Fish and Wildlife
- State Lands Commission
- California Department of Parks and Recreation
- State Water Resources Control Board
- South Coast Air Quality Management District
- Local Agency Formation Commission (LAFCo) for the County of Los Angeles
- Los Angeles Regional Water Quality Control Board.

TRUSTEE AGENCIES

Trustee agencies under CEQA are public agencies with legal jurisdiction over natural resources that are held in trust for the people of California and that would be affected by a project, whether the agencies have authority to approve or implement the project. The California Coastal Commission is a trustee agency since it will approve the Local Coastal Program under its authority through the California Coastal Act. Subsequent development under PLAN Hermosa would not generally affect lands under the jurisdiction of a trustee agency; however, the trustee agencies with jurisdiction that could be affected by subsequent projects include the California Department of Fish and Wildlife, the State Lands Commission, and the California Department of Parks and Recreation.

3.0.7 REFERENCES

City of Hermosa Beach. 2014. *Existing Conditions Report* (also referred to as the Technical Background Report).

OPR (Governor's Office of Planning and Research). 2003. *General Plan Guidelines.*

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4.0 Introduction to the Analysis

4.0.1 BASELINE EXISTING CONDITIONS ASSUMED IN THE ANALYSIS

Each resource section in this Draft Program Environmental Impact Report (Draft EIR) (see Sections 4.1 through 4.14) summarizes the environmental setting specific to that resource topic. The environmental setting summary is based on information from the Technical Background Reports included in **Appendix C**.

SCOPE

Sections 4.1 through 4.14 present the environmental impact analysis for the anticipated effects of implementation of PLAN Hermosa. Topics evaluated in these resource sections are described in Chapter 2.0, Introduction, and were identified in the Notice of Preparation (NOP) (**Appendix B**).

4.0.2 DOCUMENT STRUCTURE

Each resource section presents an evaluation of a particular environmental topic and includes a summary of existing conditions (both physical and regulatory), potential environmental impacts, mitigation measures proposed to reduce significant environmental impacts (where necessary), and a determination of the level of significance after mitigation measures are implemented.

ENVIRONMENTAL SETTING

This subsection provides summary information about the existing physical environment related to the resource topic. In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15125, the discussion of the physical environment describes existing conditions in the planning area at the time the NOP was filed in August 2015. The basis for the Environmental Setting is information provided in the Technical Background Reports (**Appendix C**).

REGULATORY SETTING

This subsection summarizes federal, state, regional, and local plans, policies, laws, and regulations that apply to the resource. A full description of the Regulatory Setting for each resource section is included in the Technical Background Reports (**Appendix C**).

THRESHOLDS OF SIGNIFICANCE

The thresholds of significance that will serve as the basis for judging impact significance are identified in each resource section. Thresholds of significance used for the evaluation of impacts include those thresholds currently used by the City when reviewing individual projects. The City of Hermosa Beach considers these thresholds appropriate for evaluating the significance of impacts in the city that could occur with implementation of PLAN Hermosa.

IMPACTS

The impacts discussion describes potential consequences to each resource that would result from implementation of PLAN Hermosa associated with development potential and implementation of its policy provisions as compared to existing conditions. PLAN Hermosa does not entitle any development project or require that the City meet the buildout projections identified in **Tables 3.0-3** and **3.0-4**. Subsequent implementation and projects under PLAN Hermosa would be evaluated for consistency with the plan and in light of the environmental analysis provided in this EIR. The reader is referred to Chapter 2.0, Introduction, regarding the programmatic analysis provided in this EIR and its use for evaluation of subsequent projects. Potential environmental impacts have been classified in the following categories:

- The term "**no impact**" is used when the environmental resource being discussed would not or may not be adversely affected by implementation of PLAN Hermosa. This impact level does not require mitigation.
- A **less than significant impact** would or may cause a minor but acceptable adverse change in the physical environment. This impact level does not require mitigation, even if feasible, under CEQA.
- A **significant impact** would or may have a substantial adverse effect on the physical environment, but could be reduced to a less than significant level with mitigation. Impacts may also be considered **potentially significant** if the analysis cannot definitively conclude that an impact would occur with implementation of PLAN Hermosa. Under CEQA, mitigation measures must be provided, where feasible, to reduce the magnitude of significant or potentially significant impacts.
- A **significant and unavoidable impact** would or may cause a substantial adverse effect on the environment, and no known feasible mitigation measures are available to reduce the impact to a less than significant level, or implementation of feasible mitigation measures would not reduce impacts to a less than significant level. Under CEQA, a project with significant and unavoidable impacts could proceed, but the City, as the lead agency, would be required to prepare a statement of overriding considerations in accordance with CEQA Guidelines Section 15093, explaining why the City would proceed with the project despite potential for significant impacts.

MITIGATION MEASURES AND RESIDUAL IMPACTS

If impacts are considered significant and it is determined that implementation of PLAN Hermosa policies would not reduce impacts to a less than significant level, mitigation measures are proposed to reduce or avoid these impacts. This section also describes an impact's level of significance following mitigation. Impacts are then defined as either significant but mitigable or as significant and unavoidable. Significant but mitigable impacts could be reduced to a less than significant level with mitigation. Significant and unavoidable impacts would remain significant either because feasible mitigation to reduce impacts is unavailable or because proposed mitigation measures would not reduce impacts to a less than significant level.

4.0.3 FORMAT OF IMPACTS AND MITIGATION MEASURES

Throughout the discussion, impacts are identified numerically and sequentially. For example, impacts discussed in Section 4.1 are identified as 4.1-1, 4.1-2, and so on. Mitigation measures, where needed, are identified numerically to correspond to the number of the impact being reduced by the measure. For example, mitigation measure MM 4.1-1 would mitigate Impact 4.1-1. The format used to present the evaluation of impacts and mitigation measures is as follows:

IMPACT 4.0-1 ***Impact Title.*** *An impact summary heading appears before the impact discussion. The heading contains the impact number and title. The impact statement briefly summarizes the findings of the impact discussion below. The level of significance is included at the end of the summary heading. Levels of significance listed in this EIR (as described above) are* ***no impact****,* ***less than significant****,* ***potentially significant****, or* ***significant****.*

The impact discussion is contained in the paragraphs following the impact statement. The analysis compares implementation of PLAN Hermosa to existing conditions by:

- identifying federal, state, regional, and local regulations that would reduce or mitigate the impact;

- identifying PLAN Hermosa policies and implementation programs that would reduce or mitigate the impact; and
- describing the potential impact with implementation of applicable regulations and PLAN Hermosa policies and implementation programs.

MITIGATION MEASURES

After the impact discussion, if necessary, feasible mitigation measures are identified that would reduce the impact. If no mitigation is necessary or feasible, this conclusion is stated.

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4.1 Aesthetics and Visual Resources

4.1.1 INTRODUCTION

This section evaluates the potential environmental impacts related to aesthetics from implementation of PLAN Hermosa. As described in Chapter 2.0, Introduction, the California Environmental Quality Act (CEQA) evaluates physical environmental impacts. As such, the analysis in this EIR focuses on the visual resources and characteristics of the public visual environment, that is, visual features, viewpoints, corridors, and other significant elements of the visual landscape which are accessible from public areas such as streets, beaches, parks, and plazas. The analysis provides an overview of public visual resources in the city, considers their relative significance to the visual environment, and identifies potential causes of adverse impacts to those resources that might arise from implementation of PLAN Hermosa, as well as the effectiveness of PLAN Hermosa policies and implementation actions to avoid significant impacts. Where warranted, the EIR includes measures to mitigate potential impacts.

NOP Comments: No comments were received in response to the Notice of Preparation (NOP) addressing aesthetic resource concerns. Comments included written letters and oral comments provided at the NOP scoping meeting.

4.1.2 ENVIRONMENTAL SETTING

Visual character is the overall impression of a landscape created by its unique combination of visual features such as landform, vegetation, water, and structures. Scenic quality is a measure of degree to which these elements blend to create a landscape that is visually pleasing to a viewer. As such, viewer sensitivity informs the degree to which changes in visual quality may be considered significant.

Generally, the key factors in determining the potential impacts on visual character and quality are based on overall visual change/contrast, dominance, and view blockage. An adverse visual impact may occur when a project (1) perceptibly and substantially changes the existing physical features of the landscape that are characteristic of the region or locale; (2) introduces new features to the physical landscape that are perceptibly uncharacteristic of the region or locale or that become visually dominant from common viewpoints; or (3) blocks or completely obscures scenic resources in the landscape. The degree of impact depends on how noticeable the adverse change might be to sensitive viewer groups.

VISUAL CHARACTER OF THE REGION

Hermosa Beach's visual character and visual resources reflect the community's regional setting. The city is located along the southern end of Santa Monica Bay. As such, it occupies a visible edge between the extensive urban landscape of the South Bay subregion and the entire Los Angeles Basin, and its boundary with the Pacific Ocean. This edge defines the dominant visual character of Hermosa Beach's environment.

The city's position in the South Bay provides panoramic views of regionally significant visual features: Santa Monica Bay itself (the ocean and the bay's coastline), the Palos Verdes Peninsula to the south, and the more distant Santa Monica Mountains across the bay to the north. From the more inland and higher elevations of the city (in the Hermosa Hills and Eastside neighborhoods east of Pacific Coast Highway), the Los Angeles Basin and San Gabriel Mountains are visible. These easterly views, although less predominant than those along the coast, have regional significance and are among the valued visual resources in the community. Public views to these vistas, including viewpoints and view corridors, are significant visual resources and are discussed in greater detail below. In addition to these vistas, there is the edge itself, Hermosa's beach, which gives the city uninterrupted open space and visual expansiveness

along its entire western boundary. The beach, with its unobstructed vistas, is the destination of and visual reward for Hermosa Beach visitors.

VISUAL CHARACTER OF THE CITY

Urban land uses that currently contribute to the visual character of the city's built environment are primarily residential uses, which are distributed throughout the city, and commercial uses that are mostly located along Pacific Coast Highway, Aviation Boulevard, and Pier Avenue. Architecture styles of development in the city vary and most buildings are low in stature, reflecting height restrictions that limit building heights to 25 to 35 feet, depending on zoning and location. The city's prominent open space areas include the beach, Hermosa Valley Greenbelt, and park and school sites such as South Park, Clark Stadium, Hermosa View School, Valley View School, and Valley Park. There are 19 parks in the city, including many small parkettes.

The prevailing low-profile beach atmosphere and the availability of walking streets and small-scale east–west streets along the oceanfront provide a visual transparency experienced from major public thoroughfares such as Hermosa Avenue, Manhattan Avenue, and Monterey Boulevard. Visual transparency refers to the degree to which people can see or perceive what lies beyond the edge of a street or public space. More specifically it refers to the degree to which people can see or perceive human activity beyond the edge of a street or other public spaces (Ewing 2013). This visual permeability in the community's local urban landscape softens the urban/ocean edge and contributes to the beach town character of the community.

While Hermosa Beach is well known for its sweeping views of natural resources, the area also includes numerous structures and buildings that are considered scenic resources. Some of the city's historic landmark structures are regionally distinctive, such as the Bijou Theatre, the Bank of America Building, and the Community Center. Historic resources in Hermosa Beach are discussed in greater detail in Section 4.4 Cultural Resources, of this EIR. Aside from individual structures, scenic resources may also include a collection of buildings that are architecturally distinctive or potentially historic, well-manicured streetscapes such as Pier Avenue, and commercial corridors or districts. The areas identified as playing a key role in defining the city's visual character are described below.

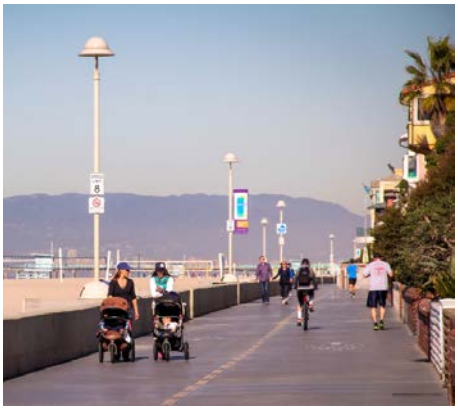
Downtown District

The Downtown District is located in an area along Pier Avenue from Valley Drive to The Strand and on Hermosa Avenue. The district is predominantly characterized by commercial and visitor-serving uses, with a small amount of residential development. Street-oriented storefronts, trees and landscaped spaces, varying architectural styles, and streetscape improvements contribute to the visual character of this area. In general, buildings are one to two stories tall and are located along the sidewalk with stepbacks on the upper levels. The predominant architectural style is that of a California beach town, with no officially designated styles. Most buildings are painted in light colors to reflect the sun. The district's landscaping comprises palm trees and low native scrubs in street medians. Ornate streetlights in an old-fashioned style line the major corridors, while on-street parking (both parallel and angled) lines several streets, including Pier Avenue.

Landscaping, outdoor eating spaces, and streetscape features add to the pedestrian-oriented character of Pier Plaza in the Downtown District.

The Strand

This oceanfront boardwalk traverses the length of the city from Herondo Street to 35th Street. Sandy beaches and the shoreline dominate the scenic views to the west of the boardwalk, while the area east of The Strand is characterized by one-, two-, and three-story residences as well as the Downtown District. These residences are designed and oriented to take advantage of the sweeping ocean views. There is minimal landscaping along The Strand, and no predominant architectural style or color. Most notable views are of the Pacific Ocean, the Palos Verdes Peninsula, and the Santa Monica Mountains.



North-facing view from The Strand.

Hermosa Valley Greenbelt

The original Santa Fe Railway right-of-way was converted to a recreational use trail in the 1980s (Hermosa Beach Historical Society 2009). Today, this trail is known as the Hermosa Valley Greenbelt. It is one of the community's most highly used public spaces, second only to the beach. The landscaped trail extends the length of the city between Ardmore Avenue and Valley Drive.

Lush landscaping and the jogging trail are the primary visual characteristics of the Hermosa Valley Greenbelt.

Pacific Coast Highway (PCH)

Pacific Coast Highway traverses the city in a north–south direction and is located east (inland) of the Pacific Ocean and the Downtown District. In Hermosa Beach, PCH offers views of the Palos Verdes Peninsula but does not provide any views of the Pacific Ocean except via small view corridors at intersections. The highway is a major arterial with two to three lanes of traffic in each direction, serving mainly as a transportation corridor for through traffic. Land use along Pacific Coast Highway includes both commercial and residential, as well as some public facilities. Most buildings are one to three stories tall. The overall visual aspect of PCH along this stretch is of an urbanized and highly trafficked corridor.

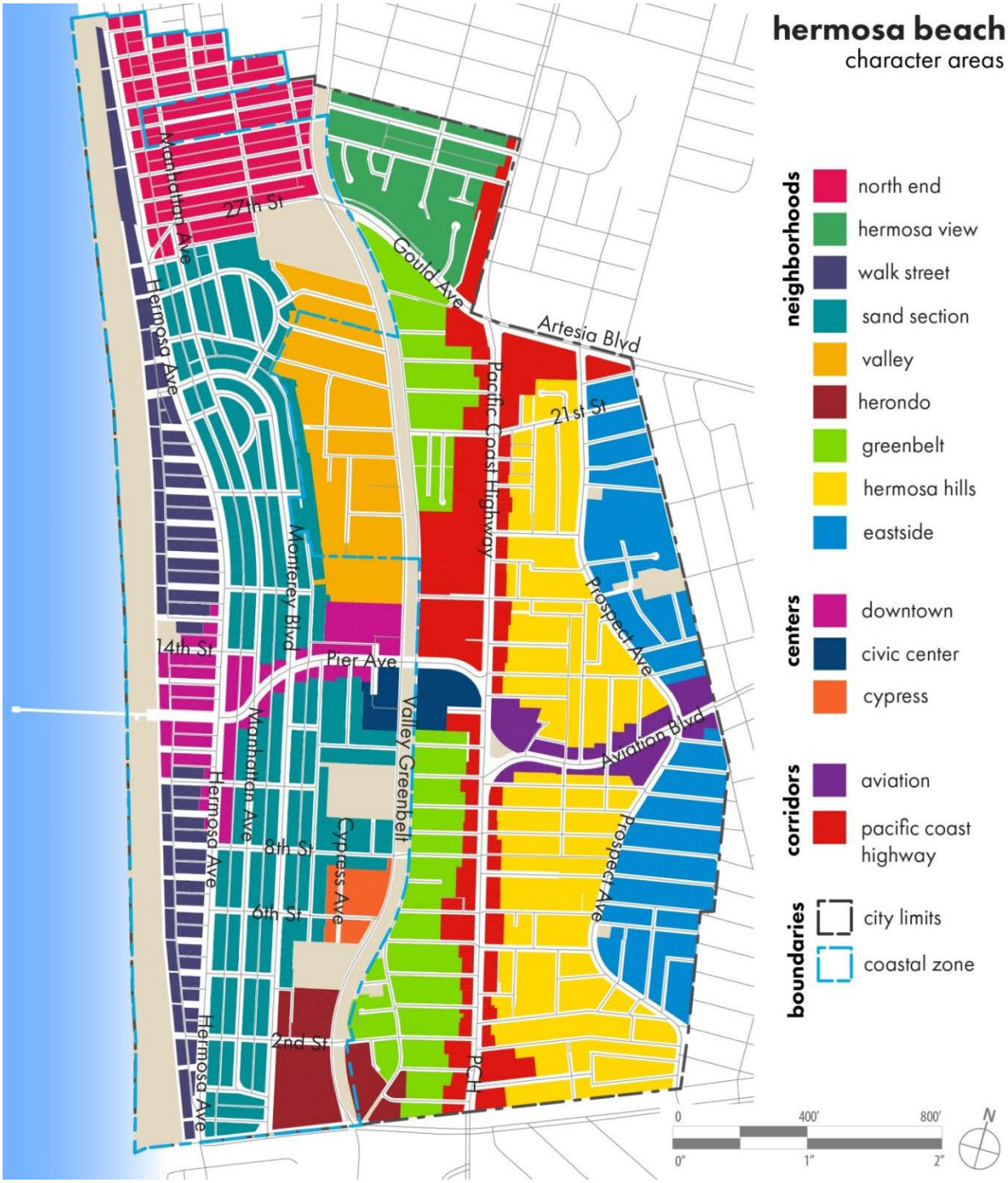
Residential and Commercial Areas

Hermosa Beach consists of many distinct neighborhoods and commercial areas. PLAN Hermosa identifies nine residential neighborhoods with more or less distinct characteristics and five commercial corridors or districts (see **Figure 4.1-1, Character Areas**). The predominant land use in Hermosa Beach is residential, which accounts for approximately 67 percent of the city's total land area. The residential areas have no predominant architectural style, as many homes have been rebuilt over time. Most homes have small front yards, if any, and landscaping varies from grassy lawns to drought-tolerant xeriscapes. The architectural diversity of Hermosa Beach's distinct neighborhoods contributes to the visual character of the community, which can be summarized as low-key, predominantly residential and diverse.

The city's public spaces—its streets and streetscapes, parks, plazas, and public buildings—create much of its urban form. Aside from parks and the beach, streets and sidewalks make up a large portion of the public realm in Hermosa Beach. In character and appearance, the streetscape defines the experience for street users such as pedestrians, bicyclists, and motorists. Streetscape amenities on Pier Avenue and the pedestrian mall of lower Pier Avenue are prominent features,

along with other visually iconic structures and monuments such as the Hermosa Pier and the Bijou Theatre that also contribute to the city's visual character.

FIGURE 4.1-1
CHARACTER AREAS



SCENIC VISTAS/VIEW CORRIDORS

A scenic vista is a high quality view from which the public can experience one or more significant visual features, a landscape, or an aesthetically pleasing viewshed. Scenic vistas are often available from elevated vantage points that offer panoramic or expansive views. Hermosa Beach does not have officially designated scenic vistas. Nonetheless, prominent public viewpoints and view corridors in the city provide long-range views of important scenic features: Santa Monica Bay, the Palos Verdes Peninsula and the Santa Monica Mountains, and the Los Angeles Basin and the San Gabriel Mountains.

Pacific Ocean

Public views of the Pacific Ocean from within the city can be described according to three general categories: (1) uninterrupted panoramic views; (2) major vistas or viewpoints; and (3) intermittent views. Uninterrupted public views of the ocean are available along the entire length of The Strand, from the beach, and from Hermosa Pier. These view locations are significant because of the high quality of the views (they are panoramic and include all of the major visually significant coastal features—Santa Monica Bay, the Palos Verdes Peninsula, and the Santa Monica Mountains) and they are also locations of high public use. Major vistas of the ocean are also available from several public streets where the topography and surrounding structures do not obstruct the line of sight. In some cases, these viewpoints are located at relatively high elevations in the eastern half of the city; for example, the intersection of Prospect Avenue and 6th Street.

Public views of the Pacific Ocean from north–south-trending streets in the city are generally more limited because existing development along the street frontage obstructs views. However, the ocean is visible at key points along major corridors including Pacific Coast Highway at Longfellow Avenue and along Aviation Boulevard at key intersections. From within the coastal half of the city, major public views of the ocean exist along Pier Avenue and on several east–west-trending streets such as 8th, 14th, 22nd, and 27th streets.

For a typical viewer who is 5 to 6 feet in height, standing within 50 feet of a building that is 20 to 35 feet in height, the panoramic views that would qualify as scenic vistas or prominent viewpoints could be obstructed by the existing buildings. Nevertheless, as mentioned previously, the abundant small east–west streets, particularly between The Strand and Loma Drive/Morningside Drive, along most of the coastal length of the city offer a series of intermittent views to the ocean as one travels parallel to the coast on north–south-trending streets (Hermosa Avenue, Manhattan Avenue, and Monterey Boulevard). These east–west streets cumulatively provide visual transparency from the public streets to the ocean, an effect that contributes to the visual character of Hermosa Beach.

Palos Verdes Peninsula and Santa Monica Mountains

Public views of the Palos Verdes Peninsula and the Santa Monica Mountains are unobstructed from The Strand, the beach, and the pier. Views of the Santa Monica Mountains are available from the extreme northwest corner of the city within the public right-of-way in the vicinity of Hermosa Avenue and 35th Street. Views of the Palos Verdes Peninsula are available along Pacific Coast Highway (framed by urban development on both sides of the corridor), on Aviation Boulevard, and from Prospect Avenue near 6th Street. Other locations offer intermittent views of the Peninsula (for example, from several points along Pier Avenue), but the most significant of these might be the view from Cypress Avenue because of the unique character and mix of activities and land use at this lower elevation in the city. Views of both the Peninsula and the Santa Monica Mountains serve as backgrounds from many minor viewpoints in the city. Most of these views are fragmented by existing urban development.

Los Angeles Basin and San Gabriel Mountains

Public views of the Los Angeles Basin and the San Gabriel Mountains generally are from higher elevations in the eastern part of the city along east–west-trending streets. The best views are from Aviation Boulevard, the southern end of Prospect Avenue looking east, and 5th Street looking northeast (though framed by existing development along the roadway). The Los Angeles Basin and the San Gabriel Mountains serve as backgrounds for the city. Most views of these features are fragmented by existing urban development.

PROMINENT PUBLIC VIEWS

Figure 4.1-2, Prominent Public Viewpoints, identifies significant public viewpoints from which these features can be viewed. The viewpoints identified in **Figure 4.1-2** are considered prominent based on four key criteria established by the City.

1) The view includes one or more of the five regionally significant features identified above.
2) The view is readily accessible to the public.
3) The view is panoramic, expansive, or a relatively unobstructed, high quality view.
4) The view contributes importantly to the visual environment of Hermosa Beach.

These criteria, and the viewpoints identified in **Figure 4.1-2,** are considered in the impact assessment in this section.

FIGURE 4.1-2
PROMINENT PUBLIC VIEWPOINTS

SHADE OR SHADOW

Prolonged periods of shade and shadow during the middle of the day can adversely affect parks and other public gathering areas. Shade and shadow effects are limited in Hermosa Beach because of building height limits enforced by the City. Since most buildings in the planning area are less than 35 feet tall, the most common sources of prolonged shadows are natural topographic features and on a smaller scale, trees. Examples include shadows from the ridgeline along Loma Drive in the Valley Drive or Greenbelt areas or from landscape features and trees.

LIGHT AND GLARE

Artificial lighting can negatively affect the visual character of land uses, especially at night. Light pollution from urban sources can also adversely affect views of the night sky. Although the night sky above the Los Angeles Basin is already impacted by the region's expansive urban development, a few relatively unpolluted locales still exist. The western portion of the Santa Monica Mountains is a known dark sky viewing location that can be said to have regional significance because of its accessibility to the Los Angeles Basin and the relative rarity of dark sky viewing locations in the region. Significant sources of light pollution in the greater Los Angeles Basin that impact the night sky have the potential to contribute to the cumulative degradation of night sky viewing.

Hermosa Beach contains various sources of light and glare that are typical of urban communities, such as streetlights along roadways and lights in parking lots, illuminated signs, lighted recreation facilities, landscape lighting, and light emitted from the interiors of residential and nonresidential buildings. Noncommercial sources of night lighting in Hermosa Beach include lighted sports fields, notably Clark Field, which is lit most evenings of the year.

The greatest source of daytime glare in Hermosa Beach is specular reflection from the Pacific Ocean. This is a natural source, of course, and a dominant element of the Southern California coastal environment. On clear days, sunlight and its attendant glare saturates the sky unobstructed by intervening buildings or structures above 35 feet in height. This natural condition reflects the city's position on the urban edge with the Pacific Ocean. If adverse sources of daytime glare exist, they are localized and small-scale, and most likely result from singular instances of highly reflective surfaces (e.g., windows and parked vehicles) present in the man-made environment. Because most buildings in the city are at or below 35 feet in height, glare effects from structures are limited to the immediate vicinity of the individual buildings.

SENSITIVE VIEWER GROUPS

Potentially impacted viewers can be categorized into groups of shared sensitivity to changes in the existing scenic quality of a landscape. Viewer sensitivity (or public concern) for the scenic quality of a landscape or particular view is informed by the activity a user is engaged in at the time something is visible. For example, commuting in heavy traffic can distract many viewers from aspects of the visual environment, while activities such as pleasure driving can encourage viewers to look at view components more closely and for a longer period of time.

Viewer sensitivity considerations include the number of viewers, duration of exposure, and degree of public interest in a particular view. In the city, highly sensitive viewers are generally assumed to include residents, tourists, and recreationists traveling through Hermosa Beach. Less sensitive viewer groups are assumed to include commuters and viewers from commercial or industrial-type land uses.

Residents are considered to be the most sensitive viewer groups because of the duration of exposure and their degree of interest in the view. Their exposure is considered long term and their interests in the view are considered to relate to both the visual quality and the character of the area. Tourists also have high sensitivity, in that they generally visit the city to observe the views as well as to enjoy the city's recreational opportunities.

Commuters and viewers from commercial or industrial-type land uses are considered less sensitive viewer groups because of the short duration of the view and their trip purposes. Such users usually pay less attention to visual quality and character and are exposed for short times to vistas and other visual characteristics.

4.1.3 REGULATORY SETTING

Several relevant state and local laws, regulations, and policies relate to visual resources. They provide the regulatory framework for addressing visual impacts. The regulatory framework for aesthetics is fully discussed in detail in **Appendix C-2**. Key regulations applicable either directly or indirectly to visual resources are presented below.

FEDERAL

No federal plans, policies, regulations, or laws related to visual resources apply to the planning area.

STATE

- **Caltrans Scenic Highway Program:** The California Department of Transportation (Caltrans) Scenic Highway Program protects and enhances the natural scenic beauty of the state's highways and corridors through special conservation treatment. There are no officially designated scenic highways within the city boundaries (Caltrans 2011).
- **California Coastal Act of 1976:** The California Coastal Act of 1976 and the California Coastal Commission, the state's landmark coastal protection law and planning agency, consider scenic and visual qualities of coastal areas as a protected resource of public importance:

  > *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.* (California Coastal Act Section 30251).

See Section 4.9, Land Use and Planning, of this EIR for a discussion of PLAN Hermosa and consistency with the California Coastal Act.

REGIONAL AND LOCAL

- **City of Hermosa Beach 1981 Local Coastal Program:** The Hermosa Beach Coastal Land Use Plan (CLUP) component addresses aesthetic considerations of design and development in the Coastal Zone. CLUP goals and objectives associated with coastal recreational access and development and design include preserving and enhancing

coastal overviews and key view point areas. Visual policies and programs in the Coastal Development and Design portion of the CLUP include the following:

- Height restrictions for residential and commercial uses (which are now contained in the City's Zoning Ordinance) to protect overview and viewshed qualities.
- Condominium project design consistent with the city's character.
- Implementation of a design review process.
- Establishment of a Downtown Plan.
- Landscaping provisions for The Strand.

The Local Implementation Plan has not yet been certified; therefore, the Coastal Commission retains authority to review and issue coastal development permits for development in the Coastal Zone. PLAN Hermosa is intended to result in an adopted and certified LCP.

- **City of Hermosa 1979 General Plan:** The current General Plan includes the following policies and programs (summarized) that address visual resources:
  - Conservation Element Policy 6 – No additional structures should be placed on the beach (with the exception of restrooms).
  - Urban Design Element Policy 1 – Maintain the present scale of the city.
    - Program 2 – Development of visual design standards.
    - Program 3 – Eliminate garish or degrading signs.
    - Program 4 – Restore and maintain residential uses in older sections of city.
- **City of Hermosa Beach Zoning Ordinance:** The City's Zoning Ordinance (Hermosa Beach Municipal Code Title 17) addresses aesthetic considerations of development. While the Zoning Ordinance sets development standards for parking, building heights (maximum 35 feet), setbacks, density, lot coverage, open space requirements, and signs which collectively contribute to the visual character of the community, the Municipal Code does not include an explicit viewshed protection ordinance related to the protection of private views. In addition, the Zoning Ordinance includes the following requirements:
  - Requirements that condominium project design be in harmony and not a major disruption to established character of the neighborhood (Section 17.22.130).
  - Commercial lighting standards to avoid lighting impacts (Section 17.26.050).
  - Screening of outdoor storage and activities for commercial uses (Section 17.26.050).
  - Landscaping and setback buffer standards for commercial projects that adjoin residential areas (Section 17.28.030).
  - Discretionary review and approval of precise development plans for development (except for single family and renovations less than 1,500 square in size) (Chapter 17.58).

4.1.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For purposes of this EIR, impacts on visual resources are considered significant if adoption and implementation of PLAN Hermosa would:

1) Have a substantial adverse effect on a scenic vista.
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
3) Substantially degrade the existing visual character or quality of the city or its surroundings.
4) Create new shade or shadow in a manner that substantially affects outdoor recreation facilities or other public gathering areas.
5) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

ANALYSIS APPROACH

The discussion below addresses the potential for future changes to the public visual environment to be significant and adverse, based on the preceding assessment of prominent visual resources, current (baseline) conditions and the significance thresholds identified above. The impact assessment that follows addresses each of the five significant impact thresholds in turn and considers potential impacts of the plan in its entirety, including its proposed new policies as well as the current General Plan policies and zoning regulations that would be carried forward as part of PLAN Hermosa. The impact assessment also considers standard conditions of approval and current regulations of other agencies that would be enforced during the implementation of PLAN Hermosa and that would reduce or avoid visual impacts.

PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

The following PLAN Hermosa policies and implementation actions address visual resources either directly or indirectly.

Policies

Land Use + Design Element

- **1.1 Diverse and distributed land use pattern.** Strive to maintain the fundamental pattern of existing land uses, preserving residential neighborhoods, while providing opportunities for enhancement or transformation of corridors and districts in order to improve community activity and identity.
- **1.6 Scale and context.** Consider the compatibility of new development within its urban context to avoid abrupt changes in scale and massing.
- **1.8 Respond to unique characteristics.** Enhance the unique character and identity of the city's neighborhoods, districts, and corridors through land use and design decisions. Allow policies and programs to be focused on each unique character area of the city.
- **2.5 Neighborhood preservation.** Preserve and enhance the quality of residential neighborhoods by avoiding or abating the intrusion of disruptive, nonconforming buildings and uses.

- **2.7 Context-sensitive design.** Wherever feasible, orient residential buildings to address streets, public spaces, or shared private spaces and consider the physical characteristics of its site, surrounding land uses, and available public infrastructure.
- **2.8 Neighborhood transitions.** Encourage that new development provide appropriate transitions in scale, building type and density between different land use designations.
- **5.1 Scale and massing.** Consider the scale of new development within its urban context to avoid abrupt changes in scale and massing.
- **5.4 Locally appropriate materials**. Require architectural designs, building materials and landscape design to respect and relate to the local climate, topography, history, and building practices.
- **5.7 Design guidelines and development standards.** Seek to maintain and enhance neighborhood character through design guidelines and development standards that articulate building form, orientation, and scale, but allow for eclectic and diverse architectural styles.
- **10.6 Incentives for preservation.** Provide incentives for preservation of designated landmarks, potentially historic resources, and older buildings.

Parks + Open Space Element

- **5.1 Protection of views.** Identify and protect the public viewpoints, view corridors, and viewsheds from which scenic vistas can be observed.
- **5.2 Visual character.** Accommodate economic growth and new buildings in a way that preserves the visual character of the community.
- **5.3 Building sites and designs.** Require that massing, height, and orientation of new development be sited and designed to protect public coastal views to and along the ocean and scenic areas.
- **5.4 Landscape design.** Require new public and private landscape installations to consider public views of vistas and encourage landscape design that protects or enhances those views.
- **5.5 Pacific Coast Highway.** Protect Pacific Coast Highway as a potentially scenic highway and important view corridor.
- **5.6 Signage and infrastructure.** Ensure signage, infrastructure, and utilities do not block or detract from views of scenic vistas.
- **5.7 Light pollution.** Preserve skyward nighttime views and lessen glare by minimizing lighting levels along the shoreline.
- **5.8 Lifeguard structures and views.** Limit the number, size, and spacing of lifeguard structures to provide unobstructed views of the ocean from coastal access points while maintaining good safety practices.
- **7.4 Beach structures.** Restrict buildings and structures on the beach with regard to size and number consistent with current access, safety, and beach use.
- **7.6 Children's recreational equipment.** Limit children's recreational equipment to slides, swings, and climbing apparatus of a non-obstructive design. Locate near major or primary entrances to the beach, at least 100 feet from the Strand wall.

Infrastructure Element

- **1.7 Aesthetic and urban form.** Require infrastructure and infrastructure improvements that are aesthetically pleasing and consistent with the scenic character of the surrounding area.

Implementation Actions

Land Use + Design Element

- LAND USE-3. Develop building design guidelines to illustrate and articulate the appropriate building form, scale, and massing for each established character area. The Design Guidelines shall be tailored to:
  - Identify and safeguard the prominent visual characteristics of each character area in accordance with those key features and characteristics to ensure that the overall visual character of the neighborhoods, centers, and districts is preserved.
  - Include provisions that ensure avoidance of significant shadow impacts from new structures onto public recreational areas, parks or other public gathering places during the hours of 10 AM to 2 PM.

Parks + Open Space Element

- PARKS-10. Develop and apply design standards and evaluation procedures for development projects that have the potential to degrade regionally important views or interfere with prominent public viewpoints, as identified in PLAN Hermosa.
- PARKS-11. Protect public views of the Pacific Ocean by establishing and applying the following development review requirements:
  - Locate new and relocated utilities underground when possible. Place and screen all other utilities to minimize public visibility.
  - Replace automobile-scale streetlights with shorter, pedestrian-scale streetlights where safe and appropriate.
  - Fences, walls, and landscaping shall not block views of scenic areas from designated viewpoints, scenic roads, parks, beaches, and other public viewing areas.
- PARKS-12. Protect visual and aesthetic resources through design review and by establishing and applying the following development review requirements:
  - New development in areas visible from prominent public viewpoints shall incorporate colors and exterior materials that are compatible with the surrounding landscape.
  - Public works projects adjacent to prominent public viewpoints that include hardscape elements such as retaining walls, cut-off walls, abutments, bridges, and culverts shall incorporate veneers, texturing, and colors that blend with the surrounding earth materials or landscape.
  - Landscaping material shall be used to screen uses that detract from the scenic quality of the coast from prominent public viewpoints.
- PARKS-13. Minimize nighttime light pollution by establishing and applying the following development review requirements:
  - Exterior lighting (except traffic lights, navigational lights, and other similar safety lighting) shall be minimized, restricted to low intensity fixtures, shielded (full cutoff), and downcast (emitting no light above the horizontal plane of the fixture) concealed to the maximum feasible extent so that no light source is directly visible from public

viewing areas, there is no glare or spill beyond the property lines and the lamp bulb is not directly visible from within any residential unit.

- PARKS-14. Minimize the negative aesthetic impacts of signs by establishing or revising and applying the following design requirements:
  - Enforce appropriate limits on height, size, design, and materials of signs.
  - Prohibit signs other than traffic or public safety signs that would obstruct views to the ocean, beach, parks, or other scenic areas.
  - Enforce sign maintenance controls.
  - Continue restrictions on the use of lights and moving parts in signs, billboards, and rooftop signs.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.1-1 ***Would PLAN Hermosa Cause Adverse Effects on Scenic Vistas and Viewsheds?*** *Future actions under PLAN Hermosa have the potential to encroach on views from prominent public viewpoints. Future actions also have the potential to degrade the visual quality of scenic vistas, through the introduction of incongruous features to the viewshed. This impact would be* ***potentially significant*** *because development under PLAN Hermosa could adversely affect scenic vistas.*

As indicated in **Figure 4.1-1**, multiple public view corridors in the city provide views of the Pacific Ocean, the Palos Verdes Peninsula, the Santa Monica Mountains, and the Los Angeles Basin and the San Gabriel Mountains. While PLAN Hermosa does not specifically propose or entitle any development project or public project, it would provide for and apply to such projects subsequent to the adoption of the plan. Subsequent projects under PLAN Hermosa could result in the alteration of these view corridors by partially blocking the public view and/or introducing a new feature that dominates the view. Examples include building features such as awnings, facades, walls, and similar items.

PLAN Hermosa outlines the community's vision for proposed development in each of the city's distinctive zones and identifies policies and actions to reduce impacts to these public view corridors. For example, implementation actions PARKS-10, 11, and 12 require discretionary design review for new development based on specific criteria to be established in the Zoning Ordinance to protect scenic vistas. As such, utilities would be located underground when possible, and fences and walls would not block views from designated viewpoints, scenic roads, or other public viewing areas. Parks + Open Space Element Policy 5.1 states the intent to protect scenic vistas. Public vistas would also be protected through proposed implementation actions, as listed above.

In addition, the City's Zoning Ordinance includes height restrictions that prohibit buildings from exceeding 35 feet, require screening of commercial outdoor storage and activities from public views (Section 17.26.050), and require development projects to be reviewed through the City's precise development plan process (Chapter 17.58).

However, neither current City standards nor PLAN Hermosa policies or actions include specific provisions to protect public view corridors. Therefore adverse effects on scenic vistas and viewsheds would be **potentially significant** and mitigation measure **MM 4.1-1** would be required. Due to the built-out nature of Hermosa Beach, the limited reach of the views, and the small amount of new development, 50 feet is an appropriate distance for the protection of public views. This metric is based on similar project experience and conversations with the City about its goals for protecting scenic vistas.

Mitigation Measures

MM 4.1-1 Projects located within 50 feet and within the directional arrow of a prominent public viewpoint, or within the uninterrupted viewing areas, as identified in Figure 4.1-2, shall demonstrate that existing public views of scenic resources along the view corridors identified in Draft EIR Figure 4.1-2 are, at a minimum, maintained in their current condition and that no features are added in the viewshed that substantially obstruct or detract from the public views of the Pacific Ocean, the Palos Verdes Peninsula, the Santa Monica Mountains, and the Los Angeles Basin and the San Gabriel Mountains. This requirement shall be incorporated into the review process for precise development plans under Chapter 17.58 of the Zoning Ordinance.

Significance After Mitigation

Implementation of mitigation measure **MM 4.1-1** would ensure that existing view corridors which offer views of the Pacific Ocean, the Palos Verdes Peninsula, the Santa Monica Mountains, and the Los Angeles Basin and the San Gabriel Mountains are maintained. Therefore, this impact would be reduced to **less than significant**.

IMPACT 4.1-2 *Would PLAN Hermosa Have Adverse Effects on Scenic Resources within a State Scenic Highway? There are no designated state scenic highways in or near Hermosa Beach. However, PLAN Hermosa directs the City to protect Pacific Coast Highway as a potentially scenic highway and would guide development and reuse projects in a manner that is consistent with the existing visual character of Pacific Coast Highway so that it may be designated as a scenic highway at some point in the future. Therefore PLAN Hermosa would have a* ***less than significant*** *impact.*

Scenic resources can include man-made or natural features, viewpoints, or viewsheds. They can include visually significant features such as rocks, trees, and historic buildings, particularly if those features are within a state scenic highway. There are no designated state scenic highways in or near Hermosa Beach. However, proposed Parks + Open Space Element Policy 5.5 directs the City to protect Pacific Coast Highway as a locally designated scenic highway and important view corridor. This policy is the basis for future planning decisions that enhance the local stretch of PCH as a scenic resource. In its current state, Pacific Coast Highway's only significance as a scenic resource is its public views to the Pacific Ocean and the Palos Verdes Peninsula. As noted in the discussion above, significant public vistas from Pacific Coast Highway would be protected through proposed Policy 5.1 in combination with mitigation measure **MM 4.1-1**.

Potential impacts on other scenic vistas are also addressed in the discussion above. Impacts to other scenic resources (such as iconic structures and visual permeability to the ocean) are addressed in the discussion of Impact 4.1-3 below. Impacts to historic resources (which may contribute significantly to the visual character of the community) are addressed in Section 4.4, Cultural Resources, of the EIR. With impacts on scenic vistas addressed by Impact 4.1-1 and on cultural resources addressed in Section 4.4, PLAN Hermosa would have a **less than significant** impact on scenic resources within a state scenic highway.

Mitigation Measures

None required.

IMPACT 4.1-3 ***Would PLAN Hermosa Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not adversely alter the existing land use pattern or visual character of the city. This would be a* ***less than significant*** *impact.*

Hermosa Beach identifies itself as a small beach town, where visual character is defined by its coastal location, diverse residential neighborhoods, and public open spaces, including lower Pier Avenue, the beach, the pier, and The Strand. PLAN Hermosa outlines future visions for the city's distinctive areas, which include neighborhoods, districts, and corridors, as outlined in **Table 4.1-1 (City of Hermosa Beach Existing Visual Character and Future Vision).**

TABLE 4.1-1
CITY OF HERMOSA BEACH EXISTING VISUAL CHARACTER AND FUTURE VISION

Existing Visual Character	Future Vision
Neighborhoods	
North End Neighborhood	
The North End is a well-defined neighborhood with a range of low- and medium-density residential development with centralized neighborhood commercial goods and services.	The intent is to preserve building form and scale and maintain neighborhood connectivity and access to nearby commercial services. Buildings should orient toward the walk streets and preserve the street frontages from driveways and curb cuts to maintain the walkable qualities offered by this neighborhood's compact grid network and scale of building that is compatible with the surrounding neighborhood.
Hermosa View Neighborhood	
This neighborhood is perched high on a hill, with a dramatic rise in slope moving north from Gould Avenue, creating a separate, distinct single-family residential enclave.	The intent is to preserve building form, orientation, and scale and to retain the unique streetscape with wide parkways and uninterrupted sidewalks. The low-density residential development pattern of this neighborhood should be maintained through the retention of larger lot sizes, building orientation toward the street, and wider setbacks that provide room for parkways and sidewalks.
Walk Street Neighborhood	
The Walk Street neighborhood currently provides a range of beachside residential development and neighborhood commercial services within a linear street network. The walk streets that provide beach access from Hermosa Avenue out to The Strand are a feature unique to this beachfront residential area.	The intent is to maintain the high quality pedestrian connections through the walk streets and retain the form, scale, and orientation of buildings in this area by designing buildings that take advantage of the opportunities for outdoor living.
Sand Section Neighborhood	
Today, the Sand Section neighborhood accommodates a range of residential development types, with neighborhood commercial services. The abundance of small, pedestrian-friendly blocks gives this area its charm and intimate sense of community.	The intent is to enhance multimodal connectivity and access while preserving the building form, scale, and orientation in this neighborhood. Through new multimodal connections, convenient access to community parks and the Greenbelt is provided and helps to maintain the compact urban format and highly connected street network of this neighborhood.

Existing Visual Character	Future Vision
Valley Neighborhood	
The Valley neighborhood includes low-density, single-family homes between key community facilities. The average density for this area is roughly 10 dwelling units per acre, with parcel sizes ranging from 5,000 to 10,000 square feet. The Valley Greenbelt runs the length of this area, and Valley School and Valley Park are beneficial amenities to residents in this neighborhood.	The intent is to improve key pedestrian thoroughfares that enhance connectivity and access while preserving the single-family development pattern of this area. Buildings should retain larger setbacks and lower scale and massing, and new sidewalks should be added to contribute to a complete pedestrian network.
Herondo Neighborhood	
The Herondo neighborhood currently accommodates the city's higher-density and larger-format residential development. Multiple connections to nearby neighborhoods, community parks, and the Greenbelt are provided throughout the neighborhood.	The intent is to preserve the scale and building form of this neighborhood and maintain connections and access to nearby amenities. To ensure a diverse range of housing formats and building types, this area will be protected for larger-format apartment complexes and townhouses. Permeability through the large apartment blocks should continue to be improved, allowing residents to walk to the Greenbelt and the beach.
Greenbelt Neighborhood	
The Greenbelt neighborhood offers a range of small-scale residential development types and provides nearby access to commercial services along PCH. Single-family homes and duplexes currently coexist side by side.	The intent is to maintain the building scale and form of this neighborhood, while enhancing access to local neighborhood-serving commercial uses. Neighborhood commercial uses and amenities should be added to serve the needs of nearby residents.
Hermosa Hills Neighborhood	
The Hermosa Hills area transitions from high- and medium-density uses adjacent to PCH and lower-density single-family uses closer to Prospect Avenue. House forms are generally small in this area, with small to moderate front and side setbacks, and many streets are closed to through traffic next to PCH.	The intent is to improve key pedestrian thoroughfares to enhance connectivity and access while preserving the single-family development pattern of this area. Many streets in this neighborhood have been enhanced with new sidewalks to create a complete pedestrian network.
Eastside Neighborhood	
The Eastside neighborhood accommodates single-family residential development types and includes Hermosa View School and multiple neighborhood parks. In terms of street activity levels, this neighborhood is one of the quietest areas of the community.	The intent is to preserve building form, orientation, and scale and to retain the quiet nature and unique streetscape of this area. Many streets in this neighborhood have been enhanced with new sidewalks to create a complete pedestrian network.
Districts	
Downtown District	
The Downtown District is the heart of social and commercial activity in Hermosa Beach, serving as a centralized location for social gatherings and the recreational activities of residents and visitors. Pier Plaza serves as a popular venue for outdoor events and dining, connecting Downtown to the beach, the pier, and The Strand. The "pedestrian scramble" at the intersection of Hermosa Avenue and Pier Avenue is a unique pedestrian amenity that reinforces the pedestrian-oriented nature of Downtown.	The intent is to enhance the building form and orientation and to maintain the pedestrian realm along Pier Avenue while transforming the realm on Hermosa Avenue. The Downtown District will continue to offer an array of uses for residents and visitors, and any new buildings should pay close attention to and contribute to the high quality pedestrian environment provided throughout Downtown.

Existing Visual Character	Future Vision
Civic Center District	
At the physical center of town, the Civic Center area is the civic hub of services and activities for the community. The Civic Center provides efficient and accessible services to the community, but is in need of modernization, repairs, and additional space.	The intent is to transform the building orientation and design in the Civic Center, while enhancing the streetscape and circulation of all modes and users. The Civic Center facilities will be modernized to accommodate the range of functions and services provided by the City, and will be expanded to provide consolidated parking facilities in well-designed or underground parking structures to serve commercial uses both along Pacific Coast Highway and in Downtown. Streetscape enhancements will provide an important connection between the main thoroughfares of Pacific Coast Highway, Downtown, and the residential neighborhoods.
Cypress District	
The Cypress District currently includes a range of professional design, light manufacturing, and warehousing uses and is home to many of the locally renowned surfboard shapers. The City operations yard occupies a large portion of this area.	The intent is to transform both the building design and orientation as well as the public realm and streetscape within the Cypress District. This area is the creative, production, and light industrial center of Hermosa Beach where ideas, spaces, and creativity are easily shared. The Cypress District includes a variety of flexible use spaces, co-working offices, and creative or "maker" industries. The City Yard will be repurposed as an innovation center, with incubator space, job training programs, and related services to enhance the local economy.
Corridors	
Aviation Corridor	
The Aviation Boulevard Corridor serves as the primary entry point into Hermosa Beach. There are currently a variety of commercial retail, office, and auto-oriented uses along the corridor.	The intent is to transform the building design, form, and orientation while enhancing the streetscape and access for pedestrians and bicyclists in this area. The area will be transformed into a walkable, multi-use, active commercial corridor with services and facilities to serve the daily needs of residents east of PCH and providing artistic and cultural services to the entire community. Enhanced streetscapes with parkettes or outdoor space, paired with new commercial uses, should help to activate the street.
PCH Corridor	
The PCH corridor serves as the primary entry point into Hermosa Beach, as well as a pass-through corridor between Manhattan Beach and the Palos Verdes Peninsula. There should be a variety of commercial retail, office, residential, and auto-oriented uses along the corridor.	The intent is to enhance building design and form and to transform streetscapes and gateways to serve pedestrians and improve vehicular circulation. The PCH corridor will be a multi-use commercial corridor with key activity nodes and iconic architecture to activate the entryways. The corridor will connect the community with adjacent neighborhoods and cities. A regular rhythm of storefronts and streetscape enhancements should provide a welcoming atmosphere that is enticing to shoppers and pleasant to walk along. New gateway monuments and signage should be added to promote Hermosa Beach's identity.

Source: City of Hermosa Beach 2015

The potential for visual character to change significantly under PLAN Hermosa is largely a function of how changes to the built environment are regulated and shaped by future policies to protect the community's visual character. Protecting visual character does not prohibit changes to the visual environment. However, the changes that occur would not significantly degrade or eliminate key elements that contribute to visual character, and new elements introduced into the built environment are not incongruous to the point of degrading the local visual environment.

Visual Transparency

As described above in the Scenic Vistas/View Corridors subsection, visual access to the ocean is an important characteristic of much of Hermosa Beach, particularly in the portions of the city west of Loma Drive/Morningside Drive. This visual access is made available to the public through the visual transparency provided by many small and closely spaced east–west-trending streets offering views of the ocean. Current zoning in this portion of the city consists of R-1, R-2, R-2B, R-3, C-1, and C-2 designations. Within this range of residential and commercial zones, a minimum front yard setback of 5 feet is required (or 10 percent of the lot depth, in an R-1 zone).

PLAN Hermosa does not propose changing the current setback requirement in these districts. Residential building heights are limited to 25 to 30 feet, with commercial building heights limited to a maximum of 35 feet, provisions that would also remain unchanged under PLAN Hermosa. Many of the commercial height limits were established through voter initiatives and would require a citywide vote of the people to change the height limits. The continued regulation of land uses in accordance with these standards is a mechanism for preventing significant encroachment and for the protection of minor view corridors present along east–west coastal streets. Although future actions under PLAN Hermosa would include remodels and reuse development projects, these key elements of the City's current and future development standards in these zones would reduce impacts on the characteristic visual permeability that currently exists. This protection would be reinforced by proposed Policy 5.3 of the Parks + Open Space Element. Potential impacts of utilities and other public infrastructure projects are addressed in implementation action PARKS-11.

The established development standards that would be carried forward with PLAN Hermosa, along with proposed Policy 5.3 and implementation action PARKS-11, would avoid significant adverse impacts on visual transparency in the coastal area of the city.

Visual Character of Neighborhoods, Corridors, and Districts

As outlined above, PLAN Hermosa's intent is to maintain and enhance the city's visual character through appropriate building massing, scale, and size. Adoption and implementation of PLAN Hermosa would not substantially alter any of the residential neighborhoods or areas of the city, but may alter certain areas near Downtown and The Strand, through new development and streetscape. PLAN Hermosa policies are meant to preserve the city's character, including those resources that are designated landmarks or architecturally distinctive. For example, Goal 5 is intended to specifically retain the city's character as a small beach town. Further, Land Use + Design Element Policy 1.6 would require the City to consider new development's compatibility with the existing scale and context, and Parks + Open Space Element Policy 5.2 requires the preservation of visual character in all development. None of the provisions of PLAN Hermosa would alter current land use patterns, height restrictions, or compatibility and buffering requirements currently established in the Zoning Ordinance (e.g., Sections 17.22.130, 17.26.050, and 17.28.030). PLAN Hermosa policies and implementation actions identified in this section implement and expand current General Plan and Coastal Land Use Plan policy provisions for the protection of the city's visual character identified above in subsection 4.1.3, Regulatory Setting.

Future land uses consistent with PLAN Hermosa would only allow new development to occur within the city in a manner that enhances and preserves Hermosa Beach's existing visual character. While changes to and demolition of certain buildings may have an impact on the cultural significance of a resource, it does not necessarily mean that these alterations would have an impact as an aesthetic resource. Provided that new structures are consistent with the visual character of the surrounding area based on the PLAN Hermosa policies and descriptions of the character area, it is possible for future development projects to impact the significance of a cultural resource but have a less than significant impact to aesthetic resources.

Additionally, future development projects would be evaluated for form, line, and massing in relation to the neighborhood or adjacent structures or background as part of the City's design review process and for compliance with the Municipal Code. Compliance with Municipal Code Section 17.20.020, for instance, would ensure that the proposed structure's style and pitch of the roof, mass and bulk, and architectural appearance (e.g., type, style, and shape of the structure and the proposed exterior materials) match the neighborhood's existing character. In addition, Municipal Code Section 17.53.020(c) encourages proposed developments near historic structures to incorporate complementary contemporary design and construction.

Land Use + Design Element Policies 1.6, 1.8, and 2.7 would also require new developments to be compatible with surrounding development, as well as enhance existing character and be sensitive to context. Similarly, Land Use + Design Element Policy 10.6 requires attention to preservation of designated landmarks, potentially historic resources, and older buildings. Implementation action LAND USE-3 directs the City to develop building design guidelines to illustrate and articulate the appropriate building form, scale, and massing for each established character area in accordance with those key features and characteristics to ensure that the overall visual character of the neighborhoods, centers, and districts is preserved. This action would apply to individual neighborhoods and character areas as identified in **Figure 4.1-1** and in **Table 4.1-1**, as it would apply citywide. The proposed implementation action establishes the appropriate mechanism for developing design guidelines that would prevent significant degradation of the built environment's visual character. As such, implementation of PLAN Hermosa policies and programs would reduce the impacts associated with visual character and visual sensitivity to a less than significant level because the City would implement design review standards that require attention to and consistency with neighboring structures in form, line, massing, and color and existing visual character and identity. Therefore, the impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.1-4 ***Would PLAN Hermosa Create New Shade or Shadow in a Manner That Substantially Affects Outdoor Recreation Facilities or Other Public Gathering Areas?*** *PLAN Hermosa would allow development or reuse projects in a manner where new sources of shade or shadow may reach outdoor recreation facilities or public gathering areas. However, the voter-approved height limits effectively restrict the number of areas in which shade or shadow may have an adverse effect but do not eliminate all potential sources. This impact would be* ***less than significant****.*

The length and direction of shadows cast from buildings and other structures are a function of building height and sun angle. Sun angle is, in turn, a function of latitude, season, and time of day. In Hermosa Beach, because of its latitude in the northern hemisphere, the sun casts shadows only on the north side of structures. Shadows move clockwise during the day, beginning in a northwesterly direction (as the sun rises in the southeast) and rotating to a

northeasterly direction (as the sun sets in the southwest). Shadow length changes dramatically during the day, with its greatest lengths occurring just after dawn and just before dusk, with a minimum at noon when the sun is nearly directly overhead. In the winter months, shadows are longer, as the sun shifts south relative to the earth, culminating in the longest shadows on the winter solstice (December 21). The summer solstice (June 21) is the time of year when the sun's shadow is shortest. In between the two solstices, the sun angle and its shadows range between the two extremes of the winter and summer solstices. Examples of shadow lengths for Hermosa Beach's latitude and for a 35-foot-tall structure are presented in **Table 4.1-2 (Shadow Lengths in Hermosa Beach)**.

TABLE 4.1-2
SHADOW LENGTHS IN HERMOSA BEACH

Shadow Lengths for 35-Foot Structure (in feet)			
Time of Year	**10 AM**	**Noon**	**2 PM**
March 20 (Spring Equinox)	49	26	26
June 21 (Summer Solstice)	29	10	11
September 22 (Autumn Equinox)	44	25	27
December 21 (Winter Solstice)	69	55	74

Source: suncalc.org 2016

Under current zoning, the maximum allowed building height in Hermosa Beach is 35 feet. The shadow lengths in **Table 4.1-2** therefore present seasonal and diurnal lengths for a worst-case condition. The distances in the table suggest that a building of 35-foot height would cast a shadow that would extend beyond the property limits of its parcel, given the relatively small size of most parcels in Hermosa Beach. In residential areas where building setbacks are usually 5 feet or less, a 35-foot building would likely cast a shadow onto one or more adjacent properties.

For purposes of this EIR, the City considers shadow impacts to be significant and adverse if they intrude extensively into a public open space, such as a park, plaza, greenbelt, or walk street, for a prolonged period of time. Other shadow effects, such as shadows that extend onto private properties, may raise important planning or design considerations, but they do not relate to the public environment. The City's Zoning Ordinance addresses potential shadow effects on private properties for proposed structures above 30 feet in height in areas where the normally allowed building height is 30 feet or less but adjacent structures that pre-date current zoning exceed the current limit.

For a significant shadow impact to occur, a new structure would have to be sited at a location that is adjacent to a public open space area. The adjacent open space would have to be north of the proposed structure and the structure would have to be near enough to impact the open space area significantly during the greater part of the sunlit day, that is, between the hours of 10 AM and 2 PM. The representative shadow lengths shown in **Table 4.1-2** suggest that the adjacent open space would have to be within at least 40 feet of the proposed structure for a significant shadow encroachment to occur. This assumes that the proposed structure is the maximum allowed building height of 35 feet. There are very few locations in the city where these conditions might occur.

One such area is the neighborhood just south of Clark Field. Under current conditions, this neighborhood is occupied by two- and three-story residential buildings, which likely cast a shadow during the early morning and late afternoon hours onto some portion of the field, although the effect would extend to cover less than 20 percent of the field area (Clark Field is

approximately 450 feet in length) within the hours of peak park sunlight or of peak park use. PLAN Hermosa does not propose any changes to the current height limits. Implementation action LAND USE-3 indicates that the City would develop design guidelines that would include provisions that ensure avoidance of significant shadow impacts from new structures onto public recreational areas, parks or other public gathering places during the hours of 10 AM to 2 PM.

Any future project that would be developed under PLAN Hermosa would be required to comply with this regulation. Therefore, the impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.1-5 ***Would PLAN Hermosa Create New Sources of Light or Glare?*** *PLAN Hermosa would guide development and reuse projects in a manner that could create new sources of glare, skyglow, and spillover lighting. However, PLAN Hermosa also includes specific policies and implementation actions that minimize adverse effects related to new sources of light and glare. Therefore, this impact would be* ***less than significant.***

The city is primarily built out, with existing sources of daytime glare and nighttime light. Development and other future actions under PLAN Hermosa have the potential to introduce new sources of daytime glare and increase nighttime lighting and illumination levels through intensification of development.

Lighting impacts can be identified according to three categories:

- Glare – Intense light that shines directly or is reflected from a surface into a person's eyes.
- "Skyglow"/Nighttime Illumination – Artificial lighting from urbanized sources in sufficient quantity to cause lighting of the nighttime sky and reduction of visibility of stars and other astronomical features.
- "Spillover" Lighting – Artificial lighting that spills over onto adjacent properties, which could interrupt sleeping patterns or cause other nuisances to neighboring residents.

The main source of introduced daytime glare is sunlight reflected from structures with reflective surfaces such as windows or glass and metal used as building materials. The amount of glare depends on the intensity and direction of sunlight, which can be more acute at sunrise and sunset because the angle of the sun is lower at these times. Glare impacts are best avoided through careful selection of building materials and consideration of the site-specific context in which new structures or remodels are proposed, relative to sun angles and surrounding uses. The likelihood of significant glare impacting public spaces (such as the plaza of lower Pier Avenue) as a result of PLAN Hermosa and its policies and actions is low and can be addressed through provisions of the design guidelines proposed under implementation action LAND USE-3.

Potential sources of new and increased nighttime lighting and illumination include, but are not limited to, lighting associated with new development or remodels (of any land use type), lights associated with vehicular travel (e.g., car headlights), street lighting, parking lot lights, and security-related lighting. Increased nighttime lighting and illumination can result in adverse effects in the form of spillover onto adjacent properties and nighttime skyglow impacts. Subsequent development would be subject to existing City development and design standards set forth in the City's Municipal Code. Section 17.26.050 of the current Municipal Code requires any lighting provided for commercial outdoor dining uses, unless exempted by a Conditional Use Permit, to be extinguished no later than 11:00 PM in the C-3 zone and by 10:00 PM in zones that allow similar uses. It also requires that the lighting be high efficiency, the minimum intensity

necessary, fully shielded (full cutoff) and downcast (emitting no light above the horizontal plane of the fixture), not create glare or spill beyond the property lines, and the lamp bulb not be directly visible from within any residential unit. PLAN Hermosa does not propose to alter this section of the code. These requirements would continue to apply to all C-3 uses.

PLAN Hermosa Parks + Open Space Element Policy 5.7 would require that new buildings preserve nighttime views and minimize light levels along the shoreline. In addition, implementation action PARKS-13 would require that new developments meet exterior lighting standards.

Implementation of PLAN Hermosa policies and programs and compliance with Municipal Code Section 17.26.050 would reduce potential impacts of light or glare in the planning area by ensuring that new developments' designs, including outdoor lighting features and material reflectivity, do not result in additional sources of light and glare. These provisions stipulate that exterior lighting be fully shielded (full cutoff) and downcast (emitting no light above the horizontal plane of the fixture), and not create glare or spill beyond the property lines, and the lamp bulb is not to be directly visible from within any residential unit. Therefore, the impact would be **less than significant.**

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The geographic context for the analysis of cumulative aesthetics and visual resources impacts includes Hermosa Beach and the communities of the South Bay subregion.

IMPACT 4.1-6 ***Would PLAN Hermosa Contribute to Cumulative Adverse Effects Related to Visual Resources?*** *Of the categories of potential visual impacts addressed, only the impact of artificial lighting to the night sky (skyglow impact) is potentially cumulative in nature. All other impacts (to scenic vistas, scenic resources, visual character, shade and shadow effects, and lighting impacts of glare and spillover) are localized and confined within the city limits of Hermosa Beach. This is a* ***less than cumulatively considerable*** *impact.*

Because this EIR addresses citywide impacts, cumulative effects of multiple projects that might occur within the city during the lifetime of PLAN Hermosa are addressed as a part of this assessment. The discussion of potential skyglow impacts under Impact 4.1-5 acknowledges the cumulative nature of this impact and addresses the project's potential contribution to cumulative skyglow effects. Therefore, this impact would be **less than cumulatively considerable.**

Mitigation Measures

None required.

4.1.5 REFERENCES

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4.2 Air Quality

4.2.1 INTRODUCTION

This section evaluates potential air quality effects associated with implementation of PLAN Hermosa.

NOP Comments: In response to the Notice of Preparation (NOP), one comment relevant to air quality was received from the South Coast Air Quality Management District (SCAQMD) (see **Appendix B**). The comment was focused on ensuring that the air quality analysis for PLAN Hermosa uses region-specific and up-to-date air quality modeling methodologies to evaluate the plan's impact on air quality. These comments and the SCAQMD's guidelines for analyzing air quality impacts have been incorporated in this analysis.

Reference Information: Information for this resource chapter is based on numerous sources, including the Air Quality Technical Background Report (TBR), transportation analysis of existing conditions and modeling of future conditions, and other publicly available documents. The TBR is attached as **Appendix C-4**.

4.2.2 ENVIRONMENTAL SETTING

Appendix C-4 describes the natural factors (i.e., topography, climate, and meteorology) that affect air quality in the region; current regional air quality conditions in the project area; and the federal, state, and local air quality regulatory framework. A summary of that information is included below.

NATURAL FACTORS

Hermosa Beach is a beachfront city located in the South Coast Air Basin, and the SCAQMD is the air pollution control district responsible for comprehensive air pollution control in the basin. The basin lies in the semi-permanent high-pressure zone of the eastern Pacific Ocean, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. Winds in the planning area are usually driven by the dominant land/sea breeze circulation system. Vertical dispersion of air pollutants in the air basin is hampered by the presence of persistent temperature inversions, which restrict the vertical dispersion of air pollutants released into the marine layer and, together with strong sunlight, can produce worst-case conditions for the formation of photochemical smog.

CRITERIA AIR POLLUTANTS

The California Air Resources Board (CARB) and the US Environmental Protection Agency (EPA) currently focus on the following criteria air pollutants as indicators of ambient air quality: ozone, particulate matter (PM_{10} and $PM_{2.5}$), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead.

Ozone is a photochemical oxidant and the primary component of smog. It is formed through complex chemical reactions between precursor emissions of reactive organic gases (ROG) and oxides of nitrogen (NO_x) in the presence of sunlight. Elevated levels of ozone can cause irritation to lungs and breathing passages, as well as coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency. Hermosa Beach is located in both a federal and state nonattainment area for ozone, as local air quality conditions exceed the federal 8-hour ozone standard and the state 1-hour and 8-hour ozone standards.

CURRENT REGIONAL AIR QUALITY CONDITIONS

Hermosa Beach is located in both a federal and state nonattainment area for $PM_{2.5}$ and a state nonattainment area for PM_{10}. The human body naturally prevents the entry of larger particles into the body. However, small particles, with an aerodynamic diameter equal to or less than 10 microns (i.e., PM_{10}) and even smaller particles with an aerodynamic diameter equal to or less than 2.5 microns (i.e., $PM_{2.5}$), can enter the body and are trapped in the nose, throat, and upper respiratory tract. These small particulates could potentially aggravate existing heart and lung diseases, change the body's defenses against inhaled materials, and damage lung tissue. The elderly, children, and those with chronic lung or heart disease are most sensitive to PM_{10} and $PM_{2.5}$. Lung impairment can persist for several weeks after exposure to high levels of particulate matter. Some types of particulates could become toxic after inhalation due to the presence of certain chemicals on or mixed with the particulates and the chemicals' reaction with internal body fluids.

The city is located in an area that meets both federal and state CO standards as well as federal and state SO_2 standards. However, Hermosa Beach is located in a federal nonattainment area for NO_2. Nitrogen dioxide acts as an acute irritant and, in equal concentrations, is more injurious than nitric oxide.

Diesel particulate matter (diesel PM) emissions are estimated to be 11,074 tons per year for the South Coast Air Basin. In Los Angeles County, the estimated health risk from diesel PM was 951 excess cancer cases per million people in 2005. Sources of diesel PM in the planning area include freeways, arterial roadways, and railways, as well as minor sources such as off-road construction equipment, portable and backup diesel generators and pumps, and other heavy- and light-duty equipment. Other toxic air contaminant (TAC) sources in Hermosa Beach include gasoline stations, auto body shops, restaurants, dry cleaners, and some commercial and light industrial uses. The city does not contain any major sources of air pollutants that will result in unacceptable air quality impacts to residents.

The city does not contain any large sources of odors. Minor sources such as paint booths, auto body repair, and other light industrial sources may exist in Hermosa Beach. Other temporary sources of odors may include construction activities such as painting and asphalt paving.

4.2.3 REGULATORY SETTING

Federal, state, and local plans, policies, laws, and regulations provide a framework for addressing aspects of air quality that would be affected by implementation of PLAN Hermosa. The regulatory setting for air quality is discussed in detail in **Appendix C-4**. A summary of that information as it relates to the impact analysis is provided below.

- **Fugitive Dust:** The SCAQMD requires all projects in the air basin to implement Rule 403 (Fugitive Dust), Rule 401 (Visible Dust), and Rule 1113 (Architectural Coatings) during construction activities.
- **Nuisance:** The SCAQMD requires all projects to comply with Rule 402 (Nuisance) during both construction and operational activities.
- **CAAQS:** The region is nonattainment for California ambient air quality standards (CAAQS) for ozone, particulate matter with aerodynamic diameter less than 10 microns (PM_{10}), particulate matter with aerodynamic diameter less than 2.5 microns ($PM_{2.5}$), and nitrogen dioxide (NO_2). The region is nonattainment for national ambient air quality standards (NAAQS) for ozone, PM_{10}, and $PM_{2.5}$.

- **Land Use:** CARB (2005) developed the *Air Quality and Land Use Handbook: A Community Health Perspective* to guide the siting and design of new land uses in order to avoid exposing sensitive receptors to toxic air contaminant emissions. Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s).

4.2.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on air quality are considered significant if adoption and implementation of PLAN Hermosa would:

1) Conflict with or obstruct implementation of the regional air quality management plan.
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
4) Expose sensitive receptors to substantial concentrations.
5) Create objectionable odors affecting a substantial number of people.

The City of Hermosa Beach uses significance criteria established by the SCAQMD to evaluate air quality impacts. According to these criteria, implementation of PLAN Hermosa would be considered significant if it would exceed any of thresholds shown in **Table 4.2-1 (Mass Daily Thresholds)**.

TABLE 4.2-1
MASS DAILY THRESHOLDS [A]

Pollutant	Construction [a]	Operation [b]
VOC	75 lbs/day	55 lbs/day
NOx	100 lbs/day	55 lbs/day
CO	550 lbs/day	550 lbs/day
SOx	150 lbs/day	150 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs) and Odor Thresholds		
TACs (including carcinogens and noncarcinogens)	Maximum Incremental Cancer Risk ≥10 in 1 million Cancer Burden >0.5 excess cancer cases (in areas ≥1 in 1 million) Hazard Index ≥1.0 (project increment)	
Odor	Project creates an odor nuisance (defined as six or more complainants) pursuant to SCAQMD Rule 402	
Ambient Air Quality for Criteria Pollutants [c]		
NO_2 1-hour average annual average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state)	
PM_{10} 24-hour average annual average	10.4 μg/m^3 (construction)[d] & 2.5 μg/m^3 (operation) 1.0 μg/m^3	
$PM_{2.5}$ 24-hour average	10.4 μg/m^3 (construction)[d] & 2.5 μg/m^3 (operation)	
Sulfate 24-hour average	1 μg/m^3	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) 9.0 ppm (state/federal)	

Source: SCAQMD 2015
Notes:
a. Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea Air Basin and Mojave Desert Air Basin).
b. The mass daily thresholds for operation are the same as the construction thresholds.
c. Ambient air quality thresholds for criteria pollutants are based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.
d. Ambient air quality threshold is based on SCAQMD Rule 403.
e. lbs/day = pounds per day; ppm = parts per million; μg/m3 = micrograms per cubic meter; ≥ greater than or equal to

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of PLAN Hermosa compared to existing conditions. The following analyses of impacts on air quality

are both qualitative and quantitative and are based on available air quality information for the planning area along with a review of regional information. The analysis assumes that all future and existing development in the planning area complies with applicable laws, regulations, design standards, and plans. The cumulative impact analysis uses qualitative information for the planning area and the air basin. Operational emissions associated with future land uses anticipated by PLAN Hermosa were modeled using the California Emissions Estimator Model (CalEEMod) Version 2013.2.2 and CARB's on-road emissions inventory model, EMFAC2014. Model inputs such as land use types and sizes, vehicle miles traveled, and speed bins were obtained from the traffic study prepared for PLAN Hermosa (Fehr & Peers 2015).

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa includes several elements, including Governance, Land Use + Design, Mobility, Sustainability + Conservation, and Infrastructure. In these elements, policies and implementation actions that directly and indirectly relate to air quality include the following:

Policies

Governance Element

- **7.5 Evaluation and disclosure.** Require an evaluation and disclosure (e.g., health checklists, health impact assessments) of health impacts or benefits for all discretionary projects.

Land Use + Design Element

- **1.3 Access to daily activities.** Strive to create development patterns such that the majority of residents are within one-half mile walking distance to a variety of neighborhood goods and services, such as supermarkets, restaurants, churches, cafes, dry cleaners, laundromats, farmers markets, banks, personal services, pharmacies, and similar uses.
- **1.7 Compatibility of uses.** Ensure the placement of new uses does not create or exacerbate nuisances between different types of land uses.
- **4.7 Access to transit.** Support the location of transit stations and enhanced stops near the intersection of Aviation Blvd. and PCH, and adjacent to Gateway Commercial uses to facilitate and take advantage of transit service, reduce vehicle trips and allow residents without private vehicles to access services.
- **6.3 Green infrastructure network.** Establish an interconnected green infrastructure network throughout Hermosa Beach that serves as a network for active transportation, recreation and scenic beauty and connects all areas of the city. In particular, connections should be made between the beach, parks, the Downtown, neighborhoods, and other destinations within the city. Consider the following components when designing and implementing the green/open space network:
  - Preserved open space areas such as the beach and the Greenbelt,
  - Living streets with significant landscaping and pedestrian and bicycle amenities,
  - Community and neighborhood parks, and schools.
- **6.7 Pedestrian oriented design.** Eliminate urban form conditions that reduce walkability by discouraging surface parking and parking structures along walkways, long blank walls along walkways, and garage-dominated building facades.

- **9.1 Ocean-based energy resources.** Encourage and support research and responsible development of renewable ocean-based energy sources. Renewable energy sources appropriate to Hermosa Beach shall be limited to wave, tidal, solar, and wind sources that meet the region's and state's need for affordable sources of renewable energy.
- **9.2 Renewable energy facilities.** To reduce or avoid conflicts, communicate and collaborate with affected ocean users; coastal residents and businesses; and applicants seeking state or federal authorization for the siting, development, and operation of renewable energy facilities.
- **9.4 Adaptive management.** Require renewable energy facility operators to rectify or mitigate adverse effects that occur during the lifetime of the project by monitoring and taking appropriate corrective measures through adaptive management.
- **9.5 Reclamation.** Require renewable energy facility operators to restore the natural characteristics of a site to the extent practicable when a project is decommissioned and removed.

Mobility Element

- **3.1 Repurpose public right-of-ways.** Require repurposing public right-of-ways enhancing connectivity for pedestrians, bicyclists, and public transit.
- **3.2 Invest in sidewalks.** Prioritize investment in designated priority sidewalks to ensure a complete network of sidewalks and pedestrian-friendly amenities that enhances pedestrian safety, access opportunities and connectivity to destinations.
- **3.3 Active transportation.** Require that all development or redevelopment projects accommodate active transportation through providing necessary connections to existing and planned pedestrian and bicycle networks and incorporate people-oriented design practices.
- **3.4 Access opportunities.** Provide enhanced mobility and access opportunities for local transportation and transit services in areas of the City with sufficient density and intensity of uses, mix of appropriate uses, and supportive bicycle and pedestrian network connections that can reduce vehicle trips within the City's busiest corridors.
- **3.5 Incentivize other modes.** Incentivize local shuttle/trolley services, rideshare and car share programs, and developing infrastructure that support low speed, low carbon (e.g. electric) vehicles.
- **3.6 Complete bicycle network.** Provide a complete bicycle network along all designated roadways while creating connections to other modes of travel including walking and transit.
- **4.5 Sufficient bicycle parking.** Require a sufficient supply of bicycle parking to be provided in conjunction with new vehicle parking facilities by both public and private developments.
- **4.6 Priority parking.** Provide priority parking and charging stations to accommodate the use of electric vehicles (EVs), including smaller short-distance neighborhood electric vehicles.
- **4.9 Encourage TDM strategies**. Encourage use of transportation demand management strategies and programs such as carpooling, ride hailing, and alternative transportation modes as a way to reduce demand for additional parking supply.

- **5.1 Prioritize development of infrastructure.** Prioritize the development of roadway and parking infrastructure that accommodates and encourages private electric and other low carbon vehicle ownership and use throughout the City.
- **5.2 Local transit system.** Develop a local transit system that facilitates efficient transport of residents, hotel guests, and beachgoers between activity centers and to Downtown businesses and the beach.
- **5.3 Incentivize TDM strategies.** Incentivize the use of Transportation Demand Management (TDM) strategies as a cost effective method for maximizing existing transportation infrastructure to accommodate mobility demands without significant expansion to infrastructure.
- **5.4 Evaluate projects.** Ensure the evaluation of projects for transportation and traffic impacts under CEQA consider local and statewide goals related to infill development, the promotion of healthy and active lifestyles through active transportation, and the reduction of greenhouse gases, in addition to traditional congestion management impacts.
- **5.5 Encourage smart growth.** Encourage smart growth land use policies in development projects to ensure more compact, mixed, connected, and multimodal development supports reduced trip generation, trip lengths, and greater ability to utilize alternative modes.
- **6.1 Regional network.** Work with government agencies and private sector companies to develop a comprehensive, regionally integrated transportation network that connects the community to surrounding cities.
- **6.2 Consider travel patterns.** Require considering regional travel patterns when collaborating on regional transit and transportation projects to ensure investments facilitate greater mobility and access for residents, businesses, and visitors to and from Hermosa Beach.
- **6.3 Support programs.** Facilitate greater local and regional mobility through access to shared equipment or transportation options such as car sharing and bike sharing.
- **6.4 Coordinate with agencies.** Coordinate with regional transportation agencies and surrounding cities to improve local access and connections to region-wide public transit services.
- **6.5 Coordinate with surrounding cities.** Coordinate with surrounding cities to prioritize non-motorized and pedestrian connections to regional facilities and surrounding cities.
- **6.6 Greater utilization.** Consider exploring opportunities for greater utilization of the Beach Cities Transit system for improved mobility along major corridors and as a potential means of improved regional transit connections.
- **8.1 Minimize truck impacts.** Establish a system of truck routes on specified arterial streets to minimize the negative impacts of trucking through the City.
- **8.2 Prohibit excessive idling.** Discourage commercial vehicles from excessive idling during deliveries and while parked.
- **8.3 Reduce traffic conditions.** Encourage businesses to provide commercial loading zones in the public right-of-way at a time and in a manner that balances the needs of businesses with the impact on traffic conditions.

- **8.5 Utilize technology.** Encourage operators of commercial vehicles doing business in Hermosa Beach to utilize technologies that minimize air pollution, fuel use, and greenhouse gas emissions.
- **8.6 Prohibit mobile advertising.** Consider prohibiting mobile advertising to avoid unnecessary traffic congestion and air pollution.

Sustainability + Conservation Element

- **2.4 Land use and transportation investments.** Promote land use and transportation investments that support greater transportation choice, greater local economic opportunity, and reduced number and length of automobile trips.
- **2.7 Discretionary projects.** Require discretionary projects to substantially mitigate all feasible greenhouse gas emissions, and offset the remainder of greenhouse gas emissions produced to meet annual thresholds
- **3.1 Stationary and mobile sources.** Seek to improve overall respiratory health for residents through regulation of stationary and mobile sources of air pollution, as feasible.
- **3.2 Mobile source reductions.** Support land use and transportation strategies to reduce vehicle miles traveled and emissions, including pollution from commercial and passenger vehicles.
- **3.3 Fuel efficient fleets.** Promote fuel efficiency and cleaner fuels for vehicles as well as construction and maintenance equipment by requesting that City contractors provide cleaner fleets.
- **3.4 Two-stroke engines.** Discourage the use of equipment with two-stroke engines and publicize the benefits and importance of alternative technologies.
- **3.5 Clean fuels.** Support increased local access to cleaner fuels and cleaner energy by encouraging fueling stations that provide cleaner fuels and energy to the community.
- **3.6 Healthy Air Hermosa**. Maintain high quality outdoor and public spaces in Hermosa Beach through the Healthy Air Hermosa program.
- **3.7 Regional air quality.** When possible, collaborate with other agencies within the region to improve air quality and meet or exceed state and federal air quality standards through regional efforts to reduce air pollution from mobile sources, including trucks and passenger vehicles.
- **4.1 Renewable energy generation.** Require, promote, and facilitate the installation of renewable energy projects on homes and businesses.
- **4.2 Building energy disclosure.** Require large buildings to report their energy and water use on a regular basis.
- **4.3 Retrofit program.** Provide an energy retrofit program to assist home and building owners to make efficiency improvements.
- **7.2 Soil erosion.** Minimize soil erosion by ensuring best practices are used in grading and construction.

Infrastructure Element

- **2.5 Active transportation dedications**. Require new development and redevelopment projects to provide land or infrastructure necessary to accommodate active transportation, such as sidewalks, bike racks, and bus stops.

- **6.1 Utility maintenance permitting.** Allow efficient and streamlined permitting for the maintenance, repair, improvement, and expansion of utility facilities and infrastructure.
- **6.2 Below ground utilities.** Phase out and replace overhead electric lines with subsurface lines to reduce visual blight and the need for utility poles which can impede sidewalk accessibility.
- **6.3 Environmental compatibility.** Ensure that utility facilities and infrastructure cause minimal damage to the environment and that utility service providers are responsible for costs associated with damage caused to the environment and public right-of-way so that providers will seek to minimize those costs.
- **6.4 Innovative and renewable technology.** Encourage the exploration and establishment of innovative and renewable utility service technologies. Allow the testing of new alternative energy sources that are consistent with the goals and policies of PLAN Hermosa and comply with all relevant regulations.
- **6.5 Renewable energy facilities.** Unless a renewable energy facility would cause an unmitigatable impact to health or safety, allow them by right.
- **6.6 Community choice aggregation.** Collaborate with nearby local and regional agencies to develop a community choice aggregation system that provides greater renewable energy choices to the community.

Implementation Actions

- LAND USE-13. Create a checklist and resource guide comprising local, state, and federal requirements for the development of offshore renewable energy facilities to streamline permitting requirements and improve public awareness.
- MOBILITY-6. Install traffic calming devices in areas appropriate to mitigate an identified and documented traffic concern, as determined by the City Public Works Director or designee. Potential traffic calming applications include clearly marked and/or protected bike and pedestrian zones, bike boulevards, bulb outs, median islands, speed humps, traffic circles, speed tables, raised crosswalks, signalized crosswalks, chicanes, chokers, raised intersections, realigned intersections, and textured pavements, among other effective enhancements.
- MOBILITY-12. Maintain and periodically update the Transportation Demand Management (TDM) Ordinance with activities that will reduce auto trips associated with new development.
- MOBILITY-13. Install and maintain transportation amenities such as bicycle parking and electric vehicle charging stations so that they are available at each commercial district or corridor, park, and public facility.
- MOBILITY-14. Facilitate the operation of bicycle rental concessions in the Coastal Zone.
- MOBILITY-18. Develop congestion management performance measures and significant impact thresholds that are in accordance with the California Environmental Quality Act (CEQA) and Senate Bill 743 (SB 743) requirements for roadway segments and intersections.
- SUSTAINABILITY-1. Establish a local greenhouse gas impact fee for projects to offset their fair share of greenhouse gas emissions generated, by providing funding for implementation of local GHG reduction projects.

- SUSTAINABILITY-2. Establish greenhouse gas emissions thresholds of significance and standardize potential mitigation measures for both discretionary and ministerial actions.
- SUSTAINABILITY-6. Implement the City's clean fleet policy through the purchase or lease of vehicles and equipment that reduce greenhouse gas emissions and improve air quality.
- SUSTAINABILITY-7. Concurrent with new State Building Code adoptions, periodically update or amend Green Building Standards and conduct cost effectiveness studies to incorporate additional energy-efficient features.
- SUSTAINABILITY-8. Develop and market a program to offer incentives such as rebates, fee waivers, or permit streamlining to facilitate the installation of renewable energy, energy efficient, or water conservation equipment.
- SUSTAINABILITY-16. Revise the Municipal Code as necessary to ensure it reflects up-to-date practices to reduce potential for soil erosion and ways to minimize or eliminate the effects of grading on the loss of topsoil.
- SUSTAINABILITY-17. Develop a citywide expansive and corrosive soils screening tool to reduce the need for site-specific soil reports.
- SUSTAINABILITY-18. Where feasible, new development or redevelopment shall be sited and designed to minimize alteration of natural landforms by conforming to the local topography; preventing substantial grading or reconfiguration of the project site; requiring that man-made contours mimic natural contours; ensuring that graded slopes blend with the existing terrain of the site and surrounding areas; and clustering structures to minimize site disturbance and to minimize development area.
- PARKS-22. Amend the Local Implementation Plan/Zoning Code to require applicants for summer events occurring on weekends or holidays between Memorial Day and Labor Day with greater than 1,000 participants to provide and advertise predetermined shuttle services and bicycle corrals.
- SAFETY-17. Provide information, opportunities, and incentives to the community for the proper disposal of toxic materials to avoid environmental degradation to the air, soil, and water resources from toxic materials contamination.
- INFRASTRUCTURE-23. Develop a process for identifying sites deemed appropriate for alternative renewable energy power generation facilities, and provide such information to utility providers and potential developers.
- INFRASTRUCTURE-24. Continue to implement energy-efficient lighting throughout City facilities.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.2-1 ***Would PLAN Hermosa Conflict with or Obstruct Implementation of the Applicable Air Quality Plan?*** *Implementation of PLAN Hermosa would guide future development in the city in a manner that could result in air pollution emissions. Compliance with existing federal and state regulations and implementation of PLAN Hermosa policies would reduce conflicts with air quality plans to a* ***less than significant*** *level.*

Regional air quality plans are developed to attain and maintain ambient air quality standards. As summarized in the Environmental Setting subsection above and shown in Table 1 of **Appendix C-4**, the region is nonattainment for the state and federal ozone, PM_{10}, and $PM_{2.5}$ standards and

is nonattainment for the state NO_2 standard. As noted above, these pollutants cause public health issues involving asthma and other respiratory ailments as well as aggravate existing heart and lung diseases. In order for the region to attain and maintain air quality standards and protect public health, a concerted effort from all cities and counties in the air basin is required to reduce emissions from a variety of sources. Air quality plans model emission contributions from sources within the air basin (and outside the air basin for transport of emissions) using planned land uses and reduction measure assumptions. This type of modeling demonstrates how the air quality plan can or cannot attain air quality standards by certain dates. Therefore, if a city in the air basin would not be consistent with the assumptions and emission reduction strategies contained in an air quality plan, this could conflict with or obstruct the region's ability to attain an ambient air quality standard.

By focusing planning and improvement efforts toward designing complete streets, promoting economic diversity, and enhancing communitywide mobility, PLAN Hermosa is anticipated to reduce vehicle miles traveled (VMT) within the city. Mobility Element Goal 3 would encourage multimodal and people-oriented transportation, which could minimize or eliminate certain mobile vehicle trips (see Section 4.14, Transportation, of this EIR for an analysis of anticipated vehicle miles traveled under PLAN Hermosa). Land Use + Design Element Goal 1 would promote a diverse mix of uses, which would reduce vehicle trips between residential uses and retail or employment uses. Land Use + Design Element Goal 4 would increase the accessibility of public transit to nearby residential uses, thus reducing vehicle miles traveled. Mobility Element Policy 5.5 encourages smart growth in land use policies to ensure more compact, mixed, connected, and multimodal development supports reduced trip generation, trip lengths, and greater ability to utilize alternative modes. Implementing these policies and programs would strengthen Hermosa Beach's efforts to reduce air quality emissions from VMT, area sources, construction, and other miscellaneous sources beyond that of the existing General Plan,[1] which is the basis for the existing regional air quality plan (i.e., 2012 Air Quality Management Plan [AQMP]).

Sustainability + Conservation Element Policy 3.1 seeks to improve overall respiratory health for residents through regulation of stationary and mobile sources of air pollution. Policy 3.2 encourages support for land use and transportation strategies to reduce vehicle miles traveled and emissions, including pollution from commercial and passenger vehicles. Policy 3.3 would promote fuel efficiency and cleaner fuels for vehicles as well as construction and maintenance equipment by requesting that City contractors provide cleaner fleets. Policy 3.7 would ensure that future projects consider impacts on regional air quality planning efforts. Policy 7.2 would require construction projects to control emissions, particularly soil disturbance, which is a source of PM_{10} and $PM_{2.5}$ emissions.

As stated in the 2012 AQMP, the plan is aimed at controlling pollution from all man-made sources, including stationary sources, on-road and off-road mobile sources, and area sources (SCAQMD 2013). Therefore, the emission reductions that could be achieved through implementation of PLAN Hermosa are anticipated to exceed those currently planned for in the regional air quality plan and would be consistent with the 2012 AQMP. Although the SCAQMD is currently developing a 2016 Air Quality Management Plan, it is anticipated that the 2016 AQMP would target the same types of emission sources and would require further reductions from all jurisdictions because of the nonattainment status of the air basin with respect to state ozone,

[1] The existing General Plan is identified as the No Project Alternative in Section 6.0, Alternatives to the Proposed Project, of this EIR. Table 6-1 of Chapter 6 and Table 4-1 of Appendix C-4 to this EIR identify vehicle travel as the main contributor to ozone precursors (ROG and NO_x).

NO_x, $PM_{2.5}$, and PM_{10} standards. Both the 2012 adopted and 2016 proposed AQMPs rely on the growth projections and vehicle travel patterns modeled in the Southern California Association of Governments' Regional Transportation Plan (Section 4.9, Land Use and Planning, of this EIR evaluates PLAN Hermosa's consistency with the Regional Transportation Plan).

As discussed in Section 4.14, Transportation, many PLAN Hermosa goals and policies are aimed at reducing VMT. Fehr & Peers used the TDM+ model to quantify potential reductions in trip generation and VMT that could occur by 2040 with full buildout and implementation of PLAN Hermosa. Fehr & Peers worked with the California Air Pollution Control Officers Association (CAPCOA) to develop the transportation section of the report titled Quantifying Greenhouse Gas Mitigation Measures. This report is now used as a set of guidelines for quantifying the environmental benefits of mitigation measures. The CAPCOA guidelines were developed by conducting a comprehensive literature review of studies documenting the effects of land use planning and transportation demand management (TDM) strategies on reducing VMT. Using the results of this study, Fehr & Peers developed TDM+, a quick response tool that demonstrates trip reductions from commonly used TDM strategies. The tool also accounts for the interaction among different measures in various categories to avoid double counting. As described in Section 4.14, numerous PLAN Hermosa land use and mobility strategies were modeled to demonstrate reductions in VMT, including but not limited to land use strategies such as development of mixed-use and urban infill sites with transit proximity and a density, scale, and design that can facilitate walking, biking, and other alternative travel options.

PLAN Hermosa policies include numerous measures that support transportation demand and accessibility management. Specifically, Sustainability + Conservation Element Policy 3.2 directs the City to support land use and transportation strategies to reduce vehicle miles traveled and emissions, including pollution from commercial and passenger vehicles. Policy 3.7 directs the City to consult with other agencies to improve air quality through regional efforts to reduce air pollution from mobile sources. PLAN Hermosa would promote land use and transportation investments that support greater transportation choice, greater local economic opportunity, and reduced number and length of automobile trips.

These and other policies support region-wide traffic and air quality management strategies that support achievement of AQMP goals. PLAN Hermosa would not conflict with or obstruct implementation of the regional air quality plan; therefore, the impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.2-2 ***Would PLAN Hermosa Generate Short-Term Construction Emissions That Would Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation?*** *Implementation of PLAN Hermosa would guide future development in the city in a manner that could generate air pollutant emissions from short-term construction. Although PLAN Hermosa policies and programs and enforcement of current SCAQMD rules and regulations would help reduce short-term emissions, construction emissions would result in a* ***potentially significant*** *impact.*

The SCAQMD has established quantitative daily thresholds of significance for construction emissions, as identified in **Table 4.2-1**. Development associated with the implementation of PLAN Hermosa would result in construction emissions that would be evaluated using the SCAQMD thresholds of significance on a project-by-project basis. However, at the program level, it would

be speculative to accurately model construction emissions associated with implementation of PLAN Hermosa because it is unknown at this time what projects specifically would be constructed under the plan, what construction equipment would be used for each project, and what each project's construction phasing would be. Therefore, construction air quality impacts are evaluated qualitatively.

Construction of PLAN Hermosa's proposed land uses would generate short-term criteria air pollutant and ozone precursor emissions from sources such as heavy-duty construction equipment, material delivery trucks, soil disturbance activities, construction worker vehicles, and architectural coatings, among other activities. The daily amounts of pollutants generated would vary depending on the intensity of the construction activities and types of construction equipment used. Smaller projects with a more compact schedule, though they may involve less overall development, could generate daily emissions that exceed those of a large project with a drawn-out schedule. CalEEMod is an emissions model developed by the South Coast Air Quality Management District to calculate construction emissions for CEQA projects. Within CalEEMod, smaller projects such as single-family residences or commercial or industrial uses which are less than 150,000 square feet and that have minimal or no overlapping construction activities would not likely exceed the SCAQMD's CEQA significance thresholds for construction. Most of the development activity in the city is not expected to exceed 150,000 square feet given the city's developed condition and the limited number of large or contiguous parcels that are vacant and underutilized and therefore more likely to redevelop. However, larger projects or projects which are more complex (large quantities of grading, accelerated schedule, overlapping activities) may have the potential to exceed significance thresholds. Current examples of projects that may be under 150,000 square feet, but involve grading or excavation, include the proposed Skechers Design Center and Executive Office Project and the proposed Strand and Pier Hotel Project. Therefore, it is difficult to estimate construction emissions by simply evaluating the number of units or square feet of space to be developed. However, there is potential that construction of some future projects pursuant to PLAN Hermosa would generate short-term construction emissions that could exceed the SCAQMD's thresholds of significance.

A number of PLAN Hermosa policies, along with required SCAQMD rules and regulations, would help reduce short-term construction emissions. All construction projects in the city would be subject to SCAQMD Rule 403 (Fugitive Dust) to minimize fugitive particulate matter (PM) dust emissions during construction. In addition, Sustainability + Conservation Element Policy 7.2 would require future projects to minimize PM_{10} and $PM_{2.5}$ emissions by promoting best practices for controlling fugitive dust. Implementation actions SUSTAINABILITY-16, 17, and 18 aim to control soil erosion during grading and other construction activities. Furthermore, Sustainability + Conservation Element Policy 2.7 would require all discretionary projects to substantially mitigate all feasible greenhouse gas emissions, which would also affect the emissions of ozone precursors, PM_{10}, and $PM_{2.5}$ in the city.

Although the SCAQMD would require compliance with Rule 403, and implementation of multiple PLAN Hermosa policies would reduce construction emissions, there is potential that a number of future projects will continue to generate emissions which exceed the SCAQMD construction thresholds of significance.

Because most construction projects are performed by private parties, the City would have little control over construction equipment and truck emissions. However, EPA emissions standards require strict emissions controls for construction equipment and trucks that are phased in over time. As older construction equipment is phased out and replaced with newer equipment, emissions from the average construction fleet would be lower. With time, the construction fleet would eventually meet EPA Tier 4 emissions standards, which are currently the most stringent standards. Construction-related impacts would be **potentially significant**. To reduce

construction-related emissions, mitigation measures **MM 4.2-2a** through **MM 4.2-2e** would be required.

Mitigation Measures

MM 4.2-2a Construction projects within the city shall demonstrate compliance with all applicable standards of the Southern California Air Quality Management District, including the following provisions of District Rule 403:

- All unpaved demolition and construction areas shall be wetted at least twice daily during excavation and construction, and temporary dust covers shall be used to reduce dust emissions and meet SCAQMD Rule 403. Wetting could reduce fugitive dust by as much as 50 percent.
- The construction area shall be kept sufficiently dampened to control dust caused by grading and hauling, and at all times provide reasonable control of dust caused by wind.
- All clearing, earth moving, or excavation activities shall be discontinued during periods of high winds (i.e., greater than 15 mph), so as to prevent excessive amounts of dust.
- All dirt/soil loads shall be secured by trimming, watering, or other appropriate means to prevent spillage and dust.
- All dirt/soil materials transported off-site shall be required to cover their loads as required by California Vehicle Code Section 23114 to prevent excessive amount of dust.
- General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions.
- Trucks having no current hauling activity shall not idle but shall be turned off.

MM 4.2-2b In accordance with Section 2485 in Title 13 of the California Code of Regulations, the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to 5 minutes at any location.

MM 4.2-2c Construction projects within the city shall comply with South Coast Air Quality Management District Rule 1113 limiting the volatile organic compound content of architectural coatings.

MM 4.2-2d Construction projects within the city shall install odor-reducing equipment in accordance with South Coast Air Quality Management District Rule 1138.

MM 4.2-2e Project applicants shall identify all measures to reduce air pollutant emissions below SCAQMD thresholds prior to the issuance of building permits. Should attainment of SCAQMD thresholds be determined to be infeasible, construction contractors shall provide evidence of this to the City and will be encouraged to apply for SCAQMD SOON funds.

Significance After Mitigation

Even with the implementation of mitigation measures **MM 4.2-2a** through **MM 4.2-2e**, SCAQMD Rule 403, and PLAN Hermosa policies, it is still anticipated that some projects would have the

potential to generate daily construction emissions that exceed the SCAQMD thresholds of significance. Because the intensity and schedule of construction activities cannot be determined at the time of this program-level analysis, it would be speculative to conclude that any level of mitigation would reduce daily construction emissions below the SCAQMD thresholds of significance. Incentives could be provided for those construction contractors who apply for SCAQMD SOON funds. The SOON program provides funds to accelerate cleanup of off-road diesel vehicles, such as heavy-duty construction equipment.

In many cases, because of the amount of construction required for a project, even if all feasible mitigation is implemented, daily emissions could still exceed the significance thresholds. Therefore, this impact would be **significant and unavoidable**.

IMPACT 4.2-3 ***Would PLAN Hermosa Generate Long-Term Operational Emissions That Would Violate Any Air Quality Standard or Contribute Substantially to an Existing or Projected Air Quality Violation?*** *Subsequent development associated with the implementation of PLAN Hermosa could generate air pollutant emissions from long-term operation. PLAN Hermosa policies and programs and enforcement of current SCAQMD rules and regulations would help reduce long-term emissions. Daily operational emissions from long-term operation of PLAN Hermosa would result in a* ***less than significant*** *impact.*

Long-term operational emissions are generated from stationary, area, and mobile sources. **Table 4.2-2 (Summary of Modeled Operational Emissions of Criteria Air Pollutants and Precursors)** summarizes the daily long-term operational emissions of criteria air pollutants and precursors for existing and new development that could occur under the full buildout potential by 2040. The daily operational area, energy, and mobile source emissions were modeled using CalEEMod (Version 2013.2.2) computer model EMFAC2014 and vehicle miles traveled (VMT) data in the traffic study prepared by Fehr & Peers (2015).

TABLE 4.2-2
SUMMARY OF MODELED OPERATIONAL EMISSIONS OF CRITERIA AIR POLLUTANTS AND PRECURSORS

	Emissions (lbs/day)[a]					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Existing Conditions						
Area Sources	1,128	18	1,674	< 1	129	129
Energy	5	46	20	< 1	4	4
Mobile Sources	157	472	1,933	5	309	87
Total	1,290	536	3,627	5	442	220
Development Potential Under PLAN Hermosa						
Nonresidential						
Area Sources	25	< 1	25	< 1	< 1	< 1
Energy	1	13	11	< 1	1	1
Residential						
Area Sources	17	< 1	< 1	< 1	< 1	< 1
Energy	1	12	10	< 1	< 1	< 1
Mobile Sources	(15)	(30)	(123)	(0)	(3)	(1)
Total Daily Operational Emissions – PLAN Hermosa Development Potential	30	(5)	(77)	(0)	(0)	1
Project-Based SCAQMD Significance Threshold	55	55	550	150	150	55
Exceeds Project Threshold?	No	No	No	No	No	No
Plan Hermosa Development Potential Plus Existing Conditions	1,320	531	3,550	5	442	221

Source: Appendix D; existing conditions modeled by Michael Baker International 2016.

SCAQMD = South Coast Air Quality Management District; lbs/day = pounds per day; CO = carbon monoxide; NOx = oxides of nitrogen; PM_{10} = particulate matter less than or equal to 10 microns in diameter; $PM_{2.5}$ = particulate matter less than or equal to 2.5 microns in diameter; ROG = reactive organic gases.

Emissions modeled using the CalEEMod (Version 2013.2.2) computer model and EMFAC2014, based on daily vehicle miles traveled, daily trips, and land uses obtained from the traffic analysis prepared for this project, which estimates a reduction of 2,500 daily vehicle trips under PLAN Hermosa as compared to existing conditions.

Note: The total emissions estimates shown are the highest values that would occur in the summer or winter season. Totals may not add up to individual values since the highest emissions for a pollutant from both area and mobile sources may not occur in the same season.

*Refer to **Appendix D** for detailed assumptions and modeling output files.*

The SCAQMD's thresholds are established for individual projects and are not readily applied to a 25-year program such as PLAN Hermosa. Although the City will apply the SCAQMD's thresholds to individual projects as they are brought forward, the total emissions in the city and the planning area will still exceed these project-based thresholds.

As shown in **Table 4.2-2**, area sources contribute to most of the ROG, CO, and PM operational emissions in the city. With regard to mobile source emissions, PLAN Hermosa policies would result in a reduction of vehicle miles traveled within the city. As a result, mobile source emissions would be reduced compared to existing conditions. Heavy-commercial or industrial land uses are more likely to involve stationary sources, while retail and residential land uses would involve more area source emissions (e.g., natural gas water and space heating, consumer products, landscape maintenance). Similar to construction emissions, the SCAQMD has developed daily thresholds of

significance for operational activities. Project-level analysis of future projects would evaluate daily emissions against the SCAQMD operational thresholds of significance.

PLAN Hermosa includes numerous goals, policies, and programs that would impact future emissions associated with land use operations. Mobility Element Policies 3.6, 5.2, and 5.3 would provide new and existing land uses with greater accessibility to alternate modes of transportation and supporting amenities, some of which would be emissions-free (e.g., walking, biking). Therefore, implementation of PLAN Hermosa would provide convenient alternatives to driving and reduce trip distances through infill development in the city.

In addition, Mobility Element Policies 3.4 and 5.2 would use public transit to link employment and residential centers to provide realistic alternatives to single-occupant vehicles for a variety of trip types (e.g., home to work, home to shopping). Mobility Element Policies 3.2 and 3.3 would require new development to add pedestrian infrastructure and provide necessary connections to transit and alternate transit modes, respectively. Mobility Element Policy 5.5 and Land Use + Design Element Policy 1.3 would require that more compact, connected, and multimodal development supports reduced trip generation, trip lengths, and greater ability to utilize alternative modes and that safe and convenient complete streets (i.e., designed for all modes of transportation) be implemented throughout the city and connect residential and amenities for feasible day-to-day use.

Increasing bicycle mode share is a major goal to reduce mobile source emissions. Implementation actions MOBILITY-6 and 14 would strategically expand the city's bicycle infrastructure to provide practical and safe connections between land uses. Therefore, PLAN Hermosa would supply alternative modes of transportation through city infrastructure as well as provide incentives to maximize the effectiveness of these developments.

The PLAN Hermosa goals, programs, and policies discussed above would reduce mobile source operational emissions throughout the city. As a result, total emissions associated with daily operational activities would remain below SCAQMD thresholds of significance, as shown in **Table 4.2-2**. Therefore, PLAN Hermosa's operational emissions would be considered **less than significant**. As discussed above, emissions presented in **Table 4.2-2** take into account policies which would reduce vehicle traffic and related emissions within the city. With regard to stationary (non-mobile) sources, new projects would be required to comply with the California Green Building Standards (CALGreen) Code, which would increase energy efficiency and reduce water usage. As a result, emissions resulting from energy and water usage would be reduced.

Mitigation Measures

None required.

IMPACT 4.2-4 ***Would PLAN Hermosa Create or Contribute to CO Hot Spots That Could Result in a Cumulatively Considerable Net Increase of Any Criteria Pollutant for Which the Region Is Nonattainment?*** *Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that would reduce vehicle traffic to existing roadways, which could reduce the potential for CO hot spots. Traffic volumes anticipated at intersections throughout the city with implementation of PLAN Hermosa would not be large enough to cause a CO hot spot, resulting in a* ***less than significant*** *impact.*

Carbon monoxide concentration is a direct function of motor vehicle activity (e.g., idling time and traffic flow conditions), particularly during peak commute hours, and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor

dispersion), CO concentrations may reach unhealthy levels at local sensitive land uses such as residential areas, schools, and hospitals. As a result, the SCAQMD recommends analyzing carbon monoxide emissions at a local as well as a regional level.

A CO hot spot is an area of localized carbon monoxide pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. The SCAQMD requires a microscale CO hot-spot analysis against the 1-hour and 8-hour ambient air quality standards for carbon monoxide when a project increases the volume-to-capacity ratio by 2 percent for any intersection with an existing level of service (LOS) D or worse. The PLAN Hermosa traffic analysis (see Section 4.14, Transportation) indicates that one signalized intersection would operate at LOS E in 2040. Therefore, further investigation of potential CO impacts is warranted.

A detailed CO analysis was conducted during the preparation of the SCAQMD's 2003 Air Quality Management Plan. The locations selected for microscale modeling in the 2003 AQMP included high average daily traffic (ADT) intersections in the air basin, those which would be expected to experience the highest CO concentrations. The highest CO concentration observed was at the intersection of Wilshire Boulevard and Veteran Avenue on the west side of Los Angeles near Interstate 405. The concentration of CO at this intersection was 4.6 parts per million (ppm), which is well below the 35-ppm 1-hour CO federal standard. The Wilshire Boulevard/Veteran Avenue intersection has an ADT of approximately 100,000 vehicles per day.

The PLAN Hermosa traffic analysis demonstrates that three of the studied intersections would operate at LOS E in 2040. However, only one of these intersections is signalized. The highest total intersection ADT for any of these intersections would be about 35,700 vehicles at the intersection of Pacific Coast Highway and Aviation Boulevard, which is less than 100,000 vehicles per day. Furthermore, due to stricter vehicle emissions standards in newer cars, new technology, and increased fuel economy, CARB has indicated that future CO emission factors under future land use conditions (year 2040) would be lower than those under existing conditions. Thus, project-generated local mobile-source CO emissions would not result in or substantially contribute to concentrations that exceed the 1-hour or 8-hour ambient air quality standards for carbon monoxide. Because the number of vehicles traveling through the Pacific Coast Highway/Aviation Boulevard intersection is less than 100,000 vehicles per day, local mobile-source CO emissions would not exceed the 1-hour or 8-hour CO standard. As a result, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.2-5 ***Would PLAN Hermosa Expose Sensitive Receptors to Substantial Pollutant Concentrations?*** *Implementation of PLAN Hermosa would guide future development and reuse projects in Hermosa Beach in a manner that would potentially generate additional diesel vehicle traffic and diesel stationary sources within the city. This impact would be* ***less than significant****.*

Subsequent land use activities associated with implementation of PLAN Hermosa could potentially include short-term construction sources and long-term operational sources of TACs, including stationary and mobile sources.

Short-Term Construction Sources

Implementation of PLAN Hermosa would result in the potential construction of a variety of projects. This construction would result in short-term emissions of diesel PM, which CARB identifies as a toxic air contaminant. Construction would result in the generation of diesel PM emissions

from the use of off-road diesel equipment required for site grading and excavation, paving, and other construction activities. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The calculation of cancer risk associated with exposure to TACs is typically based on a 70-year period of exposure. The use of diesel-powered construction equipment, however, would be temporary and episodic and would occur over a relatively large area. For these reasons, diesel PM generated by construction activities, in and of itself, would not be expected to create conditions where the probability of contracting cancer is greater than 10 in 1 million for nearby receptors.

Nevertheless, construction emissions are regulated by the SCAQMD, which has developed localized significance thresholds (LSTs) for several emissions generated at construction sites (see subsection 4.2.2, Environmental Setting), including $PM_{2.5}$, produced when diesel fuel is burned. LSTs represent the maximum emissions at a construction site that are not expected to cause or contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb 5 acres of land and less in a single day. Future construction activities under PLAN Hermosa would be required to meet SCAQMD thresholds or to implement mitigation. Examples of feasible mitigation to address short-term construction sources of TACs include, but are not limited to, the requirement to keep all construction equipment in proper tune in accordance with manufacturers' specifications, the use of late-model heavy-duty diesel-powered equipment during construction to the extent that it is readily available, the use of diesel-powered equipment that has been retrofitted with after-treatment products (e.g., engine catalysts), and the use of alternative-fuel construction equipment (i.e., compressed natural gas, liquid petroleum gas, and unleaded gasoline) to the extent that the equipment is readily available.

Long-Term Mobile Sources

In April 2005, CARB released the *Air Quality and Land Use Handbook: A Community Health Perspective*, which offers guidance on siting sensitive land uses in proximity to sources of air toxics. Sensitive land uses identified in the handbook include residential communities, schools and schoolyards, day-care centers, parks and playgrounds, hospitals, and medical facilities. In terms of mobile source emissions of toxic air contaminants, CARB has provided guidelines to help determine appropriate land uses near heavily traveled roadways. The CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicle trips per day (VTD), or rural roads with 50,000 VTD should be avoided when possible. None of the roadways in the city would exceed these daily vehicle trips. As shown in Table 4.14-13 in Section 4.14, Transportation, the roadway with the highest existing daily vehicle trips is Pacific Coast Highway at 51,437 VTD. In Hermosa Beach, Pacific Coast Highway is considered an urban arterial roadway which, based on CARB guidelines, would need 100,000 VTD to exceed the TAC threshold. In any case, new sources of toxic air contaminants and/or other criteria air pollutants would be mitigated to the maximum extent possible. Governance Element Policy 7.5 requires the evaluation and disclosure (e.g., health checklists, health impact assessments) of health impacts or benefits for all discretionary projects. Most of the pollutant emissions in the Hermosa Beach area are attributable to mobile sources (construction and on-road) such as major roadways like Pacific Coast Highway and Artesia Boulevard located along the northern boundary.

Furthermore, mobile sources of TACs in the city would be reduced through various PLAN Hermosa Mobility Element and Land Use + Design Element policies, including minimizing truck impacts through the city (Mobility Element Policy 8.1), discouraging excessive idling by commercial vehicles (Mobility Element Policy 8.2), and a consideration to prohibit mobile advertising (Mobility Element Policy 8.6). In addition, the policies described above in Impact 4.2-2 to reduce mobile source emissions and construction emissions would reduce diesel PM emissions from PLAN Hermosa's planned land uses. Furthermore, statewide efforts such as CARB's On-Road Heavy-Duty Diesel Vehicles (In Use) Regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Heavier trucks were required to be retrofitted with particulate matter filters beginning January 1, 2012, and the State requires replacement of older trucks, starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent. The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses, as well as to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. Because of these types of regulations, including additional EPA-mandated controls (cleaner vehicles, cleaner fuels, and cleaner engines), mobile source air toxics (MSATs), which are the primary source of TACs, are now predicted by the Federal Highway Administration (2012) to decrease by 83 percent from 2010 to 2050 (2012).

Long-Term Stationary Sources

Based on the PLAN Hermosa Land Use Map, only two areas of the city, Creative Light Industrial and Service Commercial, are designated for uses that could contain new or expanded stationary TAC sources, including gasoline dispensing stations. Gasoline dispensing stations are a source of gasoline vapors, which include TACs such as benzene, methyl tertiary-butyl ether, toluene, and xylene. Benzene is the primary TAC associated with gas stations. Gasoline vapors are released during the filling of stationary underground storage tanks and during the transfer from those underground tanks to individual vehicles.

The SCAQMD has stringent requirements for the control of gasoline vapor emissions from gasoline-dispensing facilities. SCAQMD Rule 461 (Gasoline Transfer and Dispensing) limits emissions of organic compounds from gasoline dispensing facilities. Rule 461 prohibits the transfer or allowance of the transfer of gasoline into stationary tanks at a gasoline dispensing facility unless a CARB-certified Phase I vapor recovery system is used, and further prohibits the transfer or allowance of the transfer of gasoline from stationary tanks into motor vehicle fuel tanks at a gasoline dispensing facility unless a CARB-certified Phase II vapor recovery system is used during each transfer. Vapor recovery systems collect gasoline vapors that would otherwise escape into the air during bulk fuel delivery (Phase I) or fuel storage and vehicle refueling (Phase II). Phase I vapor recovery system components include the couplers that connect tanker trucks to the underground tanks, spill containment drain valves, overfill prevention devices, and vent pressure/vacuum valves. Phase II vapor recovery system components include gasoline dispensers, nozzles, piping, breakaway hoses, faceplates, vapor processors, and system monitors. Rule 461 also requires fuel storage tanks to be equipped with a permanent submerged fill pipe tank that prevents the escape of gasoline vapors. In addition, all gasoline must be stored underground with valves installed on the tank vent pipes to further control gasoline emissions.

Gasoline dispensing facilities are also regulated by SCAQMD Rule 1401 (New Source Review of Toxic Air Contaminants), which provides for the review of TAC emissions in order to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. Pursuant to SCAQMD Rule 1401, stationary sources having the potential to emit TACs, including gas stations, are required to obtain permits

from the SCAQMD. Permits may be granted to these operations provided they are operated in accordance with applicable SCAQMD rules and regulations. The SCAQMD's permitting procedures require substantial control of emissions, and permits are not issued unless TAC risk screening or TAC risk assessment can show that risks are not significant. The SCAQMD may impose limits on annual throughput to ensure risks are within acceptable limits. (In addition, California has statewide limits on the benzene content in gasoline, which greatly reduces the toxic potential of gasoline emissions.) Under Rule 1401, the following requirements must be met before a permit is granted to the proposed gasoline station component of a project:

- The cumulative increase from all TACs emitted from a single piece of equipment in maximum individual cancer risk (MICR) shall not exceed:
  - One in one million (1×10^{-6}) if Best Available Control Technology for Toxics (T-BACT) is not used; or
  - Ten in one million (10×10^{-6}) if T-BACT is used.
- The cumulative cancer burden from all TACs emitted from a single piece of equipment (increase in cancer cases in the population) shall not exceed 0.5.
- Neither the chronic hazard index (HIC), the 8-hour chronic hazard index (HIC8), nor the total acute hazard index (HIA) from all TACs emitted from a single piece of equipment shall exceed 1.0 for any target organ system, or an alternate hazard index level deemed to be safe.

According to the SCAQMD (2014), there are currently about 3,140 retail gasoline stations in the South Coast Air Basin. The SCAQMD has conducted an industry-wide health risk assessment for these retail gasoline stations using dispersion modeling. According to this assessment, 91 percent of the gasoline stations were demonstrated to generate a health risk within the acceptable threshold and 9 percent of the stations have risks above the threshold. Approximately half of the 9 percent of gasoline stations in the South Coast Air Basin with risks above the health risk threshold were established prior to SCAQMD Rule 1401, adopted in 1990, and thus were not subject to the TAC limitations required by this rule (SCAQMD 2014).

The SCAQMD has developed screening health risk tables for a generic retail gasoline service station. The modeled stations are assumed to have Phase I and Phase II vapor recovery systems and calculate for cancer risk accounting for the meteorological conditions of different locations throughout the South Coast Air Basin. Cancer risks from any future proposed gasoline service station in Hermosa Beach can be estimated from the SCAQMD screening tables.

The issuance of SCAQMD air quality permits and compliance with all SCAQMD, state, and federal regulations regarding stationary TACs, including gasoline dispensing stations and other stationary sources, reduce potential stationary sources of TAC emissions such that sensitive receptors in the city would not be exposed to substantial air pollutant concentrations. The SCAQMD limits public exposure to toxic air contaminants through a number of programs. The SCAQMD reviews the potential for TAC emissions from new and modified stationary sources through the SCAQMD permitting process for stationary sources. TAC emissions from existing stationary sources are limited by:

1) SCAQMD Rule 1401, which requires that construction or reconstruction of a major stationary source emitting hazardous air pollutants listed in Section 112(b) of the Clean Air Act be constructed with Best Available Control Technology and comply with all other applicable requirements.

2) Implementation of the Air Toxics "Hot Spot" (AB 2588) program as described in the Regulatory Setting subsection above.
3) Implementation of the federal Title III Toxics program.

Facilities and equipment that require permits from the SCAQMD are screened from risks from toxic emissions and can be required to install Toxic Best Available Control Technology (T-BACT) to reduce the risks to below significant if deemed necessary by the SCAQMD. T-BACTs are the most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions for toxic air contaminants.

In addition to these requirements, PLAN Hermosa contains several policies that protect city residents from toxic air pollution. Governance Element Policy 7.5 requires an evaluation and disclosure (e.g., health checklists, health impact assessments) of health impacts or benefits for all discretionary projects. Land Use and Design Element Policy 1.7 ensures the placement of new uses does not create or exacerbate nuisances between different types of land uses, and Sustainability + Conservation Element Policy 3.1 seeks to improve overall respiratory health for residents through regulation of stationary and mobile sources of air pollution, as feasible.

Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.2-6 ***Would PLAN Hermosa Create Objectionable Odors Affecting a Substantial Number of People?*** *Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that could generate odors or expose existing receptors to odors. However, PLAN Hermosa policies and programs and compliance with SCAQMD rules and regulations would result in a* ***less than significant*** *impact.*

The occurrence and severity of odor impacts depends on numerous factors including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause physical harm, they can be very unpleasant, leading to considerable distress among the public and often generating complaints to local governments and regulatory agencies. Projects with the potential to frequently expose individuals to objectionable odors would be deemed to have a significant impact. Typical facilities that generate odors include wastewater treatment facilities, sanitary landfills, composting facilities, petroleum refineries, chemical manufacturing plants, and food processing facilities, among others. However, food service, retail, and/or or residential land uses could also generate substantial odor sources from improper garbage disposal.

Hermosa Beach does not contain any large sources of odors. SCAQMD Rule 402 (Nuisance) would prohibit any land use (except agricultural land uses) from generating odors that "endanger the comfort, repose, health or safety of any such persons of the public" (SCAQMD 1976). Agricultural land uses are not permitted within the incorporated city and therefore would not generate substantial odors in Hermosa Beach. Therefore, implementation of PLAN Hermosa and compliance with SCAQMD rules and regulations would ensure that a substantial number of receptors are not exposed to substantial odor emissions. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

Although air quality emissions associated with PLAN Hermosa would be compared with SCAQMD thresholds of significance on a project-by-project basis, these emissions also cumulatively contribute to the air quality in the basin. Therefore, the cumulative context for air quality is the South Coast Air Basin. Certain localized pollutants such as CO, PM_{10}, $PM_{2.5}$, and TACs have a cumulative context of the surrounding land uses and emission sources where they would be emitted. The localized cumulative effect of these localized pollutants is important to consider when evaluating impacts on sensitive receptors.

IMPACT 4.2-7 ***Would PLAN Hermosa Contribute to Cumulative Air Quality Impacts?*** *Implementation of PLAN Hermosa in addition to anticipated growth in the South Coast Air Basin would increase the amount of air quality emissions occurring within the basin and affect the region's ability to attain ambient air quality standards. This would result in a* ***cumulatively considerable*** *impact.*

Construction Emissions

As discussed previously, construction air quality emissions would result in a significant and unavoidable impact. This, in combination with other new construction projects in the SCAQMD region, would add to a cumulative effect on air quality pollutant levels in the area. While construction air quality emissions are generally short term, as they only occur during the construction of a project, because the intensity and schedule of construction activities cannot be determined, it would be speculative to conclude that any level of mitigation would reduce daily construction emissions below the SCAQMD thresholds of significance. Implementation of mitigation measures **MM 4.2-2a** through **MM 4.2-2e** would reduce the potential for air quality impacts. However, as stated previously, in many cases, because of the amount of construction required for a project, even if all feasible mitigation is implemented, daily emissions could still exceed the significance thresholds. In addition, the City would not have control over projects outside its boundaries and therefore could not require mitigation for air quality impacts for these projects. Because it has been determined that implementation of mitigation measures **MM 4.2-2a** through **MM 4.2-2e** would not reduce construction-related air quality impacts to a less than significant level, the various future projects would add to the cumulative air quality emissions from construction in the SCAQMD region. As such, this impact would be **cumulatively considerable** and **significant and unavoidable.**

Operational Emissions

Implementation of PLAN Hermosa would generate long-term operational emissions from a variety of proposed land uses. Implementation of PLAN Hermosa Sustainability + Conservation Element, Mobility Element, and Land Use + Design Element policies and programs would reduce mobile and area source emissions associated with operation of future land uses. Because these policies and programs affect a wide range of land use and transportation factors (e.g., accessibility to transit, parking availability, bicycle and pedestrian infrastructure, distance from residential to commercial and employment uses), mobile source emissions could be substantially reduced. Daily operational emissions associated with the proposed land uses would remain below the SCAQMD's operational thresholds of significance. As shown in **Table 4.2-2**, daily operational emissions associated with PLAN Hermosa land uses would not exceed SCAQMD thresholds of significance.

As discussed in Impact 4.2-4, the PLAN Hermosa traffic analysis (see Section 4.14, Transportation) indicates that one signalized intersection in the city would operate at LOS E in 2040, and similar conditions would be expected at other intersections throughout the region. No area in the

SCAQMD region has exceeded the NAAQS for carbon monoxide since 2003 (City of Hermosa Beach 2014). Furthermore, emissions in the future would decrease due to the turnover in vehicle fleets and emissions technology, which is documented in the CARB mobile source emissions model EMFAC2014. Considering this information, it is not anticipated that implementation of PLAN Hermosa would cause a cumulatively considerable contribution to potential CO hot spots in the city or the region.

Implementation of PLAN Hermosa would contribute TAC emissions in the city from mobile, area, and stationary sources associated with proposed land uses. PLAN Hermosa focuses on infill projects and siting residential and commercial land use in proximity to each other to allow non-motorized trips for shopping, work, and recreational trips. Implementation of PLAN Hermosa Mobility Element Policies 8.1, 8.2, 8.5, and 8.6 would reduce TAC emissions from commercial vehicles by limiting idling and consider a prohibition on mobile advertising while encouraging better fuel efficiency and the use of technology that reduces air pollution. As discussed in Impact 4.2-5, CARB's Air Quality and Land Use Handbook identifies acceptable distances at which to place sensitive receptors from TAC sources. Therefore, implementation of PLAN Hermosa would reduce future TAC emissions and avoid siting sensitive receptors near substantial TAC sources. For these reasons, it is not anticipated that PLAN Hermosa would cause a cumulatively considerable contribution to the exposure of sensitive receptors to TAC emissions. Therefore, impacts from operational air quality emissions would be **less than cumulatively considerable**.

Mitigation Measures

Implement mitigation measures **MM 4.2-2a** through **MM 4.2-2e.**

Significance After Mitigation

Even with the implementation of mitigation measures **MM 4.2-2a** through **MM 4.2-2e**, SCAQMD Rule 403, and PLAN Hermosa policies, it is still anticipated that future construction projects, in combination with other construction in the SCAQMD area, would have the potential to generate daily construction emissions that exceed the SCAQMD thresholds of significance. As such, construction-related cumulative air quality impacts would be **cumulatively considerable** and **significant and unavoidable**.

4.2.5 REFERENCES

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4.3 Biological Resources

4.3.1 INTRODUCTION

This resource section evaluates the potential environmental effects related to biological resources associated with implementation of PLAN Hermosa. The analysis includes a review of special-status species, sensitive habitats, wetlands, wildlife movement, and planning efforts associated with biological resources. Policies and implementation actions presented in the PLAN Hermosa Parks + Open Space Element intend to protect coastal and marine habitat resources by protecting and restoring these spaces that are fundamental components of Hermosa Beach's environment.

NOP Comments: No comments were received in response to the Notice of Preparation (NOP) addressing biological resources concerns. Comments included written letters and oral comments provided at the NOP scoping meeting.

Reference Information: Information for this resource section is based on numerous sources, including the PLAN Hermosa Technical Background Report (TBR) and other publicly available documents. The TBR is included as **Appendix C**.

4.3.2 ENVIRONMENTAL SETTING

Appendix C-6 describes the vegetation, habitat, and wildlife in the planning area, including special-status species, sensitive habitats, and wetlands. A summary of that information is presented below.

Vegetative Communities: The vegetative communities in the city include urban/developed, beach sand, and non-native/ornamental. Urban/developed land uses encompass the majority of the planning area.

Urban/developed communities are classified as areas that have been heavily modified by humans, including roadways, existing buildings, and structures, as well as recreation fields, small parks, lawns, and other landscaped vegetation.

Non-native/ornamental areas in the planning area include the Greenbelt, South Park, Valley Park, and a hillside west of the Marineland Mobilehome Park that runs northward through several residential parcels to 24th Street. These areas could be considered urban cover as they largely comprise non-native landscaped vegetation; however, CalVEG classifies them as non-native/ornamental. For the purposes of the TBR, they are separate from the urban/developed cover type.

The entire length of the coastline in the planning area is characterized by sandy beach habitat, the beach sand habitat referenced above. This habitat is typically found between the intertidal zone and areas where vegetation becomes established, often forming dunes.

These communities are described below and shown in **Figure 4.3-1 (Vegetative Communities)**. **Table 4.3-1 (Acreages of Vegetative Communities within the Coastal and Inland Zones)** summarizes the acreages of each vegetative community within the Coastal Zone and the inland portion of the city.

Special-Status Plants: Based on the results of the California Natural Diversity Database (CNDDB) and the California Native Plant Society (CNPS) database searches of sensitive natural resources, the presence of special-status plants is highly unlikely. This is due to the extirpation or high modification of natural habitats in Hermosa Beach. The open space areas are routinely landscaped and frequented by human traffic. The beach is extremely disturbed, and no vegetated dune habitat remains. **Figure 4.3-2 (Previously Recorded Occurrences of Special-Status Species)** illustrates the special-status plants with the potential to occur in the planning area.

TABLE 4.3-1
ACREAGES OF VEGETATIVE COMMUNITIES WITHIN THE COASTAL AND INLAND ZONES

Zone	Vegetative Community	Area (acres)
Coastal	Urban/Developed	343
	Beach Sand	57
	Non-Native/Ornamental	19
	Total	**419**
Inland	Urban/Developed	479
	Non-Native/Ornamental	18
	Total	**497**

Source: City of Hermosa Beach

Special-Status Wildlife: Based on the database search results, two wildlife species have the potential to occur within the planning area. The California least tern (*Sterna antillarum-bowni*) is a federally endangered species and is state-listed as endangered. This species is a summer visitor that breeds along the Southern California coast from April to September. California least terns nest in colonies on beaches or islands cleared of vegetation (USFWS 2006). The nearest breeding colonies to the planning area are in Venice Beach and at the Port of Los Angeles (USFWS 2006). There are no records of this species nesting in the planning area; however, California least terns likely forage offshore.

The western snowy plover (*Charadrius nivosus nivosus*) is a federally endangered species and a California species of special concern. Western snowy plover habitat is known to occur in Hermosa Beach. The habitat subunit stretches roughly 0.5 mile from 11th Street southward to 1st Street and totals approximately 27 acres. This subunit supports wintering flocks of snowy plover (USFWS 2012).

Two special-status wildlife species (California least tern and western snowy plover) have the potential to occur in the beach habitats in the planning area, as shown in **Table 4.3-3 (Special-Status Wildlife Species with Potential to Occur Within and Surrounding the Planning Area)** and **Figure 4.3-2**.

Marine Wildlife: Offshore resources of Santa Monica Bay include a rich diversity of migratory and resident species of mammals, birds, fishes, and invertebrates. Common coastal seabirds found foraging near the shore of Hermosa Beach include western (*Aechmorphorus occidentalis*) and Clark's grebes (*A. clarkii*), cormorants (*Phalacrocorax* spp.), loons (*Gavia* spp.), California brown pelicans (*Pelecanus occidentalis*), and gulls. Coastal birds are at their highest densities during the winter months. Mammal species found in the area include various cetaceans (whales, dolphins, and porpoises), pinnipeds (seals and sea lions), and sea otters. All marine mammals are protected under the Marine Mammal Protection Act.

Beach Sand and Intertidal Zone: Sandy beach habitat is typically found between the intertidal zone, the area between the low tide and high tide marks, and the area where terrestrial vegetation cover is established. Sandy beach habitats can often form dunes, which are hills of sand constructed either through aeolian (wind) or alluvial (water) transport. The beach habitat is heavily used for recreation and primarily barren, except for man-made structures such as nearby lifeguard towers or volleyball courts. Occasionally kelp wrack collects on the beach, which is then removed by tractor. Beached kelp wrack can provide a food source for invertebrates and provides cover for numerous organisms that inhabit the sand of the intertidal zone. These organisms in turn act as a food source for, and attract, various species of shorebirds such as sanderling (*Calidris alba*), western sandpiper (*Calidris maudi*), least sandpiper (*Calidris minutilla*),

and willet (*Tringa semipalmata*), as well as various species of gull (*Larus spp.*). The beach may also provide habitat for special-status species. The state and federally listed western snowy plover is known to winter on the shores of the city, though nesting within the city has not been recorded since 1949. The nearest breeding colony to Hermosa Beach is located at Bolsa Chica in Orange County (City of Hermosa Beach 2015).

The intertidal zone plays an important role in coastal ecology, and sand beaches are among the most extensive coastal habitats. Sand beaches and the organisms that utilize them are subjected to a wide variety of physical instability, causing this habitat to generally be less diverse than other environments, but the beaches provide foraging and breeding habitat for a variety of species including shorebirds. Organisms occupying intertidal sand beaches are usually limited by abiotic factors such as tidal height, exposure to wave action, and the composition of the sediment.

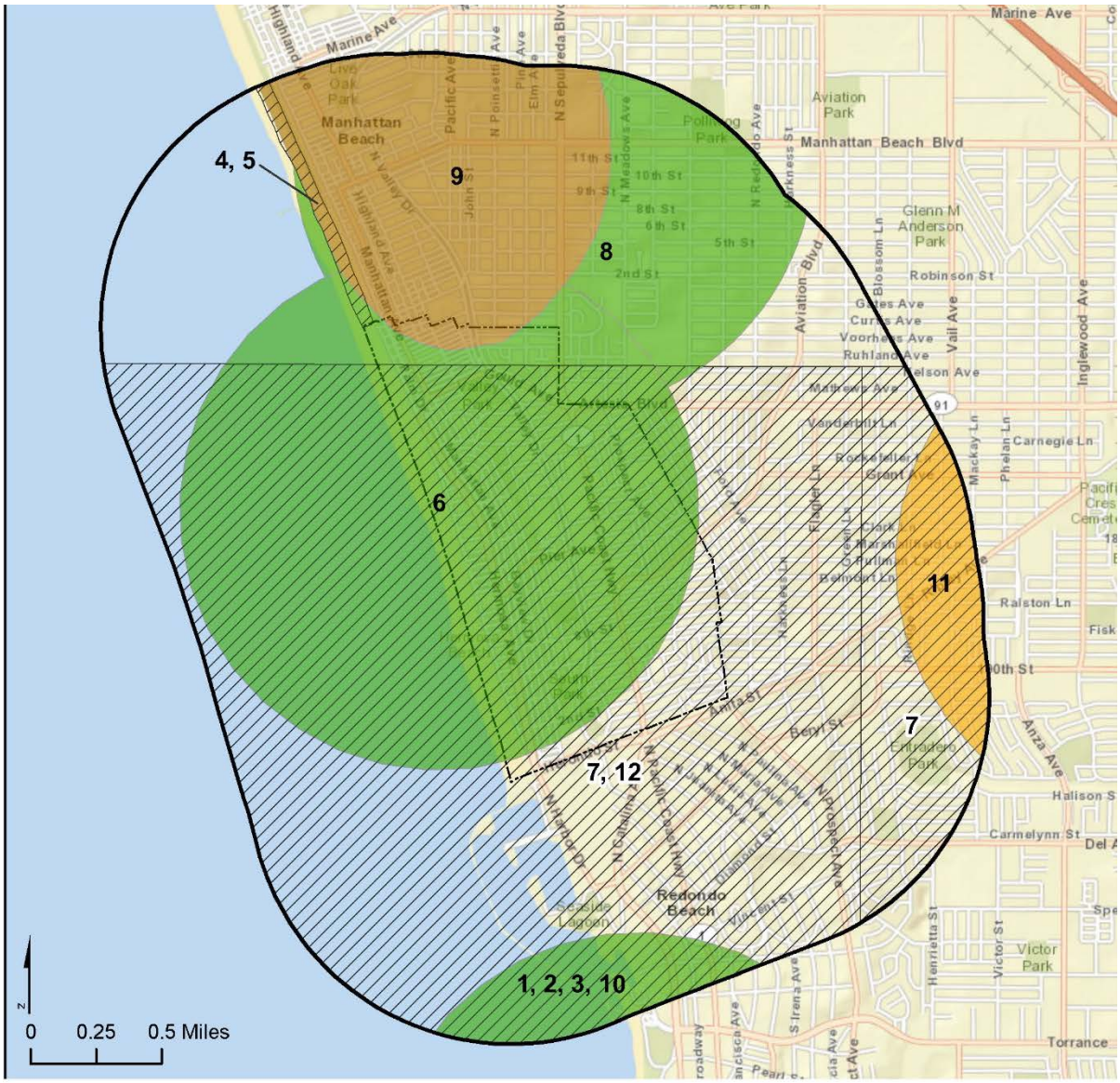
Dominant species include amphipods (*Synchelidium spp.*), polychaete worms (*Nerine cirratulus* and *Euzonus mucronata*), and isopods (*Excirolana chiltoni*). Zonation patterns for intertidal sand beach assemblages are less distinct than rocky intertidal communities. Small beach hoppers (*Orchestoidea sp.*) and kelp flies (*Coelopa vanduzeei*) are abundant in clumps of giant kelp (*Macrocystis pyrifera*) cast up on the beach at the high tide line (City of Hermosa Beach 2015).

Dominant fishes that use the intertidal zone include small active plankton feeders such as northern anchovy (*Engraulis mordax*) and topsmelt (*Atherinops affinis*), roving substrate feeders such as the barred surfperch (*Amphistichus argenteus*), and flatfishes such as juvenile California halibut (*Paralichthys californicus*). Other fishes that migrate through the surf zone include yellowfin croaker (*Umbrina roncador*) and spotfin croaker (*Roncador stearnsii*), and beach spawners such as California grunion (*Leuresthes tenuis*) are also expected to occur (City of Hermosa Beach 2015).

Sensitive Natural Communities: Two habitats (southern coastal bluff scrub and southern dune scrub) located in the planning area were identified in the CNDDB query as locally sensitive habitats. Southern coastal bluff scrub occurs south of the planning area along the bluffs of the Palos Verdes Peninsula. Southern dune scrub occurs north of the planning area in the El Segundo dunes. Neither habitat is present in or located adjacent to the planning area.

FIGURE 4.3-1
VEGETATIVE COMMUNITIES

FIGURE 4.3-2
PREVIOUSLY RECORDED OCCURRENCES OF SPECIAL-STATUS SPECIES



Legend

- City Boundary
- 1-Mile Buffer

CNDDB Occurrence Type

- Mammal
- Reptile
- Invertebrate
- Plant

Map ID	Scientific Name	Common Name	Federal Listing	State Listing	Rare Plant Rank
1	*Aphanisma blitoides*	aphanisma	None	None	1B.2
2	*Atriplex pacifica*	south coast saltscale	None	None	1B.2
3	*Atriplex parishii*	Parish's brittlescale	None	None	1B.1
4	*Brennania belkini*	Belkin's dune tabanid fly	None	None	
5	*Cicindela senilis frosti*	senile tiger beetle	None	None	
6	*Dithyrea maritima*	beach spectaclepod	None	Threatened	1B.1
7	*Glaucopsyche lygdamus palosverdesensis*	Palos Verdes blue butterfly	Endangered	None	
8	*Navarretia prostrata*	prostrate vernal pool navarretia	None	None	1B.1
9	*Perognathus longimembris pacificus*	Pacific pocket mouse	Endangered	None	
10	*Phacelia stellaris*	Brand's star phacelia	None	None	1B.1
11	*Phrynosoma blainvillii*	coast horned lizard	None	None	
12	*Rhaphiomidas terminatus terminatus*	El Segundo flower-loving fly	None	None	

TABLE 4.3-2
SPECIAL-STATUS PLANT SPECIES WITH POTENTIAL TO OCCUR WITHIN AND SURROUNDING THE PLANNING AREA

Species	Status USFWS/ CDFW/CNPS	Habitat and Blooming Time	Potential for Occurrence
aphanisma *Aphanisma blitoides*	–/–/1B.2	Sandy soils in coastal bluff scrub, coastal dunes, and coastal scrub. Elev: 3-1,000 ft. (1-305 m.) Blooms: March-June	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	FE/SE/1B.1	Coastal dunes, coastal scrub, and the edges of coast salt or brackish marshes and swamps. Elev: 3-115 ft. (1-35 m.) Blooms: June-Oct.	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
alkali milk-vetch *Astragalus tener* var. *tener*	–/–/1B.2	Alkaline soils. Playas, valley and foothill grassland (adobe clay), and vernal pools. Elev: 3-197 ft. (1-60 m.) Blooms: March-June	Not expected to occur: No suitable habitat is present within the planning area.
South Coast saltscale *Atriplex pacifica*	–/–/1B.2	Playas, coastal bluff scrub, coastal dunes, and coastal scrub. Elev: 0-459 ft. (0-140 m.) Blooms: March-Oct.	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
Parish's brittlescale *Atriplex parishii*	–/–/1B.1	Alkaline soils in playas, vernal pools and chenopod scrub. Elev: 82-6,233 ft. (25-1900 m.) Blooms: June-Oct.	Not expected to occur: No suitable habitat is present within the planning area.
southern tarplant *Centromadia parryi* ssp. *australis*	–/–/1B.1	Vernally mesic valley and foothill grassland, vernal pools, and the margins of marshes and swamps. Elev: 0-1,575 ft. (0-480 m.) Blooms: May-Nov.	Not expected to occur: No suitable habitat is present within the planning area.
Orcutt's pincushion *Chaenactis glabriuscula* var. orcuttiana	–/–/1B.1	Sandy coastal bluff scrub and coastal dunes. Elev: 0-328 ft. (0-100 m.) Blooms: Jan.-Aug.	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
coastal goosefoot *Chenopodium littoreum*	–/–/1B.2	Coastal dunes. Elev: 33-98 ft. (10-30 m.) Blooms: April-Aug.	Not expected to occur: No suitable habitat is present within the planning area.
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	FC/SE/1B.1	Sandy coastal scrub, and valley and foothill grassland. Elev: 492-4,003 ft. (150-1,220 m.) Blooms: April-July	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
beach spectaclepod *Dithyrea maritima*	–/ST/1B.1	Coastal dunes and sandy coastal scrub. Elev: 10-164 ft. (3-50 m.) Blooms: March-May	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
many-stemmed dudleya *Dudleya multicaulis*	–/–/1B.2	Often on clay soil in chaparral, coastal scrub, and valley and foothill grassland. Elev: 49-2,592 ft. (15-790 m.) Blooms: April-July	Not expected to occur: No suitable habitat is present within the planning area.
island green dudleya *Dudleya virens* ssp. *insularis*	–/–/1B.2	Rocky substrates in coastal bluff scrub and coastal scrub. Elev: 16-984 ft. (5-300 m.) Blooms: April-June	Not expected to occur: No suitable habitat is present within the planning area.

Species	Status USFWS/ CDFW/CNPS	Habitat and Blooming Time	Potential for Occurrence
island wallflower *Erysimum insulare*	–/–/1B.3	Coastal bluff scrub and coastal dunes. Elev: 0-984 ft. (0-300 m.) Blooms: March-July	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
Coulter's yellow goldfields *Lasthenia glabrata* ssp. *coulteri*	–/–/1B.1	Coastal salt marshes and swamps, playas and vernal pools. Elev: 3-4,003 ft. (1-1,220 m.) Blooms: Feb.-June	Not expected to occur: No suitable habitat is present within the planning area.
sea dahlia *Leptosyne maritima*	–/–/2B.2	Coastal bluff scrub and coastal dunes. Elev: 16-492 ft. (5-150 m.) Blooms: March-May	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
spreading navarettia *Navarretia fossalis*	FT/–/1B.1	Assorted shallow freshwater marshes and swamps, and chenopod scrub, playas and vernal pools. Elev: 98-2,149 ft. (30-655 m.) Blooms: April-June	Not expected to occur: No suitable habitat is present within the planning area.
prostrate vernal pool navarettia *Navarretia prostrata*	–/–/1B.1	Mesic areas in coastal scrub, meadows and seeps, vernal pools, and alkaline valley and foothill grasslands. Elev: 49-3,970 ft. (15-1,210 m.) Blooms: April-July	Not expected to occur: No suitable habitat is present within the planning area.
California Orcutt grass *Orcuttia californica*	FE/SE/1B.1	Vernal pools. Elev: 49-2,165 ft. (15-660 m.) Blooms: April-Aug.	Not expected to occur: No suitable habitat is present within the planning area.
Brand's star phacelia *Phacelia stellaris*	FC/-/1B.1	Coastal dunes and coastal scrub. Elev: 3-1,312 ft. (1-400 m.) Blooms: March-June	Not expected to occur: No suitable habitat is present within the planning area. Sandy coastline is unvegetated and routinely disturbed.
Ballona cinquefoil *Potentilla multijuga*	–/–/1A	Brackish meadows and seeps. Elev: 0-6 ft. (0-2 m.) Blooms: June-Aug.	Not expected to occur: No suitable habitat is present within the planning area.
estuary seablight *Suaeda esteroa*	-/-/1B.2	Coastal salt marshes and swamps. Elev: 0-16 ft. (0-5 m.) Blooms: May-Jan.	Not expected to occur: No suitable habitat is present within the planning area.

KEY	
Federal & State Status	**CNPS Rare Plant Rank**
(FE) Federal Endangered	Rareness Ranks
(FT) Federal Threatened	(1A) Presumed Extinct in California
(FC) Federal Candidate	(1B) Rare, Threatened, or Endangered in California or elsewhere
(SE) State Endangered	(2) Rare, Threatened, or Endangered, but more common elsewhere
(ST) State Threatened	Threat Ranks
(SSC) State Species of Special Concern	Seriously threatened in California
	Fairly threatened in California
	Not very threatened in California

TABLE 4.3-3
SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR WITHIN AND SURROUNDING THE PLANNING AREA

Species	Status USFWS/CDFW	Habitat	Potential for Occurrence
Invertebrates			
vernal pool fairy shrimp *Branchinecta lynchi*	FT/–	Found only in vernal pools and vernal pool-like habitats (USFWS 2005).	Not expected to occur: No vernal pool habitat is present within the planning area.
San Diego fairy shrimp *Branchinecta sandiegonensis*	FE/–	Small, shallow vernal pools. Occasionally occur in ditches and road ruts with suitable conditions. Have never been found in permanent water bodies (USFWS 1998a).	Not expected to occur: No vernal pool habitat is present within the planning area.
El Segundo blue butterfly *Euphilotes battoidea allyni*	FE/–	Known only from the El Segundo sand dunes. Dependent on food plant, coast buckwheat (*Eriogonum parvifolium*) (USFWS 1998b).	Not expected to occur: No suitable habitat is present within the planning area. Planning area is outside species range.
Palos Verdes blue butterfly *Glaucopsyche lygdamus palosverdesensis*	FE/–	Require one of two larval host plants: coast locoweed (*Astragalus trichopodus lonchus*) or deerweed (*Acmispon glaber*). Found in coastal sage scrub habitat (USFWS 2014c).	Not expected to occur: No suitable habitat is present within the planning area. Coastal sage scrub habitat has been extirpated from the planning area.
Amphibians			
California red-legged frog *Rana draytonii*	FT/SSC	Ponds/streams in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover in lowlands or foothills. Breeding habitat = permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Ephemeral wetland habitats require animal burrows or other moist refuges for estivation when the wetlands are dry. From sea level to 5,000 ft. (1,525 m.) (Nafis 2014).	Not expected to occur: No suitable aquatic breeding habitat is present within the planning area.
Reptiles			
coast horned lizard *Phrynosoma blainvillii*	–/SSC	Occur in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats. Range up to 4,000 feet (1,219 m) in the Sierra Nevada foothills, and up to 6,000 feet (1,800 m in the mountains of southern California (CDFW 2014b).	Not expected to occur: No suitable habitat is present within the planning area.
Birds			
tricolored blackbird *Agelaius tricolor*	-/SSC	Dominant nest substrate species includes cattails, bulrushes, Himalayan berry, agricultural silage. Dense vegetation is preferred but heavily lodged cattails not burned in recent years may preclude settlement. Need access to open water. Strips of emergent vegetation along canals are avoided as nest sites unless they are about 10 or more meters wide but in some ponds, especially where associated with Himalayan	Not expected to occur: No wetland habitat is present within the planning area.

Species	Status USFWS/CDFW	Habitat	Potential for Occurrence
		blackberries and deep water, settlement may be in narrower fetches of cattails. If sites are hard for an observer to reach, the site it is relatively suitable (Hamilton 2004).	
western snowy plover *Charadrius nivosus* ssp. *nivosus*	FT/SSC	Barren to sparsely vegetated sand beaches, dry salt flats in lagoons, dredge spoils deposited on beach or dune habitat, levees and flats at salt-evaporation ponds, river bars, along alkaline or saline lakes, reservoirs, and ponds (Cornell 2014).	Known to occur: Occupied designated critical habitat subunit on Hermosa Beach. Beach is wintering habitat however, no nesting birds have been recorded since 1949 (USFWS 2007).
southwestern willow flycatcher *Empidonax traillii extimus*	FE/SE	Dense riparian forest and scrub habitats associated with rivers, swamps, wetlands, lakes and reservoirs (USFWS 2002).	Not expected to occur: No suitable habitat is present within the planning area.
California black rail *Laterallus jamaicensis coturniculus*	–/ST	Yearlong resident of saline, brackish, and fresh emergent wetlands. Occurs most commonly in tidal emergent wetlands dominated by pickleweed or in brackish marshes supporting bulrushes, cattails and saltgrass (CDFW 2014b).	Not expected to occur: No wetland habitat is present within the planning area.
coastal California gnatcatcher *Polioptila californica californica*	FT/SSC	Scrub-dominated plant communities, strongly associated with coastal scrub, sage scrub, and coastal succulent scrub communities. Distribution ranges from southern Ventura County down through Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties (USFWS 2010).	Not expected to occur: No suitable habitat is present within the planning area. Coastal sage scrub habitat has been extirpated from the planning area.
light-footed clapper rail *Rallus longirostris levipes*	FE/SE	Coastal salt marshes, lagoons, and their maritime environs. Require shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high tide (USFWS 2009).	Not expected to occur: No suitable habitat is present within the planning area.
California least tern *Sternula antillarum browni*	FE/SE	Nest and roost in colonies on open beaches, forage near shore ocean waters and in shallow estuaries and lagoons (USFWS 2006).	May occur: Suitable nesting habitat present on the beach; however, no historical records of nesting in the planning area. Nearest breeding colonies are at the Port of Los Angeles and Venice Beach (USFWS 2006). May forage in offshore waters.
least Bell's vireo *Vireo bellii pusillus*	FE/SE	Obligate riparian breeder. Cottonwood willow, oak woodlands, and mule fat scrub along watercourses (Kus 2002).	Not expected to occur: No riparian habitat is present within the planning area.
Mammals			
western mastiff bat *Eumops perotis californicus*	-/SSC	Open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, and desert scrub. Roosts in crevices on vertical cliff faces, high buildings, trees, and tunnels (CDFW 2014b).	Not expected to occur: No suitable habitat is present within the planning area.

Species	Status USFWS/CDFW	Habitat	Potential for Occurrence
Pacific pocket mouse *Perognathus longimembris pacificus*	FE/SSC	Found predominantly on sandy substrates in coastal sage scrub, coastal strand, coastal dune, and river alluvium, on marine terraces within 2.5 miles of the ocean (USFWS 1998c).	Not expected to occur: No suitable habitat is present within the planning area. No records of this species in Los Angeles County since 1938. Closest known population is at Dana Point in Orange County (USFWS 1998c).

Key to State & Federal Status	
(FE) Federal Endangered	(SE) State Endangered
(FT) Federal Threaten	(ST) State Threatened
(FC) Federal Candidate	(SSC) State Candidate

4.3.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to biological resources, including special-status species and habitat, in the planning area. They provide the regulatory framework to address all aspects of biological resources that would be affected by implementation of PLAN Hermosa. The regulatory setting for biological resources is discussed in detail in **Appendix C-6.**

FEDERAL

- **Endangered Species Act:** The Endangered Species Act of 1973 (ESA), as amended, provides protective measures for federally listed threatened and endangered species, including their habitats, from unlawful take (16 United States Code [USC] Sections 1531–1544). The ESA defines "take" to mean "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Title 50, Part 222, of the Code of Federal Regulations (50 CFR Section 222) further defines "harm" to include "an act which actually kills or injures fish or wildlife. Such acts may include habitat modification or degradation where it actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns including feeding, spawning, rearing, migrating, feeding, or sheltering."
- **Clean Water Act:** The basis of the Clean Water Act (CWA) was established in 1948; however, it was referred to as the Federal Water Pollution Control Act. The act was reorganized and expanded in 1972 (33 USC Section 1251), and at this time the Clean Water Act became the act's commonly used name. The basis of the CWA is the regulation of pollutant discharges into waters of the United States, as well as the establishment of surface water quality standards.
- **Migratory Bird Treaty Act:** Migratory birds are protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 USC Sections 703–711). The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Section 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR Section 21). The majority of birds found in the vicinity of Hermosa Beach would be protected under the MBTA.
- **Marine Mammal Protection Act:** Under the Marine Mammal Protection Act of 1972, the Secretary of Commerce delegated the authority to protect all cetaceans and pinnipeds to the National Marine Fisheries Service. The Secretary of the Interior is responsible for protecting sea otters and delegated this authority to the US Fish and Wildlife Service (USFWS). The act established a moratorium on the taking of marine mammals in waters under US jurisdiction. Under the act, "taking" includes hunting, capturing, and killing and attempting to harass, hunt, capture, or kill any marine mammal. "Harassment" is defined as any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild.
- **Coastal Zone Management Act:** In accordance with the Coastal Zone Management Act and the Coastal Zone Act Reauthorization Amendments of 1990, all federal activities must be consistent, to the maximum extent practicable, with the enforceable policies of each affected state's Coastal Zone Management program. The programs set forth policies and standards regarding public and private use of land and water in the Coastal Zone.

STATE

- **California Endangered Species Act:** The California Endangered Species Act (CESA) mandates that state agencies should not approve projects that would jeopardize the continued existence of endangered or threatened species if reasonable and prudent

alternatives are available. Take authorizations from the California Department of Fish and Wildlife (CDFW) are required for any unavoidable impact on state-listed species resulting from proposed projects.

- **Santa Monica Bay Restoration Commission:** The Santa Monica Bay Restoration Commission is an independent state organization devoted to restoring and protecting Santa Monica Bay and its resources. The State of California and the US Environmental Protection Agency established the Santa Monica Bay Restoration Project (SMBRP) as a National Estuary Program in December 1988. The SMBRP was formed to develop the Santa Monica Bay Restoration Plan to ensure the long-term health of the bay and its watershed. The primary mission of the SMBRP is to facilitate and oversee the implementation of the plan.
- **California Coastal Act of 1976:** The California Coastal Act of 1976 and the California Coastal Commission, the state's coastal protection act and planning agency, were established by voter initiative in 1972 to plan for and regulate new development and to protect public access to and along the shoreline. The Coastal Act contains policies to guide local and state decision-makers in the management of coastal and marine resources. To provide maximum public access to the coast and public recreation areas, the Coastal Act directs each local government located within the Coastal Zone to prepare a Local Coastal Program (LCP) consistent with Section 30501 of the Coastal Act, in consultation with the Coastal Commission and with public participation.

LOCAL

- **City of Hermosa Beach General Plan:** The City's General Plan was last adopted in October 1979. Policies that relate to natural resources are included in the Conservation and Open Space elements of the existing General Plan. Policies address preserving and enhancing open space areas, including the beach; prohibiting oil drilling on the beach or by offshore platform; and minimizing the effects of water runoff.
- **City of Hermosa Beach Local Coastal Program (LCP):** An LCP consists of the Coastal Land Use Plan (general plan–level policies and maps) and a Local Implementation Program (coastal zoning code, zoning maps, and implementing ordinances). The City does not have a certified LCP. The Coastal Land Use Plan component, adopted by the City and certified by the California Coastal Commission in 1981, as amended, does not include policies or programs specifically related to biological resources.
- **City of Hermosa Beach Municipal Code:** Chapter 8.44 of the Municipal Code ensures the future health, safety, and general welfare of citizens of the city and the water quality of the receiving waters of the surrounding coastal areas. The chapter prohibits illicit discharges and connections, littering, disposal of landscape debris, non-stormwater discharges, and any discharges in violation of the Municipal National Pollutant Discharge Elimination System (NPDES) Permit. Chapter 12.36 strives to preserve and protect trees in the public right-of-way (parkway). The chapter prohibits the planting, maintenance, damage, destruction, or removal of parkway trees. Chapter 12.36 also states that a permit is necessary for the removal of a parkway tree. Additionally, during construction projects, the project proponent must take all necessary precautions to protect parkway trees.

4.3.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, the impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance and impacts

on biological resources are considered significant if adoption and implementation of PLAN Hermosa would:

1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS.

2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or the USFWS.

3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

5) Conflict with local policies or ordinances protecting biological resources, including but not limited to Chapter 12.36 of the Hermosa Beach Municipal Code protecting certain trees.

6) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

There are no habitat conservation plans, natural community conservation plans, or other related plans for lands in the planning area. Therefore, there would be no impact related to conflict with provisions of such a plan, and this threshold is not discussed further in this resource section.

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of PLAN Hermosa compared to existing conditions. The following analysis of impacts on biological resources is qualitative and based on available habitat, limited field review, and species occurrence information for the planning area, along with a review of regional information. A significant impact would occur if a substantial degradation in the quality of the environment or reduction of habitat would occur that would eliminate or reduce the population of a sensitive species in the planning area. The analysis assumes that all future and existing development in the planning area complies with all applicable laws, regulations, design standards, and plans. An analysis of cumulative impacts uses qualitative information for the planning area and the region.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa policies and implementation actions that address biological resources include the following:

Policies

Parks + Open Space Element

- **9.1 Protect critical habitats.** Preserve, protect, and improve remaining open space areas to the greatest extent possible to improve on existing limited habitats and prevent further extirpation of species.
- **9.2 Beach maintenance.** Consider species and habitat impacts and potential improvements when implementing beach maintenance activities.

- **9.3 Beach habitat.** Ensure beaches can function as a quality habitat for permanent and migratory species.
- **9.4 Coordinated habitat protection.** Enhance information sharing and research regarding habitat and wildlife with resource agencies and neighboring jurisdictions to ensure coordinated decision-making and management.
- **9.5 Minimal activity impacts to habitat.** Protect coastal and marine habitats from impacts from maintenance, construction, recreation, and industrial activities.
- **9.6 Tree protection.** Protect existing trees and tree copses that may provide temporary or permanent bird habitat and encourage replacement with specimen trees whenever they are lost or removed.
- **10.1 Urban forest.** Expand the urban forest and green spaces citywide on public and private property.
- **10.2 Native landscapes.** Require the planting of native, non-invasive landscaping and trees, and encourage the planting of edible landscapes and fruit trees.
- **10.3 Green space co-benefits.** Recognize the many positive qualities provided by landscaping, trees, and green space including reduced heat gain, controlled stormwater runoff, absorbed noise, reduced soil erosion, improved aesthetic character, and absorption of air pollution.
- **10.4 Scenic features.** Ensure landscaping, trees, and green spaces on public and private property are designed to conserve scenic and natural features of Hermosa Beach.
- **10.5 Park landscaping.** Landscaping in parks located within the Coastal Zone shall consist of non-invasive, native, drought-tolerant plants.

Implementation Actions

- LAND USE-13. Create a checklist and resource guide comprising local, state, and federal requirements for the development of offshore renewable energy facilities to streamline permitting requirements and improve public awareness.
- PARKS-24. Partner with local nonprofits such as the Santa Monica Bay Restoration Commission or the University of California, Los Angeles, to conduct education demonstration projects or presentations on coastal and marine habitat conservation.
- PARKS-25. Evaluate existing beach conditions and identify areas that may be appropriate to restore vegetated dune habitat. Pursue grant funding.
- PARKS-26. Review and revise as needed, the City's tree ordinance to ensure protection of existing parkway trees, and update the master tree list.
- PARKS-27. Complete and maintain a citywide public tree inventory, including quantity, species type, diameter, condition, trimming strategies and geo-codes and recommendations.
- PARKS-28. Maintain a list of approved plantings for trees and landscaping within City parkways.
- PARKS-29. Amend the municipal code to incorporate tree removal and replacement requirements. If preservation of existing mature trees is not feasible, removed trees shall be replaced at a minimum 2:1 ratio either on-site, or elsewhere as prescribed by the City.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.3-1 ***Would PLAN Hermosa Have a Substantial Adverse Effect on Any Special-Status Species?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in the development or expansion of beach-supporting uses that could adversely affect western snowy plover and California least tern. This impact would be* ***potentially significant****.*

The city is largely built out with urban uses and does not support habitat suitable for special-status plant species, as shown in **Table 4.3-2** and **Figure 4.3-1**. Additionally, PLAN Hermosa does not propose any land use changes that would convert existing open space areas to developed uses. Special-status plant species are not expected to occur because of the extirpation or modification of natural habitats in the planning area. In addition, beach areas are highly disturbed and no vegetated dune habitat remains. Therefore, no impacts on special-status plants species would occur.

Two special-status wildlife species (California least tern and western snowy plover) have the potential to occur in the beach habitats in the planning area, as shown in **Table 4.3-3** and **Figure 4.3-2**. Based on current and anticipated future extent of beach activity in the city (e.g., routine grooming, recreation, and patrolling), these species are expected to have a low potential of nesting. There are documented observations of the western snowy plover roosting at the beach during the winter adjacent to 19th and 22nd streets as well as from 26th to 28th streets (City of Hermosa Beach 2015). PLAN Hermosa would limit uses on the beach to structures that are essential to the safe operation and enjoyment of the beach (e.g., restrooms, playgrounds, stormwater facilities).

The Parks + Open Space Element includes several policies that would assist in the protection of these species. In particular, Policies 9.3, 9.4, 9.5, and 9.6 would protect coastal and marine habitats from construction impacts and would protect trees and beaches so they can function as a quality habitat for permanent and migratory species. For instance, under Policy 9.4, the City would enhance information sharing and research regarding habitat and wildlife with resource agencies and neighboring jurisdictions to ensure coordinated decision-making and management.

Further, the Parks + Open Space Element would support restoring potentially suitable habitat for special-status species by pursuing grant funding to initiate a process to restore vegetated dune habitat in appropriate areas of the beach.

However, the potential for impacts to these species is considered significant.

Mitigation Measures

MM 4.3-1 Construction of facilities on the beach that must occur between the months of April and August (roosting season for snowy plovers) will require preconstruction surveys to determine the presence of western snowy plovers or California least terns. If these species are present, no construction may occur until the species leave the roost based on review by a qualified biologist and consultation with the California Department of Fish and Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). If the project is within a Special Protection Zone, construction activities will not be allowed until western snowy plovers are no longer present. If the area is not within a Special Protection Zone, a qualified biologist will survey the area for western snowy plovers using established protocols and in coordination with the USFWS and CDFW to determine if plovers are present. If they are present, no work will occur until after snowy plovers leave the roost site for the season. The qualified biologist will also survey the area for California least terns using established protocols and in coordination

with the USFWS and CDFW to determine if California least terns are present. If surveys are negative for western snowy plovers or California least terns, work may proceed during the roosting period and the biologist will be present to monitor the establishment of the beach landing sites to ensure that no western snowy plovers or California least terns are injured or killed, should they arrive in the area subsequent to work commencing. The project will include fencing/walls that will prevent western snowy plovers or California least terns from entering the work areas. The biologist will conduct weekly site visits to ensure that fencing/walls are intact until construction activities are finished at the sites and all equipment is removed from the beach. The results of the preconstruction survey will be submitted to the City prior to the establishment of beach landing sites. All biological monitoring efforts will be documented in monthly compliance reports to the City.

Significance After Mitigation

Implementation of mitigation measure **MM 4.3-1** would specifically require that western snowy plovers or California least terns which roost on the beach are protected if they occur in an area proposed for beach-supporting facilities. Implementation of this mitigation measure would reduce this impact to **less than significant**.

IMPACT 4.3-2 ***Would PLAN Hermosa Have a Substantial Adverse Effect on Sensitive Biological Communities or Riparian Habitat?*** *Hermosa Beach does not contain any sensitive biological communities or riparian habitat that could be impacted by implementation of PLAN Hermosa.* ***No impact*** *would occur.*

Numerous federal regulations include protections for endangered species, coastal and marine areas and wildlife, and surface water resources. Additional California regulations, including the California Endangered Species Act and the Coastal Act, protect certain special-status species and important habitat areas, including Environmentally Sensitive Habitat Areas (ESHAs). In its plans, the City must comply with state and federal requirements to protect special-status species, native plants, beach areas, and the watershed. No ESHAs are present in Hermosa Beach.

PLAN Hermosa does not propose land use changes that would convert existing open space areas containing native vegetation or habitat to developed uses. Therefore, future development would not result in loss or degradation of riparian habitat or sensitive natural communities. Additionally, policies in the Parks + Open Space Element would protect sensitive habitat (Policies 9.3, 9.4, and 9.5 protect beach, coastal, and marine habitats). Policy 9.1 would require protection and preservation of critical habitats to prevent further extirpation of species.

The PLAN Hermosa policies and implementation actions discussed above would ensure that potential impacts on sensitive natural communities are reduced or avoided if those communities are later identified in the planning area. In addition, projects must comply with state laws that would reduce impacts on sensitive natural communities. Therefore**, no impact** would occur.

Mitigation Measures

None required.

IMPACT 4.3-3 ***Would PLAN Hermosa Have a Substantial Adverse Effect on Federally Protected Wetlands as Defined by Section 404 of the Clean Water Act?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could indirectly impact jurisdictional waters of the United States, particularly Santa Monica Bay. However, implementation of PLAN Hermosa policies and*

implementation actions and enforcement of existing grading and erosion regulations would result in a ***less than significant*** *impact.*

There are no federally protected wetlands or water bodies considered waters of the United States within the city boundaries.

However, Santa Monica Bay is a jurisdictional water of the United States and could be indirectly impacted by development in Hermosa Beach. The potential for stormwater flows to affect water quality would be controlled through implementation of Municipal Code Chapter 8.44 (Stormwater and Urban Runoff Pollution Control Regulations), which includes the City's Low-Impact Design Ordinance (Municipal Code Section 8.44.095) and the City's Green Street Policy. Construction activities resulting from implementation of PLAN Hermosa would also temporarily increase the amount of sediments and pollutants in stormwater runoff. Implementation of PLAN Hermosa policies and implementation actions and enforcement of existing grading and erosion regulations (Municipal Code Section 8.44.090 and NPDES Construction General Permit stormwater pollution prevention plan requirements) would result in a **less than significant** impact. See Impact 4.8-1, in Section 4.8, Hydrology and Water Quality, of this EIR for a more complete discussion of this impact.

Mitigation Measures

None required.

IMPACT 4.3-4 ***Would PLAN Hermosa Interfere Substantially with the Movement of Native Resident or Migratory Fish or Wildlife Species or Within an Established Migratory Corridor****? PLAN Hermosa would guide future development and reuse projects in the city in a manner that could impede wildlife movement in the planning area. However, PLAN Hermosa policies and implementation actions would result in a* ***less than significant*** *impact.*

Wildlife movement is affected when physical constraints impede the ability of wildlife to search for food, water, shelter, and mates. In addition, when urban development fragments open space or creates obstacles or distractions, it compromises the quality of wildlife corridors and further hinders wildlife movement. Hermosa Beach is an urbanized community. Open space and areas not disturbed or heavily used by humans are scarce and are generally located at the beach along the coastline, the Hermosa Valley Greenbelt, the hillside along Loma Drive, and the Valley neighborhood. Implementation of PLAN Hermosa would not result in any actions that would substantially alter these areas.

Although no established migratory routes have been identified in the city, several migratory wildlife species are found along the city's coastline. Common coastal seabirds found foraging near the shore of Hermosa Beach include western and Clark's grebes, cormorants, loons, California brown pelicans, and gulls. Coastal birds are at their highest densities during the winter months. Mammal species found in the area include various cetaceans (whales, dolphins, and porpoises), pinnipeds (seals and sea lions), and sea otters. All marine mammals are protected under the Marine Mammal Protection Act. Additionally, several invertebrate species, such as crustaceans and worms, live in the sand of the intertidal zone. These invertebrates attract shorebirds such as sanderling, western sandpiper, least sandpiper, willet), and various species of gull. Western snowy plover, a special-status species, is known to winter on the shores of Hermosa Beach.

Implementation of PLAN Hermosa would result in further protection for existing open spaces and wildlife corridors. PLAN Hermosa does not propose land use changes that would convert existing open space areas containing native vegetation or habitat to developed uses. However, future development, including infrastructure improvements, could potentially result in loss or degradation of wildlife corridors. Parks + Open Space Element Policies 9.3 and 9.5 would protect

habitats and wildlife movement corridors from construction, recreation, and industrial activities while also ensuring the beaches function as high quality habitat for migratory species. Subsequent discretionary projects in the city would be required to demonstrate compliance with these policies and provide site-specific measures to address any potential impacts to migratory species.

Implementation of PLAN Hermosa policies would ensure that habitats used by migratory species would be protected from impacts associated with construction, recreation, and industrial activities. Therefore, impacts on wildlife corridors and wildlife movement would be minimized, and the impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.3-5 ***Would PLAN Hermosa Conflict with Any Local Policies or Ordinances Protecting Biological Resources, Such as a Tree Preservation Policy or Ordinance****? PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not result in a conflict with a local policy or ordinance protecting biological resources, including but not limited to Chapter 12.36 of the Hermosa Beach Municipal Code protecting certain trees. Therefore, impacts would be* ***less than significant****.*

Hermosa Beach Municipal Code Chapter 12.36, Trees, protects biological resources by preserving and protecting trees in the public right-of-way (parkway). Additionally, several Parks + Open Space Element policies recognize the importance of and seek to protect green spaces and urban forests citywide on public and private property. For example, Policy 10.1 promotes expansion of urban forests and green spaces. Policy 10.2 requires planting of native, non-invasive landscaping and trees and encourages the planting of edible landscapes and fruit trees. Additionally, implementation actions PARKS-26 and PARKS-27 require that a citywide tree inventory be completed and maintained and that the tree ordinance be reviewed and revised as needed to ensure protection of existing trees. Development projects would be required to minimize the removal of natural vegetation and replace any existing mature trees removed at a minimum of 2:1 ratio either on-site or elsewhere as prescribed by the City.

Future projects proposed under PLAN Hermosa would be required to comply with applicable local ordinances. Regulatory processes to ensure compliance are already in place and would not be affected by the plan. In addition, PLAN Hermosa policies and implementation actions would ensure the protection of existing trees in the city. Therefore, impacts would be **less than significant.**

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative setting associated with PLAN Hermosa is the Southern California Bight, which is a region that consists of a large and gradual bend in the California coastline that is adjacent to the Los Angeles metropolitan area and contains a diverse range of habitats and marine life. This region is impacted by the existing urban conditions in the region as well as from recreational activities, urban runoff, and related impacts of urban uses. This cumulative setting also includes approved, proposed, planned, and other reasonably foreseeable projects and development in Hermosa Beach and the South Bay Cities Council of Governments (COG) planning area. Developments and planned land uses, including PLAN Hermosa, would contribute to impacts on biological resources in the region.

IMPACT 4.3-6 ***Would PLAN Hermosa Contribute to Cumulative Effects on Biological Resources?*** *Implementation of PLAN Hermosa, in combination with existing, approved, proposed, and reasonably foreseeable development in the South Bay Cities COG planning area, could result in the conversion of habitat and impact biological resources. Biological impacts from PLAN Hermosa would be limited due to the small size of potential projects and the focus on urban infill sites, and PLAN Hermosa would not contribute to any cumulative impacts. This would be a* ***less than cumulatively considerable*** *impact.*

PLAN Hermosa does not propose land use changes that would affect open space in the city. However, cumulative changes, including land use changes, could affect wildlife movement either directly or indirectly due to factors discussed in Impacts 4.3-1 and 4.3-4 above and are limited to the city and not regional biological conditions or wildlife movement. PLAN Hermosa does not propose land use changes that would convert existing open space areas to developed uses. Furthermore, the policies and implementation actions described in Impact 4.3-4 would reduce PLAN Hermosa's contribution to cumulative effects. Because PLAN Hermosa would not convert existing open space areas to developed uses and would implement these policies and implementation actions, the plan's contribution to cumulative effects would not be considerable. The impact would be **less than cumulatively considerable**.

Mitigation Measures

None required.

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4.4 Cultural Resources

4.4.1 INTRODUCTION

This resource section evaluates the potential environmental effects related to cultural resources (i.e., archaeological, paleontological, and historical resources) associated with implementation of PLAN Hermosa. The analysis includes an overview of archaeological, paleontological, and historical resources in Hermosa Beach, a discussion of federal, state, and local regulations pertaining to the management of these resources, and a discussion of the type of these resources likely to be encountered in the planning area. PLAN Hermosa Public Safety Element, Land Use + Design Element, Parks + Open Space Element, and Sustainability + Conservation Element policies and implementation actions both pose potential threats to historical resources and promote the identification, protection, and maintenance of cultural resources to reduce potential threats.

NOP Comments: No comments were received in response to the Notice of Preparation (NOP) addressing cultural resource concerns. Comments included written letters and oral comments provided at the NOP scoping meeting.

Reference Information: Information for this section is based on a technical report titled Archaeological and Paleontological Resources Assessment and Historic Resources Existing Conditions Report to support PLAN Hermosa, prepared by PCR Services Corporation and attached to this document as **Appendix C-7.** The scope of work included an archaeological resources records search through the California Historical Resources Information System, South Central Coastal Information Center (CHRIS-SCCIC), a Sacred Lands File search through the California Native American Heritage Commission (NAHC), a paleontological resources records search through the Natural History Museum of Los Angeles County (NHMLAC), review of City Planning Division and Building and Safety Division property files, and a citywide windshield survey of all buildings over 45 years old. All cultural resources investigations were conducted by staff who meet and exceed the Secretary of the Interior's Professional Qualifications Standards in History, Architectural History, Archaeology, and Historic Preservation.

Definitions: *Cultural resources* are defined as physical evidence or place of past human activity: site, object, landscape, or structure; or a site, structure, landscape, object, or natural feature of significance to a group of people traditionally associated with it.

Archaeology is the recovery and study of material evidence of human life and culture of past ages. Over time, this material evidence becomes buried, fragmented or scattered, or otherwise hidden from view. In urban areas such as Hermosa Beach and environs, archaeological resources may include both prehistoric remains (before 1769 A.D.) and remains dating to the historical period (1769 to 1950 A.D.). Prehistoric (or Native American) resources can include village sites, temporary camps, lithic (stone tool) scatters, rock art, roasting pits/hearths, milling features, rock features, and burials. Historic archaeological resources can include refuse heaps, bottle dumps, ceramic scatters, privies, foundations, and burials and are generally associated in California with the Spanish Mission Period (after A.D. 1769) to the mid-twentieth century of the American Period (1950s).

Paleontology is a branch of geology that studies the life forms of the past, especially prehistoric life forms, through the study of plant and animal fossils. Paleontological resources represent a limited, nonrenewable, and impact-sensitive scientific and educational resource. Fossil remains such as bones, teeth, shells, and leaves are found in the geologic deposits (rock formations) where they were originally buried. Paleontological resources include not only the actual fossil remains but also the collecting localities and the geologic formations containing those localities.

Historical resource is a term encompassing prehistoric/historic archaeological sites and/or the built environment, which includes historic sites, buildings, structures, objects, districts, and landscapes.

4.4.2 ENVIRONMENTAL SETTING

Appendix C-7 includes a prehistoric and historic overview of Hermosa Beach and the surrounding areas, describes methods of identifying known cultural resources in the planning area, and discusses themes and property types in the city. It also includes a regulatory setting pertaining to cultural resources located in the planning area. Key findings from the environmental setting are summarized below by resource type.

ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES

No known archaeological sites or isolates have been recorded in the city, based on information in the SCCIC database. However, one archaeological site (CA-LAN-1872) has been recorded immediately adjacent and south of the city's southern boundaries, along Herondo Street. CA-LAN-1872 is a historic and prehistoric archaeological site believed to represent a portion of the Gabrielino village of *Engva*, which was located along the edges of the Old Salt Lake. The Old Salt Lake is also known to have been located immediately outside and in very close proximity to the city's southern boundaries. The Old Salt Lake has been designated as State Historic Landmark No. 373 and is also listed in the California Register of Historical Resources (California Register). These resources are known to have been destroyed by modern development (e.g., construction of an apartment complex, expansion of the Redondo Beach Generating Station, and road expansion), and the Old Salt Lake was known to have been filled in with concentrated chloride brine in the early 1900s.

The results of the paleontological resources records search conducted at the Natural History Museum of Los Angeles County indicated that three fossil localities of the same sedimentary deposits (older Quaternary terrace deposits) which occur within the city limits have been found nearby. These localities have yielded fossils of horses, a marine whale, and a mammoth at depths between 15 to 35 feet below the surface. Other research indicated that adjacent to the city limits (at the Redondo Beach Generating Station), a Rancholabrean-age tooth of an extinct llama was found at a depth of approximately 30 feet below the surface. A fossil horse tooth was also found near the Redondo Beach Generating Station at a depth of about 35 feet below the surface. Paleontological resources are discussed further in **Appendix C-7.**

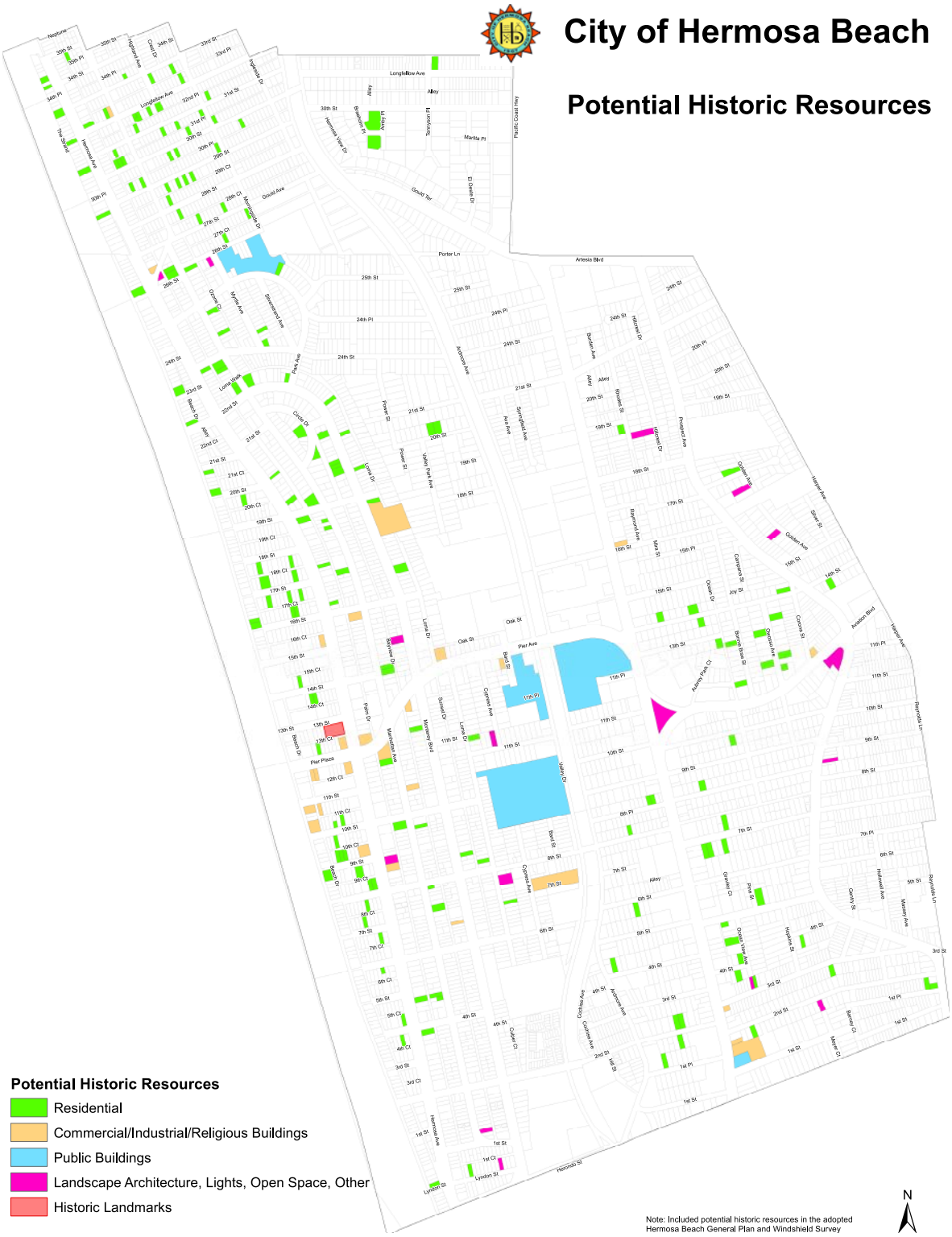
HISTORICAL RESOURCES

There are 28 previously identified individual historical resources and two potential districts in Hermosa Beach which are included in the City's current General Plan Land Use Element (Historic Preservation) that could be materially or visually impacted by PLAN Hermosa as the result of alteration of these resources or their immediate surroundings. A description and map identifying existing historic resources in the city are included in **Appendix C-7.**

- Two properties are designated local landmarks and are listed on the California Register: the Bijou Theater at 1229–1235 Hermosa Avenue and the Community Center at 710 Pier Avenue.
- One property, the Clark Building at 861Valley Drive, is listed on the California Register.
- Two properties have been designated by the City (2011) as "potential landmarks that warrant further study by Section 17.53.040(B) of the Historic Preservation ordinance (per Planning Commission Resolution No. 98-65)": the Bank of America Building at 90 Pier Avenue and the Hermosa Hotel at 20–26 Pier Avenue.
- Two potential districts have been identified by the City: a residential neighborhood bounded by 16th Street, The Strand, and 20th Street, and the Hermosa Avenue and Strand Houses north of 26th Street.

Hermosa Beach has not been surveyed previously; therefore, a citywide windshield survey was conducted to examine existing conditions and identify examples of potentially eligible property types, styles, and methods of construction, which included locating potential individual historical resources and concentrations or groups of intact resources that appear to be eligible as potential historic districts based on their age, architecture, and integrity. There are approximately 3,600 parcels with improvements over 45 years old in Hermosa Beach. A total of 218 improved parcels were identified as potentially eligible for local listing and were assigned California Historical Resource (CHR) status codes of 5S3, "appears to be individually eligible for local listing or designation through survey evaluation." In addition, the survey identified two groupings of single-family residences that appear potentially eligible as beach cottage districts and were assigned CHR status codes of 5D3, "appears to be a contributor to a district that appears eligible for local listing or designation through survey evaluation." **Figure 4.4-1 (Potentially Eligible Historic Resources [Windshield Survey])** identifies the 218 parcels that have been identified as potentially eligible for local listing. An architectural overview, complete inventory list, and California Department of Parks and Recreation primary survey forms are provided in **Appendix C-7.**

FIGURE 4.4-1
POTENTIALLY ELIGIBLE HISTORIC RESOURCES (WINDSHIELD SURVEY)



Source: PCR Services 2014

4.4.3 REGULATORY FRAMEWORK

Federal, state, and local laws, regulations, and policies pertain to cultural resources in the planning area. They provide the regulatory framework for addressing all aspects of cultural resources that would be affected by implementation of PLAN Hermosa. The regulatory framework for cultural resources is discussed in detail in **Appendix C-7**. Key regulations used to reduce environmental impacts are summarized below.

FEDERAL

- **Section 106 of the National Historic Preservation Act:** Section 106 requires federal agencies, or those they fund or permit, to consider the effects of their actions on properties that are listed in or are eligible for listing in the National Register of Historic Places (National Register).
- **National Environmental Policy Act (NEPA):** NEPA directs federal agencies to prepare a detailed statement of the environmental impacts of any "major federal action significantly affecting the quality of the human environment." The human environment consists of many aspects, including what NEPA terms cultural resources. Cultural resources also include the cultural use of the physical and natural environment, social institutions, lifeways, religious practices, and other cultural institutions.

STATE

- **California Environmental Quality Act (CEQA):** CEQA specifically defines a historical resource and explicitly defines when an action would have a substantial adverse change in the significance of a historical resource. CEQA includes provisions that specifically address the protection of cultural resources by requiring consideration of impacts of a project on unique archaeological resources, historical resources, and paleontological resources.
- **Senate Bill (SB) 18:** SB 18 requires that cities and counties contact and consult with California Native American tribes before adopting or amending general plans and specific plans, or when designating land as open space.
- **Assembly Bill (AB) 52:** AB 52 amends CEQA by requiring that lead agencies consult with Native American groups or individuals regarding the identification, evaluation, and treatment of tribal cultural resources prior to the release of an environmental document. The City requested consultation with Native American tribes under AB 52 in August 2015. In accordance with AB 52 and SB 18, the City notified all of the relevant tribal organizations identified by the Native American Heritage Commission for the City of Hermosa Beach. To date, none of the tribal organizations have requested formal consultation through the General Plan update or EIR process. However the Soboba Band of Luiseño Indians and the Gabrieleño Band of Mission Indians-Kizh Nation have requested that an experienced, trained, and certified Native American monitor be on site during any ground-disturbing activities related to subsequent projects.
- **California Health and Safety Code Section 7050:** This code section states that if human remains are uncovered during ground-disturbing activities, the contractor or the project proponent must immediately halt potentially damaging excavation in the area of the burial and notify the county coroner to determine the nature of the remains.
- **California Register of Historical Resources:** The California Register includes resources that are listed in or are formally determined eligible for listing on the National Register, as well as some California State Landmarks and Points of Historical Interest. The eligibility criteria for listing in the California Register are similar to those for National Register listing, but focus on the importance of the resources to California history and heritage.

- **California State Historical Landmarks:** California Historical Landmarks are buildings, structures, sites, or places that have been determined to have statewide historical significance and meet specific criteria. The resource must also be approved for designation by the county or local jurisdiction, be recommended by the State Historical Resources Commission, and be officially designated by California State Parks. California Historical Landmarks are automatically listed in the California Register.
- **California Points of Historical Interest:** California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific, technical, religious, experimental, or other value.

LOCAL

- **Hermosa Beach Municipal Code (Section 17.53, Historic Resources Preservation):** See discussion below under "Criteria for Eligibility."

Criteria for Eligibility

Cultural resources fall within the jurisdiction of several levels of government. Federal laws provide the framework for the identification and in certain instances, protection of historic resources. The National Historic Preservation Act, enacted in 1966, established the National Register program under the Secretary of the Interior. Additionally, state and local jurisdictions play active roles in the identification, documentation, and protection of such resources within their communities. Enacted in 1992, the California Register program is administered by the State Office of Historic Preservation and the State Historical Resources Commission. The City of Hermosa Beach adopted a preservation ordinance in 1998 (Hermosa Beach Municipal Code, Chapter 17.53, Ordinance 98-1186). A summary of the regulatory setting as it relates to the impact analysis is included below.

To be eligible for listing in the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Four criteria for evaluation have been established to determine the significance of a resource:

1) It is associated with events that have made a significant contribution to the broad patterns of our history.

2) It is associated with the lives of persons significant in our past.

3) It embodies the distinctive characteristics of a type, period, or 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 individual distinction.

4) It yields, or may be likely to yield, information important in prehistory or history.

The criteria for eligibility for the California Register are based on National Register criteria. Certain resources are determined by the statute to be automatically included in the California Register by operation of law, including California properties formally determined eligible for or listed in the National Register. To be eligible for the California Register, a historic resource must be significant at the local, state, or national level, under one or more of the following four criteria:

1) It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

2) It is associated with the lives of persons important in our past.

3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.

4) It has yielded, or may be likely to yield, information important in prehistory or history.

Under the City's current policies and preservation ordinance, only resources that are designated as federal, state, or local landmarks are protected from alterations, degradation, or demolition. Designated landmarks are required to obtain a Certificate of Appropriateness from the City of Hermosa Beach prior to making alterations. When proposed alteration or demolition to other potentially historic resources requires a discretionary review, a thorough analysis of the potential impact on the cultural significance of the building will be studied under CEQA before the decision to alter or demolish the project can be made.

A historic resource may be designated a local landmark, pursuant to City Municipal Code Sections 17.53.070 through 17.53.120, if it meets one or more of the following criteria:

1) It exemplifies or reflects special elements of the city's cultural, social, economic, political, aesthetic, engineering, or architectural history.

2) It is identified with persons or events significant in local, state, or national history.

3) It embodies distinctive characteristics of a style, type, period, or method of construction, or is a valuable example of the use of indigenous materials or craftsmanship.

4) It is representative of the notable work of a builder, designer, or architect.

5) Its unique location or singular physical characteristic(s) represents an established and familiar visual feature or landmark of a neighborhood, community, or the city.

Nomination of a historic resource as a landmark is made by the City, or by application of the property owner or property owners representing a majority or controlling interest in the property on which the resource is located. To be eligible for consideration as a landmark, a historic resource must be at least 50 years old; with the exception that a historic resource of at least 30 years old may be eligible if the City Council determines that the resource is exceptional, or that it is threatened by demolition, removal, relocation, or inappropriate alteration.

4.4.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on historical resources are considered significant if adoption and implementation of PLAN Hermosa would:

1) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

2) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

3) Disturb any human remains, including those interred outside of formal cemeteries.

4) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of implementation of PLAN Hermosa, compared to existing conditions of cultural resources within the city. It is assumed that all future and existing development in the city would comply with applicable laws, regulations, design standards, and plans. Presented below are the applicable policies and implementation actions outlined in PLAN Hermosa that would affect cultural resources.

Subsequent public and private projects that include construction excavations (e.g., grubbing/clearing, demolition grading, trenching, and boring) are activities that have potential to impact or cause a substantial adverse change to archaeological and historic resources, paleontological resources, and human remains. Subsequent projects that do not require excavation activities would cause no direct impacts on archaeological and paleontological resources, and human remains; therefore, no additional analysis or mitigation is necessary for these specific types of activities. Other development activities that would excavate heavily disturbed soils or artificial fill would also cause no impact on intact and significant archaeological resources, paleontological resources, or human remains since they have likely been displaced by previous disturbances (such as the original construction of a condominium complex) and there would be very limited to no potential to encounter intact and significant resources in artificial fill soils.

PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa policies and implementation actions that address cultural resources are listed below. If implemented in the future, these particular policies and actions may reduce or avoid adverse material impacts on historical resources either directly or indirectly.

Policies

Land Use + Design Element

- **5.6 Preservation and adaptive reuse.** Encourage the preservation or adaptive reuse of historic structures, iconic landmarks, and older buildings.
- **5.7 Design guidelines and development standards.** Seek to maintain and enhance neighborhood character through design guidelines and development standards that articulate building form, orientation, and scale, but allow for eclectic and diverse architectural styles.
- **7.1 Re-purposing surplus property.** Promote the reuse of surplus publicly-owned property for other uses that benefit the community.
- **7.3 School modernization upgrades.** Support HBCSD plans to renovate and modernize school facilities to meet growing capacity needs in a manner that minimizes burdens to adjacent neighborhoods.
- **10.1 Historic landmarks and districts.** Encourage the voluntary designation of potentially historic resources as landmarks or historic districts.
- **10.2 Public and institutional facilities.** Initiate the designation of potentially historic public or institutional resources under threat of demolition or deterioration.
- **10.3 Protect designated landmarks.** Prohibit the demolition, degradation, and inappropriate alteration of designated landmarks.
- **10.4 Treatment of potentially historic resources.** Discourage the demolition, degradation, and inappropriate alteration of potentially historic resources.

- **10.5 Evaluation prior to demolition.** Require evaluation and documentation of potentially historic resources prior to demolition.
- **10.6 Incentives for preservation.** Provide incentives for preservation of designated landmarks, potentially historic resources, and older buildings.
- **10.7 Historic resources as cultural tourism.** Promote historic places and cultural tourism as an economic development strategy.
- **10.8 Adaptive reuse and sustainable development.** Promote historic preservation as sustainable development and encourage adaptive reuse of historic or older properties.
- **10.9 History and cultural heritage.** Support and encourage efforts to document and share the cultural heritage and history of Hermosa Beach.
- **10.10 Culturally inclusive planning.** Ensure that historic preservation planning is culturally inclusive and reflective of the unique background and diversity of neighborhoods in the city.
- **10.11 Incentives and technical assistance.** Provide expert technical assistance to owners of historic properties with tools and incentives to maintain historic resources.
- **10.12 Salvage architectural features or materials.** Encourage salvaging of architectural features that would otherwise be transported to landfills as a result of demolition.
- **10.13 Archaeological and paleontological resources.** Recognize the prehistory and history of the city and strive to identify, protect, and preserve archaeological and paleontological resources.

Public Safety Element

- **1.9 Facilitate retrofits.** Encourage and facilitate retrofits of seismically high-risk buildings.

Implementation Actions

- GOVERNANCE-5. Incorporate guidance related to Native American consultation and treatment of prehistoric and Native American resources into local CEQA guidelines for Hermosa Beach.
- LAND USE-2. Establish development standards to correspond with any new land use designations with consideration of neighborhood character areas.
- LAND USE-3. Develop building design guidelines to illustrate and articulate the appropriate building form, scale, and massing for each established character area. The Design Guidelines shall be tailored to:
  - Identify and safeguard the prominent visual characteristics of each character area in accordance with those key features and characteristics to ensure that the overall visual character of the neighborhoods, centers, and districts.
  - Include provisions that ensure avoidance of significant shadow impacts from new structures onto public recreational areas, parks or other public gathering places during the hours of 10 AM to 2 PM.
- LAND USE-14. Amend the CEQA documentation and initial study process to ensure cultural and historical resources are studied in accordance with CEQA and any local historic preservation programs.
- LAND USE-15. Develop eligibility criteria to use in the designation of local historic sites or historic districts.

- LAND USE-16. Develop emergency preparedness and disaster response plans for cultural resources, including a recovery action plan that addresses long-range decisions likely to be faced by the City following a major disaster, including economic recovery, protocols for demolition or restoration of damaged historic structures, and fee deferral for repair permits.
- LAND USE-17. Create a program to provide for the voluntary installation of plaques and/or public art related to historic buildings and sites in the city.
- LAND USE-18. Establish design review procedures and establish effective means to protect architectural features that have historical significance. Use the Secretary of Interior's Standards to evaluate impacts of alterations or new development on historical resources.
- LAND USE-19. Prepare design guidelines that illustrate and highlight important historic design features of buildings.
- LAND USE-20. Research and develop innovative policies for preserving historic properties.
- LAND USE-21. Work with community organizations to develop brochures, guides, walking tours, and other marketing materials to highlight existing public art in Hermosa Beach.
- LAND USE-22. Develop historic preservation expertise among staff and decision makers on the Secretary of the Interior's Standards for Rehabilitation, preservation ordinances, the State Historical Building Code, environmental review for historical resources, and tax credits and incentives.
- LAND USE-23. The City shall require archaeological investigations for all applicable discretionary projects, in accordance with CEQA regulations, for areas not previously surveyed and/or that are determined sensitive for cultural resources. The City shall require the preservation of discovered archaeologically significant resources (as determined based on city, state, and federal standards by a qualified professional) in place if feasible or provide mitigation (avoidance, excavation, documentation, curation, data recovery, or other appropriate measures) prior to further disturbance.
- SAFETY-26. Develop a recovery action plan that addresses long-range decisions likely to be faced by the City following a major disaster, including economic recovery, protocols for demolition or restoration of damaged historic structures, and fee deferral for repair permits.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.4-1 ***Would PLAN Hermosa Cause a Substantial Adverse Change in the Significance of an Archaeological Resource?*** *Implementation of PLAN Hermosa could provide for future development and reuse projects on previously undisturbed land throughout the city, which could cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5. However, PLAN Hermosa includes implementation actions that require archaeological investigations for discretionary projects on previously undisturbed lands determined sensitive for cultural resources, and require the preservation of any discovered archaeologically significant resources. Therefore, this impact would be* ***less than significant.***

Subsequent public and private projects under PLAN Hermosa that include excavation (e.g., grubbing/clearing, grading, trenching, and boring) into native soil could have the potential to impact or cause a substantial adverse change to undiscovered archaeological resources, paleontological resources, and human remains. Future development that does not require excavation activities would cause no impacts on archaeological resources, paleontological

resources, and human remains; therefore, no additional analysis or mitigation is necessary for these specific types of activities. Other development that would excavate heavily disturbed soils or artificial fill would cause no impact on intact and significant archaeological resources, paleontological resources, or human remains since such resources have likely been displaced by previous disturbances and there would be very limited to no potential to encounter intact and significant resources in artificial fill soils.

No known archaeological resources (historic or prehistoric) from the SCCIC's database have been recorded within the city. These findings, however, do not preclude the possibility of encountering undiscovered archaeological resources during construction, given the proven prehistoric and historic occupation of the region (as described in **Appendix C-7**), the identification of surface and subsurface archaeological resources near the PLAN Hermosa planning area (e.g., Old Salt Lake and CA-LAN-1872), and the favorable natural conditions (e.g., Pacific Ocean) that would have attracted prehistoric and historic inhabitants to the area. The archaeological monitoring of numerous construction projects throughout the region in recent decades has demonstrated the existence of deeply buried archaeological deposits, especially in locations of rapid Holocene deposition such as alluvial fans.

The lack of known archaeological resources identified in the planning area may be because projects were constructed prior to cultural resources protection laws and because parcels were not surveyed prior to construction. It is also possible that buried archaeological resources that were not visible to previous archaeological surveyors have now been brought to the surface as a result of disturbance (e.g., clearing, grading) or natural processes (e.g., erosion, wind, floods).

Development in Hermosa Beach could result in damage to prehistoric- and historic-period archaeological resources located at or near previously undisturbed ground surfaces as the result of construction. In addition, infrastructure and other improvements requiring ground disturbance could result in damage to or destruction of archaeological resources buried below the ground surface. Archaeological sites have the potential to contain intact deposits of artifacts, associated features, and dietary remains that could contribute to the regional prehistoric or historic record or may be of cultural or religious importance to Native American groups.

Land Use + Design Element Policy 10.13 directs the City to recognize the prehistory and history of Hermosa Beach and strive to identify, protect, and preserve the city's archaeological resources. The direction to recognize archaeological resources would be accomplished through archaeological investigations, as appropriate, which would include research, Native American consultation (implementation action GOVERNANCE-5), pedestrian surveys, and testing during the CEQA planning process (i.e., prior to construction), as well as monitoring during ground-disturbing activities (i.e., during construction). The proper handling of discovered resources and enforcement of applicable state and federal laws and regulations would qualify as the directed maintenance of archaeological resources. Much of the planning area is built out, and most new development pursuant to PLAN Hermosa would therefore take place aboveground on previously disturbed land, thereby minimizing the potential to disturb archaeological resources. However, ground-disturbing activities on previously undisturbed land could affect the integrity of an as-yet-unknown archaeological resource, thereby causing a substantial change in the significance of the resource. Although efforts would be made to identify and mitigate impacts on potential archaeological resources prior to ground disturbance, there is no way to know if significant archaeological resources occur below undisturbed ground surfaces.

Implementation action LAND USE-23 would require archaeological investigations, as necessary, by a qualified archaeologist for projects subject to CEQA involving ground-disturbing activities for areas not previously surveyed and/or that are determined sensitive for cultural resources and would require preparation and implementation of a treatment plan if buried resources would be affected by a proposed project. For example, an initial archaeological study (Phase I Assessment),

at a minimum, would consist of the following tasks to identify known archaeological resources in a given project site: a cultural resources records search through the South Central Coastal Information Center of the California Historical Resources Information System, a pedestrian survey of the project site, a review of the land use history, and coordination with knowledgeable organizations or individuals (e.g., Hermosa Beach Historical Society, Native American tribes). If warranted, additional analyses such as archaeological test excavations and/or remote sensing methods would be implemented to identify resources.

To identify if a project requires archaeological investigations, the City would review available geotechnical studies to determine whether excavation activities would impact native soils. If a geotechnical study is not available for review, then the City would need to make a determination based on a review of recent aerial photography of the project location, available data from adjacent or nearby sites, and professional judgement. Thus, with implementation action LAND USE-23, future development and reuse projects under PLAN Hermosa would implement the appropriate treatment and/or preservation of resources if encountered. Therefore, potentially significant impacts on archaeological resources would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.4-2 ***Would PLAN Hermosa Cause Disturbance of Any Human Remains?*** *Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that could disturb human remains. With implementation of existing policies and procedures, this impact would be* ***less than significant.***

As discussed in **Appendix C-7**, no known human remains were identified from the SCCIC records in the PLAN Hermosa planning area. However, these findings do not preclude the existence of previously unknown human remains located below the ground surface that may be encountered during construction excavations associated with subsequent projects in the city. The discovery of Native American human remains, including cases of multiple burials, is not uncommon in the region (e.g., Malaga Cove). Similar to the discussion regarding archaeological resources above, it is also possible to encounter buried human remains during construction given the proven prehistoric and historic occupation of the region, the identification of multiple surface and subsurface archaeological resources in the PLAN Hermosa planning area, and the favorable natural conditions that would have attracted prehistoric and historic inhabitants to the area.

Subsequent projects in Hermosa Beach could result in damage to human remains located at or near previously undisturbed ground surfaces as the result of construction involving ground disturbance. In addition, infrastructure and other improvements requiring ground disturbance could result in damage to or destruction of human remains buried below the ground surface. Human remains have the potential to contribute to the regional prehistoric or historic record or may be of cultural or religious importance to Native American groups.

However, if human remains are discovered as part of project construction or other ground-disturbing activities, the project applicant and/or contractor would notify the City and immediately halt work at the site. The county coroner would be notified according to California Public Resources Code Section 5097.98 and California Health and Safety Code Section 7050.5. If the remains are determined to be Native American, the coroner would notify the Native American Heritage Commission and the procedures outlined in CEQA Section 15064.5(d) and (e) would be followed. Additionally, the City requires the presence of an on-site monitor for discretionary projects involving ground disturbance or excavation of soil. Therefore, because of compliance with state laws, this impact would be **less than significant.**

Mitigation Measures

None required.

IMPACT 4.4-3 ***Would PLAN Hermosa Directly or Indirectly Destroy a Unique Paleontological Resource, Site, or Geologic Feature?*** *Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that could damage previously unknown unique paleontological resources, sites, or unique geologic features. This impact would be* ***potentially significant.***

As described in **Appendix C-7**, no known fossil localities have been recorded within the city in the NHMLAC database. However, three fossil localities of the same sedimentary deposits (older Quaternary terrace deposits) that currently underlie the entire city have been found nearby. These localities have yielded fossils of horses, a marine whale, and a mammoth at depths between 15 to 35 feet below surface. Previous research also indicated that a Rancholabrean-age tooth of an extinct llama was found at the Redondo Beach Generating Station (located adjacent to but outside of the planning area) at a depth of approximately 30 feet below surface. A fossil horse tooth was also found near the Redondo Beach Generating Station at a depth of about 35 feet below surface.

Subsequent projects in Hermosa Beach could result in damage to paleontological resources located at or near previously undisturbed ground surfaces as a result of construction. In addition, infrastructure and other improvements requiring ground disturbance could result in damage to or destruction of paleontological resources buried below the ground surface. Paleontological resources have the potential to contribute to the regional geological and paleontological record of the region and may be of scientific importance to researchers.

Land Use + Design Element Policy 10.13 directs the City to recognize the prehistory and history of Hermosa Beach and strive to identify, protect, and preserve paleontological resources. The proper handling of discovered resources and enforcement of applicable state and federal laws and regulations would qualify as the directed maintenance of paleontological resources.

Much of the planning area is built out, and most new development pursuant to PLAN Hermosa would therefore take place above ground on previously disturbed land, thereby minimizing the potential to disturb paleontological resources. Very little land in Hermosa is undisturbed, and even less of that land would be available for redevelopment since it is currently designated as open space, beach, or other public amenity and would not be built on. Although efforts would be made to identify and mitigate impacts to potential paleontological resources prior to ground disturbance, there is no way to know if significant paleontological resources occur below undisturbed ground surfaces. Therefore, this impact would be **potentially significant.**

Mitigation Measures

MM 4.4-3 As a standard condition of approval for future development projects implemented under PLAN Hermosa that involve ground disturbance or excavation:

- For any project where earthmoving or ground disturbance activities are proposed at depths that encounter older Quaternary terrace deposits, a qualified paleontologist shall be present during excavation or earthmoving activities.
- If paleontological resources are discovered during earthmoving activities, the construction crew shall immediately cease work in the vicinity of the find and notify the City. The project applicant(s) shall retain a qualified

paleontologist to evaluate the resource and prepare a recovery plan in accordance with Society of Vertebrate Paleontology guidelines (1996). The recovery plan may include, but is not limited to, a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations in the recovery plan that are determined by the lead agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.

Significance After Mitigation

With implementation mitigation measure **MM 4.4-3**, PLAN Hermosa would provide for the appropriate treatment and/or preservation of paleontological resources, if encountered. For instance, a paleontological resource evaluation would consist of a paleontological resources records search through the Natural History Museum of Los Angeles County, a pedestrian survey of the project site (if applicable), a review of the land use history, and a review of geologic mapping and/or geotechnical reports. At that point, appropriate mitigation would be developed and implemented to mitigate impacts on the paleontological resource. Therefore, potentially significant impacts on paleontological resources would be reduced to **less than significant.**

IMPACT 4.4-4 ***Would PLAN Hermosa Cause a Substantial Change in the Significance of a Historical Resource?*** *Implementation of PLAN Hermosa would provide for future development and reuse projects in the city in a manner that could cause a substantial change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. Although implementation of PLAN Hermosa policies and actions would protect historical resources, this would be a* ***potentially significant*** *impact.*

The City of Hermosa Beach adopted a preservation ordinance in 1998, which outlines the landmark designation criteria, the nomination and application requirements for local landmarks, and the certificate of appropriateness requirements. Under the City's current policies and preservation ordinance, only resources that are officially listed federal, state, or local landmarks are protected. In Hermosa Beach, local landmarks can only be nominated by the City Council or the property owner; a landmark cannot be nominated by members of the community. The City does not have a dedicated historic preservation commission. Instead, the City Council carries out the duties of a historic preservation commission by designating landmarks and conducting preservation design review. Since adoption of the preservation ordinance, only one historical resource has been formally designated as a local landmark, the Bijou Building. Also, the historic preservation code identifies two additional buildings, the Bank of America Building (90 Pier Avenue) and the Hermosa Hotel (20–26 Pier Avenue), which require preservation design review for any proposed alterations. Any alterations to city landmarks or potential landmarks on a list of historic resources established by the City must first apply for a certificate of appropriateness.

The City does not have a comprehensive list of potentially eligible historic properties over 45 years old. During the preparation of the City's General Plan Land Use Element in 1994, 28 historical resources and two historic districts were identified as potentially eligible; however, some of these potential resources have been demolished or substantially altered. Furthermore, this list is now over 20 years old and many additional properties now meet the age threshold for consideration that would have not been considered in 1994. As described in **Appendix C-7**, PCR conducted a windshield survey to identify potentially eligible individual historic resources and concentrations or groups of historic resources that appeared to be eligible as potential districts. Of the approximately 3,600 parcels over 45 years old in Hermosa Beach, 218 parcels are potentially eligible for local listing (5S3) and two potentially eligible groupings of single-family residences that

appear to be eligible as beach cottage districts (5D3). The evaluation of historic resources during the windshield survey was based on architecture, and a more intensive survey could be conducted in the future to consider patterns of history, events, and significant persons.

Approximately 60 percent of the potentially eligible resources are single-family, one-story residential properties constructed between 1906 and 1930 located in the Walk Street, Sand Section, North End, and Hermosa Hills neighborhoods. There are also two groupings of residences located in the Walk Street and Hermosa Hills neighborhoods. The remaining 40 percent of potentially eligible properties include a variety of property types and styles, such as commercial and industrial buildings, institutional buildings, landscape architectural features, churches, parkettes, and greenbelts. These potential historical resources are located in the Downtown, Civic Center, and Cypress districts and along the Pacific Coast Highway corridor.

Subsequent public and private projects under PLAN Hermosa could lead to the demolition of historic or potentially eligible historic buildings and structures. PLAN Hermosa states that approximately 67 percent of the city's total land area is improved with residential uses, with the remaining land uses defined by commercial (7 percent), light industrial (4 percent), institutional (22 percent), and vacant land (0.5 percent). As such, the greatest concentration of historical resources (60 percent), as described above, is located in the residential use areas and is subject to redevelopment pressures. In regard to the Walk Street, Sand Section, North End, and Hermosa Hills neighborhoods, PLAN Hermosa describes the future vision of these neighborhoods as preserving building form and scale, maintaining neighborhood connectivity, orienting buildings toward the street or walk streets, and enhancing multimodal connectivity and access.

Additionally, development in commercial, industrial, and civic center areas of Hermosa Beach could result in damage to or demolition of other historical resources. The Civic Center Complex was surveyed as potentially eligible at the local level during the windshield survey; however, PLAN Hermosa describes a transformation of the building orientation and design, the modernization of facilities, and construction of parking facilities in the Civic Center District. The light industrial area named the Cypress District is proposed to be re-envisioned, with emphasis placed on the transformation of the building design and orientation and the public realm and streetscape in the area. PLAN Hermosa's vision of the Downtown District along Pier Avenue and Hermosa Avenue appears to be the retention of the buildings that are "iconic and historic in nature, and new buildings are carefully integrated to retain the town's eclectic charm."

Provisions of the City's current preservation ordinance (Municipal Code Section 17.53) would not prevent the demolition or impairment of a historic building or structures that are not formally designated as a landmark under the City's preservation ordinance or listed on the City's potential historical resources list, but that meet the definition of historical resource for the purpose of CEQA. Demolition of such a historical resource would be a significant impact under CEQA. Furthermore, it is possible that some structures that have not yet been surveyed could be eligible historical resources. Implementation actions LAND USE-3 and LAND USE-15 attempt to lessen impacts due to infill development adjacent to historical resources by recommending the preparation of design guidelines to ensure new development would not sharply contrast with nearby historic resources and the use of the Secretary of Interior's Standards to evaluate impacts of alterations or new development to historical resources.

The Land Use + Design Element of PLAN Hermosa lists a number of policies to encourage and strengthen historic preservation in the city, including Policies 10.1 through 10.12. PLAN Hermosa Policies 10.1, 10.2, 10.3, 10.4, and 10.6 would encourage the voluntary designation of potentially eligible historic resources as landmarks or historic districts, prohibit and discourage the inappropriate alteration or demolition of designated landmarks, require the evaluation of potentially eligible historic resources prior to demolition, and provide incentives for preservation of

historic resources. The implementation actions set forth in PLAN Hermosa recommend a number of programs to support the goals and policies described above.

PLAN Hermosa policies and implementation actions requiring the identification and protection of historic resources, along with adherence to existing federal, state, and City regulations, would provide greater protections to locally designated and potential historical resources. Other implementation actions address amending CEQA documentation and the initial study program to ensure historic resources are adequately addressed (LAND USE-14) and the establishment of design review procedures and guidelines (LAND USE-18). However, implementation of PLAN Hermosa would not prevent the demolition of or substantial adverse change to potentially eligible historic buildings and structures that qualify as historical resources pursuant to CEQA, but have not been formally designated under the City's preservation ordinance or listed on the City's potential landmark list. Therefore, this impact would be **potentially significant**.

Mitigation Measures

MM 4.4-4a The City shall establish an updated list of potential historic resources to be maintained by the Community Development Director. The list shall be updated every 10 years, at a minimum, to identify as-yet-unknown historical resources (as defined in CEQA Guidelines Section 15064.5) as potential resources are identified through citywide surveys and on a project-by-project basis.

MM 4.4-4b The City shall require project applicants to conduct historical resources studies, surveys, and assessment reports on a project-by-project basis, when a project proposes to alter, demolish, or degrade a designated landmark or a potential historic resource.

MM 4.4-4c The City shall maintain the "Historical Resources in Hermosa Beach" guide, and shall update the guide so that it is informed by current resource data and its goals and policies are consistent with the Land Use + Design Element.

MM 4.4-4d The City shall develop procedures and nomination applications to facilitate and streamline the designation of local historic sites and historic districts.

MM 4.4-4e Historical resources studies, surveys, and assessment reports shall be performed by persons who meet the Secretary of the Interior's Professional Qualification Standards for Archaeology and Historic Preservation (48 CFR 44716).

MM 4.4-4f For historical resources that may be adversely impacted, conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties and application of the State Historical Building Code shall be required to protect significant character-defining features and protect the eligibility of potential historical resources.

Significance After Mitigation

Implementation of mitigation measures **MM 4.4-4a** through **MM 4.4-4f** would reduce impacts on historical resources to the extent feasible. However, impacts on potentially eligible historic structures could occur depending on the proposed uses, the cost of rehabilitation, and safety considerations. Thus, it may not be feasible in all circumstances to rehabilitate a structure and retain its historic significance. If a project applicant proposes to demolish an eligible structure, the City would consider the project's impacts prior to approval. Given this uncertainty, this impact would be **significant and unavoidable.**

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The geographic context for cumulative impacts on archaeological resources, human remains, paleontological resources, and cultural resources is future development in Hermosa Beach and the South Bay Cities Council of Governments (COG) planning area. Many of these locations are in the PLAN Hermosa planning area and share common historic, archaeological, and paleontological characteristics.

IMPACT 4.4-5 ***Would PLAN Hermosa Contribute to Cumulative Effects on Archaeological Resources?*** *Implementation of PLAN Hermosa in addition to future development in the South Bay Cities COG planning area could cause a substantial change in the significance of an archaeological resource. The loss of some archaeological resources may be prevented through implementation of PLAN Hermosa policies and similar policies in other communities. PLAN Hermosa also includes implementation actions to minimize impacts by requiring archaeological investigations on previously undisturbed lands, and requiring the preservation of any discovered archaeologically significant resources. These implementation actions would ensure that these resources can be protected and preserved. This impact would be* ***less than cumulatively considerable.***

Future development could include ground-disturbing activities on previously undisturbed land that could affect archaeological resources. The cumulative effect would be the loss of prehistoric cultural resources. Future development would increase the likelihood that archaeological resources could be discovered. However, implementation action LAND USE-23 would require archaeological investigations, as necessary, by a qualified archaeologist for projects subject to CEQA involving ground-disturbing activities for areas not previously surveyed and/or that are determined sensitive for cultural resources and would require preparation and implementation of a treatment plan if buried resources would be affected by a proposed project.

Therefore, cumulative development would not result in the demolition or destruction of archaeological resources, which could contribute to the erosion of the prehistoric record of the planning area and the region and this would be **less than cumulatively considerable** impact.

Mitigation Measure

None required.

IMPACT 4.4-6 ***Would PLAN Hermosa Contribute to Cumulative Effects on Human Remains?*** *Implementation of PLAN Hermosa in addition to anticipated future development in the South Bay Cities COG planning area could disturb human remains, including those interred outside of formal cemeteries. The loss of some human remains may be prevented through implementation of PLAN Hermosa policies and similar policies in other communities. Additionally, PLAN Hermosa includes implementation actions to minimize impacts by requiring archaeological investigations on previously undisturbed lands, and requiring the preservation of any discovered archaeologically significant resources. These implementation actions would ensure that these resources can be protected and preserved. This impact would be* ***less than cumulatively considerable.***

Future development could include ground-disturbing activities on previously undisturbed land that could potentially affect human remains. The cumulative effect would be the loss of human remains. Future development would increase the likelihood that human remains could be discovered.

However, implementation action LAND USE-23 would require archaeological investigations, as necessary, by a qualified archaeologist for projects subject to CEQA involving ground-disturbing activities for areas not previously surveyed and/or that are determined sensitive for cultural resources and would require preparation and implementation of a treatment plan if buried resources would be affected by a proposed project. Therefore, cumulative development would not result in the demolition or destruction of human remains, which could contribute to the erosion of the prehistoric record of the planning area and the region. This impact would be **less than cumulatively considerable.**

Mitigation Measures

None required.

IMPACT 4.4-7 ***Would PLAN Hermosa Contribute to Cumulative Effects on Paleontological Resources?*** *Ground disturbance, earthmoving, and excavation activities associated with implementation of PLAN Hermosa combined with construction activities in the South Bay Cities COG planning area could damage previously unknown unique paleontological resources. This impact would be* ***cumulatively considerable.***

Portions of the city are underlain by potentially fossil-bearing Pleistocene non-marine sediment and Holocene alluvium. Significant fossils, including unique specimens and vertebrate remains, have been discovered in Pleistocene and Holocene sediments throughout the Los Angeles area, ranging from finds at the La Brea Tar Pits to mastodon and other fossils discovered in western Riverside County during the construction of Diamond Valley Lake. Excavations and ground-disturbing activities on these sediments throughout the region would disturb significant paleontological resources. This cumulative impact would be **cumulatively considerable.**

Mitigation Measures

Implement mitigation measure **MM 4.4-3.**

Significance After Mitigation

Ground disturbance, earthmoving, and excavation activities would occur under PLAN Hermosa and in the South Bay Cities COG planning area. As discussed above, mitigation measure **MM 4.4-3** would reduce impacts on paleontological resources by requiring that fossil specimens be recovered and recorded and undergo appropriate curation, in the event that resources are encountered during construction activities in Hermosa Beach. With implementation of mitigation measure **MM 4.4-3**, PLAN Hermosa's contribution to significant cumulative paleontological resources impacts would be offset and would result in a **less than cumulatively considerable** impact.

IMPACT 4.4-8 ***Would PLAN Hermosa Contribute to Cumulative Effects on Historical Resources?*** *Implementation of PLAN Hermosa in addition to anticipated future development in the South Bay Cities COG planning area could cause a substantial change in the significance of a historical resource. The loss of some historical resources may be prevented through implementation of PLAN Hermosa policies and similar policies in other communities. However, this would not ensure that these resources can be protected and preserved. This impact would be* ***cumulatively considerable.***

Cumulative impacts on historical resources may occur under PLAN Hermosa when one or more goals or policies has the potential to impact several historical resources and would erode the historical character and significance of the built environment in Hermosa Beach such that the

character of these resources would be compromised and no longer able to convey the resources' significant historical or architectural associations, resulting in a cumulatively significant impact. Additionally, the lack of strong historic preservation standards regionally could further result in the loss of specific architectural styles, such as the beach bungalow, that are representative of the historical character in the beach cities area. This impact would be **cumulatively considerable.**

Mitigation Measures

Implement mitigation measures **MM 4.4-4a** through **MM 4.4-f.**

Significance After Mitigation

Implementation of mitigation measures **MM 4.4-4a** through **MM 4.4-4f** would not ensure that historical resources would be protected and preserved. As described in the analysis presented in Impact 4.4-4, impacts on historic resources cannot be reduced to less than significant. Therefore, this impact would remain **cumulatively considerable** and **significant and unavoidable**.

4.4.5 REFERENCES

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4.5 Geology and Soils

4.5.1 INTRODUCTION

This resource section evaluates the potential environmental effects related to geology and soils from implementation of PLAN Hermosa. The analysis includes a review of regional geology, seismicity and faulting, and soils.

Issues regarding water quality impacts from soil erosion are discussed in Chapter 4.8, Hydrology and Water Quality. PLAN Hermosa Public Safety Element policies and implementation actions presented in the implementation plan guide development and infrastructure practices designed to protect residents and structures from seismic-related hazards.

NOP Comments: No comments were received in response to the Notice of Preparation (NOP) addressing the geology and soils analysis. Comments included written letters and oral comments provided at the NOP scoping meeting.

Reference Information: Information for this resource chapter is based on numerous sources, including the PLAN Hermosa Technical Background Report (TBR) and other publicly available documents. The TBR prepared for the project is attached to this document as **Appendix C**.

4.5.2 ENVIRONMENTAL SETTING

Appendix C-9 describes the regional and local conditions related to geology and soils. Key findings of the environmental setting are presented below.

GEOLOGY AND TOPOGRAPHY

Hermosa Beach is located along the southwestern margin of the Los Angeles Basin and Coastal Plain. The Los Angeles Basin is an alluvial-filled basin bounded to the north and east by the Santa Monica, San Gabriel, and Santa Ana mountains and to the west and south by the Pacific Ocean and the Palos Verdes Peninsula.

The planning area is underlain by Holocene-age dune sands located west of the adjacent older alluvial deposits of the Los Angeles Basin. Beneath the surficial dune sands is the Pleistocene-age San Pedro Formation, consisting of unconsolidated and semi-consolidated stratified sands with some clays, silts, and gravels. The late Pliocene-age Pico Formation, consisting of marine siltstones and sandstones, sits beneath the San Pedro Formation. Beneath the Pico Formation is the early Pliocene-age Repetto Formation, consisting of siltstones with layers of sandstones and conglomerates. Beneath the Repetto Formation is the Miocene-age Puente Formation, which contains the primary oil reservoir in the planning area (City of Hermosa Beach 2014).

Hermosa Beach sits at the southwest end of Santa Monica Bay and ranges in elevation from sea level in the west to about 200 feet above sea level at inland locations (USGS 1981).

SEISMIC HAZARDS

The primary seismic hazards in the city are fault ground ruptures and ground shaking. Secondary seismic hazards include liquefaction, lateral spreading, differential settlement, landslide-induced earthquakes, and subsidence.

Seismic Ground Shaking and Fault Rupture

Earthquakes can cause strong ground shaking that may damage property and infrastructure. The strength of an earthquake is generally expressed in two ways: magnitude and intensity. The magnitude is a measure that depends on the seismic energy radiated by the earthquake as recorded on seismographs. The intensity at a specific location is a measure that depends on the

effects of the earthquake on people or buildings and is used to express the severity of ground shaking.

The most commonly used scale to measure earthquake intensities (ground shaking and damage) is the Modified Mercalli Intensity (MMI) Scale, which measures the intensity of an earthquake's effects in a given locality and is based on observations of earthquake effects at specific places. On the MMI Scale, values range from I to XII (see **Table 4.5-1**). While an earthquake has only one magnitude, it can have various intensities, which decrease with distance from the epicenter and vary depending on the underlying soil conditions (CGS 2002). **Table 4.5-1** provides descriptions of the effects of ground shaking intensities along with a general range of moment magnitudes that are often associated with those intensities.

TABLE 4.5-1
EFFECTS OF RICHTER MAGNITUDE AND MODIFIED MERCALLI INTENSITY

Mw	Modified Mercalli Scale	Effects of Intensity
1.0–3.0	I	I. Not felt except by a very few under especially favorable conditions.
3.0–3.9	II–III	II. Felt only by a few persons at rest, especially on upper floors of buildings. Delicately suspended objects may swing. III. Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
4.0–4.9	IV–V	IV. Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably. V. Felt by nearly everyone, many awakened. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.
5.0–5.9	VI–VII	VI. Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight. VII. Everybody runs outdoors. Damage negligible in building of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.
6.0–6.9	VIII–IX	VIII. Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed. IX. Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.
7.0 and higher	X or higher	X. Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks. XI. Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly. XII. Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted. Objects are thrown upward into the air.

Source: CGS 2002

Faults are classified as "active" and "potentially active." An active fault is one that has had surface displacement within Holocene time (about the last 11,000 years), while a potentially active fault is one that has been active during Quaternary time (last 1,600,000 years). These definitions are used in delineating Special Studies Zones as mandated by the 1994 Alquist-Priolo Earthquake Fault Zoning Act.[1] A fault rupture is the sudden release of elastic energy that results from the sliding of one part of the earth's crust past another. The resulting fracture is known as a fault, while the sliding movement of earth on either side of a fault is called fault rupture.

The planning area is not located in a fault-rupture hazard zone, as defined by the Alquist-Priolo Earthquake Fault Zoning Act (CGS 2010). Based on information from the California Geological Survey (2010), no known major active faults are located in the planning area. The closest active faults are the Newport-Inglewood fault, approximately 5 miles to the east, and the Palos Verdes fault, approximately 2 miles to the west (CGS 2010). An inactive offshore fault, named Offshore Fault 103, is approximately 1.4 miles west of the planning area (City of Hermosa Beach 2014). **Figure 4.5-1 (Regional Faults)** shows the location of the planning area relative to mapped active and potentially active faults in Southern California.

Historic records indicate that the planning area has experienced seismic ground shaking from a number of seismic events over the last century and a half. For example, the 1933 Long Beach earthquake, which occurred on the nearby Newport-Inglewood fault, caused serious damage to weak masonry structures and killed 115 people throughout the region. The earthquake had an estimated moment magnitude of M6.4 on the Richter scale (City of Hermosa Beach 2014; USGS 2013b; Southern California Earthquake Data Center 2014).

[1] The Alquist-Priolo Earthquake Fault Zoning Act requires the California State Geologist to establish regulatory zones now known as Earthquake Fault Zones; prior to January 1, 1994, these zones were known as Special Studies Zones.

FIGURE 4.5-1
REGIONAL FAULTS

Legend

- Alquist-Priolo Fault Zones
- Accurately Located Fault Trace
- Approximately Located Fault Trace
- Inferred Fault Trace

Source: CGS 2010

Landslides

A landslide is the downhill movement of masses of earth material under the force of gravity. Factors contributing to landslide potential include steep slopes, unstable terrain, and proximity to earthquake faults. This process typically involves surface soil and an upper portion of underlying bedrock. Movement may be very rapid or so slow that a change of position can be noted only over a period of weeks or years. The size of a landslide can range from several square feet to several square miles. There are several landslide zones in Hermosa Beach, as shown on **Figure 4.5-2 (Landslide and Liquefaction Zones)**. These zones have a potential for permanent ground displacement, based on previous landslide movement or local topographic, geological, geotechnical, or subsurface water conditions. They are identified as follows: one near South Park, east of Monterey Boulevard between 2nd Street and 6th Street; one on the city's southern border at the intersection of Valley Drive and Ardmore Avenue; one to the north of Gould Avenue between Ardmore Avenue and Pacific Coast Highway (State Route [SR] 1); and one on the western border of the city between 8th Street and 6th Street. An additional landslide zone is located just east of the city limits between Havemeyer Lane and Haynes Lane in Redondo Beach (DOC 1999). Future development in these zones requires mitigation of potential landslide hazards.

Liquefaction

Liquefaction is the loss of soil strength caused by a sudden increase in pore water pressure during shaking and is one of the most destructive secondary effects of seismic shaking. Liquefaction occurs primarily in saturated and loose, fine- to medium-grained soils. Liquefaction occurs most often where groundwater lies within 30 feet of the surface, but it may also occur in areas where groundwater is up to 50 feet beneath the surface.

In general, the entire planning area west of Hermosa Avenue may include potentially liquefiable layers, as shown on **Figure 4.5-2**. A liquefaction zone is also identified in the southern portion of the planning area near the northeast corner of Monterey Boulevard and Herondo Street.

If groundwater levels in these areas rise to within 30 to 50 feet of the ground surface, the sediments would have a moderate to high susceptibility for liquefaction. The highest water levels recorded in Hermosa Beach are measured at 10 feet deep along the coast (DOC 1998). The type of soil present along the city's coastal area indicates the potential for large liquefiable areas. This area could become larger as the sea level rises and causes groundwater tables to rise as well. For more information on sea level rise, please refer to Section 4.8, Hydrology and Water Quality.

Lateral Spreading

Lateral spreading occurs as a result of liquefaction in which a subsurface layer becomes a liquefied mass, and gravitational and inertial forces cause the mass to move downslope. Development within landslide or liquefaction zones generally requires additional design considerations of different construction methods. This type of secondary seismic hazard is not expected to occur, as most of the liquefaction areas in the city are located in relatively flat areas (City of Hermosa Beach 2014).

FIGURE 4.5-2
LANDSLIDE AND LIQUEFACTION ZONES

Legend

- City Boundary
- Coastal Zone Boundary
- Liquefaction Zone
- Earthquake-Induced Landslide Zone

Source: CGS 2010

Differential Settlement

Differential settlement is a process whereby soils settle non-uniformly, potentially resulting in stress and damage to structures. Native earth materials in Hermosa Beach are relatively dense and therefore not prone to seismically induced settlement (City of Hermosa Beach 2014).

SOILS

The California Department of Conservation (DOC) prepared soil maps for the state of California by US Geological Survey (USGS) quadrangle; the planning area lies within the Redondo Beach quadrangle. The oldest Quaternary geologic unit mapped in the Redondo Beach quadrangle is the Pleistocene San Pedro Formation. The only identified soil substrate mapped in the planning area is Quaternary Older Alluvium (DOC 1998).

Erosion

Soil erosion is a process whereby soil materials are worn away and transported to another area by either wind or water. Rates of erosion can vary depending on the soil material and structure, placement, and human activity. In the planning area, opportunities for accelerated erosion include the steepening of slopes, removing ground cover, and other human-induced activities associated with construction and landscaping.

Expansive Soils

Expansive soils consist largely of clays, which greatly increase in volume when saturated with water and shrink when dried. It does not appear that expansive clays or soils exhibiting shrink-swell characteristics underlie the planning area. However, since no citywide soil report exists, expansive and collapsible soils are analyzed on a project-by-project basis.

4.5.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to geology and soils in the planning area. They provide the regulatory framework for addressing aspects of geology and soils that would be affected by implementation of PLAN Hermosa. The regulatory framework for geology and soils is discussed in detail in **Appendix C-9**. The following summarizes key regulations used to reduce potential environmental impacts of implementing PLAN Hermosa.

FEDERAL

- **Earthquake Hazards Reduction Act:** US Congress passed the Earthquake Hazards Reduction Act in 1977 to reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards reduction program. To accomplish this goal, the act established the National Earthquake Hazards Reduction Program. This program was substantially amended in November 1990 by the National Earthquake Hazards Reduction Program Act, which refined the description of agency responsibilities, program goals, and objectives.

STATE

- **Alquist-Priolo Act:** The Alquist-Priolo Earthquake Fault Zoning Act was created to prohibit the location of structures designed for human occupancy across the traces of active faults (lines of surface rupture), thereby reducing the loss of life and property from an earthquake. The planning area does not contain Alquist-Priolo Earthquake Fault Zones (CGS 2010).

- **Seismic Hazards Mapping Act:** The 1990 Seismic Hazards Mapping Act (Public Resources Code Sections 2690–2699.6) addresses hazards such as strong ground shaking, earthquake-induced landslides, and, in some areas, zones of amplified shaking. The act established a mapping program for areas that have the potential for liquefaction, landslide, strong ground shaking, or other earthquake and geologic hazards. The California Geological Survey (CGS) is the primary state agency charged with implementing the act and provides local jurisdictions with the seismic hazard zone maps that identify areas susceptible to liquefaction, earthquake-induced landslides, and amplified shaking.

- **California Building Code (CBC):** The California Building Standards Commission is responsible for coordinating, managing, adopting, and approving building codes in California. The 2013 CBC became effective on January 1, 2014, and updated all the subsequent codes under the California Code of Regulations (CCR) Title 24 (24 CCR), which provides minimum standards for building design. The State requires local governments to adopt Title 24 on a triennial basis. Where no other building codes apply, Chapters 16, 17, 18, 20, and 21 of the 2010 CBC regulate excavation, foundations, and retaining walls.

- **California Coastal Act:** The California Coastal Act of 1972 created the California Coastal Commission to enact policies and standards in its coastal development permit decisions. Among many issues, the Coastal Commission and the coastal development permit program protect against loss of life and property in the Coastal Zone from coastal hazards, including geologic hazards (Section 30006.5, Public Resources Code, Division 20, California Coastal Act). Section 30262(5) of the act also provides that "development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence."

LOCAL

- **City of Hermosa Beach Municipal Code:** Chapter 15.36 of the Municipal Code promotes public safety and welfare by reducing the risk of death or injury that may result from the effects of earthquakes on existing unreinforced masonry bearing wall buildings. The provisions of the chapter require existing seismically unreinforced buildings to be retrofitted and provide minimum seismic reinforcement standards for new buildings.

- **City of Hermosa Beach Building Requirements:** The City requires developers to submit a geotechnical report before starting construction on new buildings. As mentioned above, groundwater levels under sites located west of Hermosa Avenue can be as shallow as 10 feet from the surface. The geotechnical reports ensure that new developments appropriately consider and design geological, soil, and seismic safety conditions for each project site.

4.5.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on geology and soils are considered significant if adoption and implementation of PLAN Hermosa would:

1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving:

    a) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on

other substantial evidence of a known fault. Refer to California Geological Survey (formerly Division of Mines and Geology) Special Publication 42.

b) Strong seismic ground shaking.

c) Seismic-related ground failure, including liquefaction.

d) Landslides.

2) Result in substantial soil erosion or the loss of topsoil.

3) 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.

4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

The City of Hermosa Beach Municipal Code does not include provisions for new development with on-site septic systems and there are no existing individual septic systems within the city. Therefore, there would be no impact related to the use of septic tanks or alternative wastewater disposal systems. This topic will not be discussed further in this EIR.

ANALYSIS APPROACH

The impact analysis of PLAN Hermosa implementation evaluates geological hazards and their potential to affect future development. The following impact analysis is based on a review of published information, surveys, and reports regarding regional geology and soils. Information was obtained from private and governmental agencies and Internet websites, including the USDA Natural Resources Conservation Service, the California Geological Survey, and the US Geological Survey.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa policies and implementation actions that reduce potential geology and soils impacts include the following:

Policies

Public Safety Element

- **1.1 Evaluate risks.** New buildings and infrastructure will evaluate seismic, fire, flood, and coastal storm hazard risks and comply with California Building Code standards to minimize risk.
- **1.2 Prepare geotechnical reports.** Geotechnical reports will be prepared for new development projects in areas with the potential for liquefaction or landslide.
- **1.9 Facilitate retrofits.** Encourage and facilitate retrofits of seismically high-risk buildings.
- **1.10 Consider site-specific soil conditions.** Require new structures to consider site-specific soil conditions.

Implementation Actions

- SUSTAINABILITY-16. Revise the Municipal Code as necessary to ensure it reflects up-to-date practices to reduce potential for soil erosion and ways to minimize or eliminate the effects of grading on the loss of topsoil.
- SUSTAINABILITY-17. Develop a citywide expansive and corrosive soils screening tool to reduce the need for site-specific soil reports.
- SUSTAINABILITY-18. Where feasible, new development or redevelopment shall be sited and designed to minimize alteration of natural landforms by conforming to the local topography; preventing substantial grading or reconfiguration of the project site; requiring that man-made contours mimic natural contours; ensuring that graded slopes blend with the existing terrain of the site and surrounding areas; and clustering structures to minimize site disturbance and to minimize development area.
- SAFETY-1. Continue to adopt and enforce the most up-to-date California Building Standards Code and California Fire Code, with appropriate local amendments.
- SAFETY-2. Continue to inventory unreinforced brick masonry, soft-story, and other seismically vulnerable private buildings. Identify potential funding sources to assist with seismic retrofits.
- SAFETY-3. Enforce seismic design provisions of the current California Building Standards Code related to geologic, seismic, and slope hazards, with appropriate local amendments.
- SAFETY-4. For properties identified as possibly containing acidic, expansive, or collapsible soils, require site-specific soil condition reports and appropriate mitigation as a condition of new development.
- SAFETY-6. Evaluate the landslide potential of a project site and require implementation of landslide mitigation measures when, during the course of a geotechnical investigation, areas prone to landslide are found. Potential landslide mitigation measures include, but are not limited to the following:
    - Avoidance: Developments should be built sufficiently far away from the threat that they will not be affected even if a landslide does occur.
    - Reduction: Reduction of landslide hazards should be achieved by increasing the factor of safety of the landslide area to an acceptable level, based on current engineering standards and practices. This can be accommodated by eliminating slopes with active/inactive landslides, removing the unstable soil and rock materials, or applying one or more appropriate slope stabilization methods (such as buttress fills, subdrains, soil nailing, crib walls, etc.).
- SAFETY-7. Require projects located within the Liquefaction Areas identified in PLAN Hermosa to evaluate the liquefaction potential and require implementation of mitigation measures when, during the course of a geotechnical investigation, shallow groundwater (60 feet or less) and potentially liquefiable soils are found. Potential liquefaction mitigation measures include, but are not limited to, soil densification or compaction, displacement or compaction grouting, and use of post-tensioned slab foundations, piles, or caissons.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.5-1 ***Would PLAN Hermosa Expose People or Structures to Substantial Adverse Effects Associated with Fault Rupture and Seismic Hazards?*** *PLAN Hermosa would provide for and regulate future development and reuse projects in the city, including buildings and structures that would potentially expose people and structures to seismic hazards. Implementation of existing laws, regulations, and policies, as outlined in the Regulatory Setting subsection, and PLAN Hermosa policies would minimize seismic hazards impacts to people and structures to a* ***less than significant*** *level.*

As previously discussed, the planning area is located in a seismically active area and could experience seismic ground shaking and seismic-related ground failure (i.e., liquefaction and landslides) from earthquakes on active faults. The city is already developed, and people and structures in Hermosa Beach are subject to both existing primary and secondary geological hazards. To prevent loss of life and property, the City of Hermosa Beach adopted the California Building Code as outlined in Title 15, Buildings and Construction, of the City's Municipal Code.

The current adopted CBC includes design criteria for seismic loading and other geologic hazards, including design criteria for geologically induced loading from geological hazards. While shaking impacts could be potentially damaging, they would also be reduced in their impacts due to CBC criteria that recognize this potential. The CBC includes provisions for buildings to structurally survive an earthquake without collapsing and includes measures such as anchoring to the foundation and structural frame design. Additionally, Chapter 15.36 of the City's Municipal Code requires existing seismically unreinforced buildings to be retrofitted. This requirement would apply to infill development or redevelopment that would reuse existing buildings considered "high risk buildings" (as defined in Municipal Code Section 15.36.030) that have at least one unreinforced masonry bearing wall (Section 15.36.020).

PLAN Hermosa policies and implementation actions would further protect people and structures from risks associated with seismic-related hazards. For instance, Public Safety Element Policy 1.1 would require that all new buildings and infrastructure be evaluated for seismic hazard risks, while Policy 1.2 requires geotechnical reports be prepared for new development projects in areas with the potential for liquefaction or landslides. Additionally, implementation actions SAFETY-6 and SAFETY-7 require that future project sites be evaluated for landslide and liquefaction potential. The site-specific geotechnical investigations and actions SAFETY-6 and SAFETY-7 would ensure that proposed buildings developed under PLAN Hermosa are properly designed to address these constraints.

Thus, while PLAN Hermosa would result in the exposure of people to dangers associated with earthquakes, applicable building standards and implementation of PLAN Hermosa policies and implementation actions would minimize these dangers. The plan would not increase the potential for seismic activity or the inherent risks that come with living in a seismically active region. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.5-2 ***Would PLAN Hermosa Result in Substantial Soil Erosion or Loss of Topsoil?*** *PLAN Hermosa would provide for and regulate future development and reuse projects in the city, which would entail ground-disturbing activities that could lead to soil loss. Compliance with existing policies regarding soil erosion and implementation*

of PLAN Hermosa policies would minimize impacts associated with erosion and loss of topsoil. This impact would be ***less than significant.***

PLAN Hermosa implementation could result in actions that would require soil-disturbing activities such as grading, hillside construction, and other activities that could accelerate soil erosion and expose topsoil. Landscaping activities could also result in soil exposure and limited soil erosion.

However, all construction activities would be required to comply with CBC Chapter 70 standards, which would ensure implementation of appropriate measures during soil-disturbing activities to reduce erosion. Project construction would also comply with City Municipal Code grading and erosion standards, as outlined in Chapter 8.44, Stormwater and Urban Runoff Pollution Control Regulations. PLAN Hermosa implementation actions SUSTAINABILITY-16 and SAFETY-1 would further reduce erosion associated with future construction by requiring the City to update both the Municipal Code and the building code to reflect the most up-to-date practices for soil erosion prevention.

Additionally, development involving clearing, grading, or excavation that causes soil disturbance of 1 or more acres, or a project involving less than 1 acre that is part of a larger development plan and includes clearing, grading, or excavation, is subject to provisions of the National Pollutant Discharge Elimination System (NPDES) State General Permit (Order No. 2009-0009), as discussed in Section 4.8, Hydrology and Water Quality. Any development of this size in the planning area would be required to prepare and comply with an approved stormwater pollution prevention plan (SWPPP). The SWPPP considers the full range of erosion control best management practices, including any additional site-specific and seasonal conditions. Such existing requirements would significantly reduce the potential for substantial erosion or topsoil loss to occur in association with new development.

Since erosion impacts are often dependent on the type of development, intensity of development, and amount of lot coverage of a particular project site, impacts can vary. However, compliance with existing standards and implementation of PLAN Hermosa policies would minimize the potential for soil erosion and loss of topsoil. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.5-3 ***Would PLAN Hermosa Locate Structures on Unstable and Expansive Soils?*** *PLAN Hermosa would provide for and regulate future development and reuse projects in the city. Because Hermosa Beach has a low potential for expansive soils and PLAN Hermosa contains policies to minimize development in areas with unstable or expansive soils, this impact would be* ***less than significant****.*

As discussed above, it does not appear that expansive clays or soils exhibiting shrink-swell characteristics are present in the planning area. As such, the potential for exposure to these types of hazards from implementation of PLAN Hermosa would be low.

Additionally, the CBC and other related construction standards apply seismic requirements and address certain grading activities. The CBC includes common engineering practices requiring special design and construction methods that reduce or eliminate potential expansive soil-related impacts. These methods can include overexcavation of foundations, import of more stable material, positive drainage systems, or changes in structure design to mitigate for unstable soils. Compliance with CBC regulations would ensure the adequate design and construction of building foundations to resist soil movement.

PLAN Hermosa Public Safety Element implementation action SUSTAINABILITY-17 would require the City to develop a citywide screening tool to identify areas in which site-specific soil conditions reports may be needed. Such reports also include specific engineering design methods for construction in areas with these types of soils if necessary. Further, implementation action SAFETY-4 requires new structures to consider site-specific soil conditions. These measures would further reduce the potential for loss of life from development on expansive or unstable soils.

Development under PLAN Hermosa would be designed and constructed in accordance with applicable engineering standards and local policies that address soil stability. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

Site-specific topography, soil conditions, and surrounding development determine geological and soil-related impacts, which generally are not considered cumulative in nature. For example, seismic events may damage or destroy a building, but the development of a new building would not cause other areas to be more susceptible to seismic hazards. However, erosion and sediment deposition can be cumulative in nature, depending on the type and amount of development proposed in a given geographical area. The cumulative setting for soil erosion consists of existing, planned, proposed, and reasonably foreseeable land use conditions in Hermosa Beach and the South Bay Cities Council of Governments (COG) planning area.

IMPACT 4.5-4 ***Would PLAN Hermosa Contribute to Cumulative Geologic and Soil Hazards Impacts?*** *Implementation of PLAN Hermosa, in addition to other existing, planned, proposed, approved, and reasonably foreseeable development projects in the South Bay Cities COG planning area, may result in cumulative soil erosion impacts. However, compliance with existing regulations intended to reduce soil erosion during construction would reduce this impact to* ***less than cumulatively considerable****.*

PLAN Hermosa's intent is to minimize soil erosion through implementation of new policies and continued strengthening of existing policies. As discussed above, adoption and implementation of PLAN Hermosa would not lead to substantial soil erosion or topsoil loss. It would also not result in any changes to existing federal, state, and city policies and standards regulating soil erosion. As such, compliance with existing City policies and implementation of PLAN Hermosa policies would offset Hermosa Beach's contribution to cumulative soil erosion impacts.

Further, new development in the region would have to abide by CBC regulations. Additionally, and as described above, all development involving clearing, grading, or excavation that causes soil disturbance of 1 or more acres, or any project involving less than 1 acre that is part of a larger development plan and includes clearing, grading, or excavation, would be subject to the State General Permit and would be required to prepare and implement an approved SWPPP containing erosion control measures.

Because policies and programs included in PLAN Hermosa and existing federal and state regulations would reduce the potential for soil erosion and loss of topsoil, cumulative impacts would be **less than cumulatively considerable**.

Mitigation Measures

None required.

4.5.5 REFERENCES

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4.6 Greenhouse Gas Emissions

4.6.1 INTRODUCTION

This resource section discusses PLAN Hermosa's contribution to greenhouse gas (GHG) emissions and the associated effects of climate change. Policies contained in the Land Use + Design, Mobility, Sustainability + Conservation, Parks + Open Space, and Infrastructure elements of PLAN Hermosa are intended to reduce the contribution of GHG emissions in Hermosa Beach from both community activities and municipal operations. The reader is referred to Section 4.2, Air Quality, for a discussion of project impacts associated with air quality.

NOP Comments: No comments were received in response to the Notice of Preparation (NOP) related to GHG emissions. Comments included written letters and oral comments provided at the NOP scoping meeting.

Reference Information: Information for this resource chapter is based on numerous sources, including the PLAN Hermosa Technical Background Report (TBR), the Hermosa Beach Sustainability Plan, the Hermosa Beach Carbon Neutral Scoping Plan, the 2015 City of Hermosa Beach GHG Inventory, Forecasting, Target-Setting Report for an Energy Efficiency Climate Action Plan, the Community Carbon Planning Tool, and other publicly available documents. The TBR is attached as **Appendix C-5**.

4.6.2 ENVIRONMENTAL SETTING

Various gases in the earth's atmosphere, classified as atmospheric 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. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, the radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Methane traps over 21 times more heat per molecule than CO_2, and N_2O absorbs 310 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weigh each gas by its global warming potential. Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

According to the California Association of Environmental Professionals (2015) Beyond 2020 whitepaper, scientific studies have demonstrated a causative relation between increasing man-made GHG emissions and a long-term trend in increasing global average temperatures. This conclusion is the consensus of the vast majority of climate scientists who publish in the field. The effects of past increases in temperature on the climate and the earth's resources are well documented in the scientific literature, which is best summarized in the Intergovernmental Panel on Climate Change's (IPCC) periodic reports, the latest of which is the Fifth Assessment Report, released in 2014.

The IPCC's work to model and evaluate future climatic conditions indicates that if GHG emissions to continue to increase at current rates, there will be substantial adverse effects to both humans and the natural environment. Many scientific bodies around the world have concluded that avoiding the most severe outcomes of climate change will require keeping global average temperatures to rising no more than two degrees Celsius by the end of the century and limiting

carbon dioxide emissions to below 450 parts per million (IPCC 2014). In order to limit global temperature increases to two degrees Celsius, the IPCC and organizations like the Union of Concerned Scientists have indicated that the United States and other developed countries would need to reduce greenhouse gas emissions anywhere from 78 to 95 percent below 1990 levels, with most organizations identifying an approximately 80 percent reduction below 1990 levels by 2050 to provide stabilization at the two degree Celsius threshold (IPCC 2014).

Although the State of California has taken action through legislation and executive orders to curb the generation or release of additional greenhouse gas emissions, the state still faces intensifying impacts of climate change in coming decades, as a result of emissions already released into the atmosphere (CNRA 2009a). The California Climate Adaptation Strategy indicates that California should expect overall hotter and drier conditions, with a continued reduction in winter snow (with concurrent increases in winter rains), as well as increased average temperatures and accelerating sea level rise. In addition to changes in average temperatures, sea level, and precipitation patterns, the intensity of extreme weather events is also changing (CNRA 2009a).

Climate change temperature projections identified in the 2009 California Climate Adaptation Strategy suggest the following:

- Average temperature increase is expected to be more pronounced in the summer than in the winter season.
- Inland areas are likely to experience more pronounced warming than coastal regions.
- Heat waves are expected to increase in frequency, with individual heat waves also showing a tendency toward becoming longer and extending over a larger area, thus more likely to encompass multiple population centers in California at the same time.
- Because GHGs remain in the atmosphere for decades, temperature changes over the next 30 to 40 years are already largely determined by past emissions. By 2050, temperatures are projected to increase by an additional 1.8 to 5.4°F [degrees Fahrenheit] (an increase one to three times as large as that which occurred over the entire twentieth century).
- By 2100, the models project temperature increases between 3.6 and 9°F. (CNRA 2009a)

According to the 2009 California Climate Adaptation Strategy, the impacts of climate change in California have the potential to include but are not limited to the areas discussed in **Table 4.6-1 (Potential Statewide Impacts from Climate Change)**.

TABLE 4.6-1
POTENTIAL STATEWIDE IMPACTS FROM CLIMATE CHANGE

Potential Statewide Impact	Description
Public Health	Climate change is expected to lead to an increase in ambient (i.e., outdoor) average air temperature, with greater increases expected in summer. Larger temperature increases are anticipated in inland communities as compared to the California coast. The potential health impacts from sustained and significantly higher than average temperatures include heat stroke, heat exhaustion, and the exacerbation of existing medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Numerous studies have indicated that there are generally more deaths during periods of sustained higher temperatures. The elderly, infants, and socially isolated people with pre-existing illnesses who lack access to air conditioning or cooling spaces are among the most at risk during heat waves.

Potential Statewide Impact	Description
Floods and Droughts	The impacts of flooding may include population displacement, severe psychosocial stress with resulting mental health impacts, exacerbation of pre-existing chronic conditions, and infectious disease. Additionally, impacts can range from a loss of personal belongings, and the emotional ramifications from such loss, to direct injury and/or mortality. Drinking water contamination outbreaks in the United States are associated with extreme precipitation events. Runoff from rainfall is also associated with coastal contamination that can lead to contamination of shellfish and contribute to food-borne illness. Floodwaters may contain household, industrial, and agricultural chemicals, as well as sewage and animal waste. Flooding and heavy rainfall events can wash pathogens and chemicals from contaminated soils, farms, and streets into drinking water supplies. Flooding may also overload storm and wastewater systems, or flood septic systems, also leading to possible contamination of drinking water systems. Drought impacts develop more slowly over time. Risks to public health that Californians may face from drought include impacts on water supply and quality, food production (both agricultural and commercial fisheries), and risks of waterborne illness. As surface water supplies are reduced as a result of drought conditions, the amount of groundwater pumping is expected to increase to make up for the water shortfall. The increase in groundwater pumping has the potential to lower the water tables and cause land subsidence. Communities that utilize well water will be adversely affected by drops in water tables or through changes in water quality. Groundwater supplies have higher levels of total dissolved solids compared to surface waters. This introduces a set of effects for consumers, such as repair and maintenance costs associated with mineral deposits in water heaters and other plumbing fixtures, and on public water system infrastructure designed for lower salinity surface water supplies. Drought may also lead to increased concentration of contaminants in drinking water supplies.
Water Resources	The state's water supply system already faces challenges to provide water for California's growing population. Climate change is expected to exacerbate these challenges through increased temperatures and possible changes in precipitation patterns. The trends of the last century, especially increases in hydrologic variability, will likely intensify in this century. The state can expect to experience more frequent and larger floods and deeper droughts. Rising sea level will threaten the Delta water conveyance system and increase salinity in near-coastal groundwater supplies.
Forests and Landscapes	Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, wildfire occurrence statewide could increase from 57 to 169 percent by 2085. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks will not be uniform throughout the state.

Source: CNRA 2009a

EXISTING CONDITIONS

Global and US Emissions

Global emissions have continued to increase nearly every year since 2000, reaching 34.5 billion metric tons of carbon dioxide equivalents ($MTCO_2e$) in 2012. The six largest emitting countries/regions were China (29 percent), the United States (15 percent), the European Union (11 percent), India (6 percent), the Russian Federation (5 percent), and Japan (2 percent) (PBL Netherlands Environmental Assessment Agency 2013).

According to the National Oceanic and Atmospheric Administration (NOAA), in March 2015 the monthly global average carbon dioxide concentration surpassed 400 parts per million (ppm) for the first time since tracking was initiated (NOAA 2015). This is considered a significant milestone, as it shows that humans burning fossil fuels have caused global carbon dioxide concentrations to rise

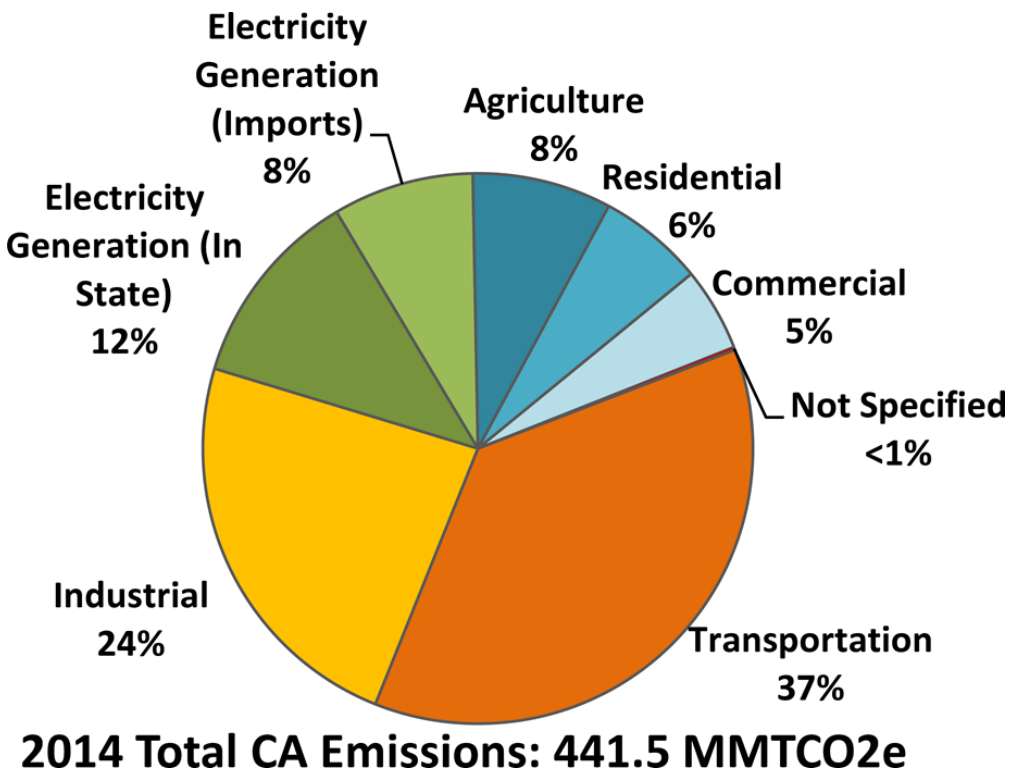
more than 120 ppm since pre-industrial times around the year 1800 (NOAA 2015). Half of this rise has occurred since 1980. By February 2016, the monthly average had risen to 404.02 ppm (NOAA 2016).

Recent assessments annual GHG emissions in the United States indicate that in 2014 emissions increased approximately 1 percent since 2013 to 6.8 billion $MTCO_2e$. While the 1 percent increase is attributed to increased fuel use and miles traveled, it still represents an approximately 9 percent decrease in emissions from 2005 levels (EPA 2016).

California Emissions

California produced 441 million metric tons of CO_2e ($MMTCO_2e$) in 2014 (CARB 2016), representing nearly 7 percent of all US emissions and 2 percent of global emissions. In 2014, the consumption of fossil fuels in the transportation sector was the single largest source of GHG emissions in California, accounting for 37 percent of total GHG emissions in the state (CARB 2016). This category was followed by the industrial sector (24 percent) and the electric power sector, including both in-state and out-of-state sources (20 percent) (CARB 2016).

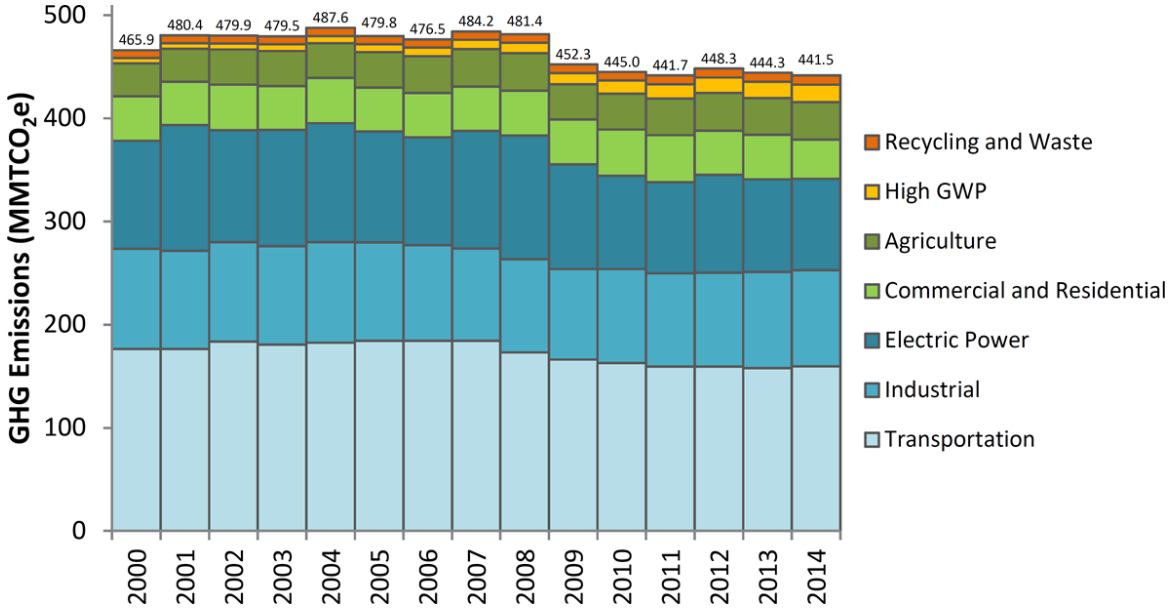
FIGURE 4.6-1
CALIFORNIA GREENHOUSE GAS EMISSIONS BY SECTOR, 2014



Source: CARB 2015

In 2014, total greenhouse gas emissions were 441.5 $MMTCO_2e$, representing an overall decrease of 9.4 percent since peak levels in 2004. During the 2000 to 2014 period, per capita GHG emissions in California continued to drop from a peak in 2001 of 13.9 $MTCO_2e$ per person to 11.4 $MTCO_2e$ per person in 2014, an 18 percent decrease (CARB 2016). To curb statewide emissions, the State of California has taken numerous legislative actions, described in the Regulatory Setting subsection, and implemented several incentive-based programs to reduce statewide greenhouse gas emissions over the last 10 years.

FIGURE 4.6-2
CALIFORNIA GREENHOUSE GAS EMISSIONS, 2000–2014



Source: CARB 2014a

The City of Hermosa Beach, working in conjunction with the South Bay Cities Council of Governments, prepared greenhouse gas inventories for 2005, 2007, 2010, and 2012 (City of Hermosa Beach 2015a). The inventories estimate emissions for on-road transportation, off-road equipment, residential and commercial energy use, solid waste generation, and water and wastewater emissions. The inventories were prepared consistent with industry protocols including the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions, the Local Government Operations Protocol, and the California Association of Environmental Professionals whitepapers on inventorying, forecasting, and setting targets for GHG emissions.

Transportation sector emissions are the result of gasoline and diesel combustion in vehicles traveling to, from, or within Hermosa Beach, but exclude emissions associated with vehicles that pass through the city without stopping (City of Hermosa Beach 2015b). Residential and commercial energy use calculates the emissions generated by electricity and natural gas consumed by residences and commercial businesses within Hermosa Beach, while solid waste emissions are based on the amount of waste disposed in landfills, where it decomposes and generates methane. Finally, water and wastewater emissions are calculated by determining the energy needed to extract, transport, treat, and dispose of the water resources consumed by the community.

Table 4.6-2 (Hermosa Beach Greenhouse Gas Emissions by Sector, 2005, 2007, 2010, 2012) illustrates Hermosa Beach's GHG inventory for the years 2005, 2007, 2010, and 2012. In 2005, Hermosa Beach generated approximately 137,160 metric tons of CO_2e. On-road transportation, at 73,567 metric tons of CO_2e, represented the largest share of emissions at 54 percent. In 2007, the city generated approximately 132,768 metric tons of CO_2e, a 3.2 percent decrease from the total emissions in 2005. This decrease was attributed to fewer emissions from all emission categories. By 2012, the city had a reduction in emissions of 7.7 percent from the 2005 inventory, with emissions decreasing in most sectors. Between 2005 and 2012, the wastewater sector observed a small increase in emissions and the residential energy sector saw a nearly 5 percent increase in emissions.

TABLE 4.6-2
HERMOSA BEACH GREENHOUSE GAS EMISSIONS BY SECTOR, 2005, 2007, 2010, 2012

Sector	2005 ($MTCO_2e$)	% of Total	2007 ($MTCO_2e$)	% of Total	2010 ($MTCO_2e$)	% of Total	2012 ($MTCO_2e$)	% of Total
On-Road Transportation	73,567	54%	71,863	54%	70,277	55%	68,235	54%
Residential Energy	32,293	24%	31,964	24%	32,700	26%	33,808	27%
Commercial Energy	20,280	15%	19,792	15%	18,372	14%	17,830	14%
Solid Waste	6,015	4%	4,584	3%	3,510	3%	3,334	3%
Water	4,065	3%	3,942	3%	2,552	2%	2,600	2%
Off-road Sources	888	1%	588	<1%	419	<1%	745	<1%
Wastewater	52	<1%	35	<1%	59	<1%	59	<1%
Total	137,160		132,768		127,889		126,611	
Change from 2005			-3.2%		-6.8%		-7.7%	

Source: City of Hermosa Beach 2015b

On a per capita basis, the Hermosa Beach community generated 6.4 $MTCO_2e$ per year per resident in 2012, based on California Department of Finance estimates of 19,699 residents in 2012. The per capita estimates are lower than the California average of 11.9 $MTCO_2e$ per resident in 2014.

4.6.3 REGULATORY SETTING

State and local laws, regulations, and policies provide a regulatory framework for addressing GHG emissions under PLAN Hermosa. Key laws, regulations, and policies helping to reduce local emissions are summarized below.

STATE

- **The California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32 and Senate Bill [SB] 32):** AB 32 is the primary legislation that has driven GHG regulation and analysis in California between 2006 and 2016, by instructing the California Air Resource Board (CARB) to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020. Based on CARB's calculations of emissions levels, California must reduce GHG emissions by approximately 15 percent below 2005 levels to achieve this goal. In September 2016, the Governor signed SB 32, which builds upon the statewide targets for 2020 by establishing a longer-term target so that "statewide greenhouse gas emissions are reduced to 40 percent below the 1990 levels by 2030." The bill further authorized CARB to adopt regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions.
- **California Executive Orders S-3-05 (2005) and B-30-15 (2015):** These two executive orders highlight longer-term GHG emissions reduction targets for the state, though such targets have not yet been adopted by the legislature and signed into law. Specifically, Executive Order (EO) S-3-05 seeks to achieve a reduction of GHG emissions of 80 percent below 1990 levels by 2050, consistent with the scientific consensus that developed regions will need to reduce emissions at least 80 percent below 1990 levels to limit global warming to two degrees Celsius. Executive Order B-30-15 seeks to establish an interim target, between the

2020 target established through AB 32 and the long-term targets in EO S-3-05, to achieve a reduction of GHG emissions of 40 percent below 1990 levels by 2030.

- **CEQA and Greenhouse Gas Emissions (Senate Bill 97):** In 2007, the Natural Resources Agency was directed by the legislature to prepare amendments to the California Environmental Quality Act (CEQA) Guidelines, providing direction to lead agencies on how to analyze and mitigate greenhouse gas emissions. According to the Governor's Office of Planning and Research, the amendments adopted in 2009 to the CEQA Guidelines helped to clarify the following:

  1) Lead agencies must analyze the greenhouse gas emissions of proposed projects and must reach a conclusion regarding the significance of those emissions. (See CEQA Guidelines Section 15064.4.)

  2) When a project's greenhouse gas emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions. (See CEQA Guidelines Section 15126.4(c).)

  3) Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change. (See CEQA Guidelines Section 15126.2(a).)

  4) Lead agencies may significantly streamline the analysis of greenhouse gases on a project level by using a programmatic greenhouse gas emissions reduction plan meeting certain criteria. (See CEQA Guidelines Section 15183.5(b).)

  5) CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply, and ways to reduce energy demand, including through the use of efficient transportation alternatives. (See CEQA Guidelines Appendix F.)

These amendments essentially provided two pathways for lead agencies to conduct GHG emissions analysis: (1) individually analyze and mitigate the greenhouse gas emissions generated by any project subject to CEQA, or (2) develop, at the programmatic level, a Qualified GHG Reduction Strategy and require each project to demonstrate that the project is consistent with the strategy. The amendments to the CEQA Guidelines additionally outlined the components required for a public agency's GHG emissions reduction strategy in order to be deemed qualified. The requirements for a Qualified GHG Reduction Strategy should:

- Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.
- Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable.
- Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area.
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.
- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels.
- Be adopted in a public process following environmental review.

Rather than a state or regional agency determining whether a public agency's GHG reduction plan meets the requirements to be deemed qualified, to date, the responsibility has remained with each individual agency to demonstrate how its GHG reduction plan fulfills each component of the requirements. The City of Hermosa Beach anticipates that PLAN Hermosa, in conjunction with this Environmental Impact Report, is designed to meet the intent of a Qualified GHG Reduction Strategy and will elaborate how these documents are consistent with each component of the CEQA Guidelines under the discussion related to Impact 4.6-2.

LOCAL

- **South Coast Air Management District (SCAQMD).** To provide guidance to local lead agencies on determining the significance of greenhouse gas emissions in CEQA documents, SCAQMD staff is in the process of developing significance thresholds for criteria air pollutants and GHGs relative to general plans. A SCAQMD Working Group has proposed several possible thresholds, including thresholds for analysis of general plan impacts. On September 28, 2010, SCAQMD Working Group Meeting #15 considered use of a metric ton per service population metric as a threshold for plan-level analysis, though it has not adopted any thresholds for the land use sector to date. The first threshold corresponds to a 2020 service population metric of 6.6 metric tons of CO_2e per service population (residents plus employees) per year. The second proposed threshold is a 2035 service population metric of 4.1 metric tons of CO_2e per service population per year. These efficiency thresholds were developed based on the statewide GHG inventory and statewide emission reduction goals of AB 32.
- **Hermosa Beach 2011 Sustainability Plan.** The City is involved in a number of efforts to reduce GHG emissions. The City Council adopted the first Sustainability Plan for Hermosa Beach in 2011. The Sustainability Plan describes community and municipal GHG emissions, compares future emissions to the AB 32 emissions reduction target (15 percent below 2005 levels), and outlines a series of strategies and actions to reduce GHG emissions. The strategies address emissions from building energy (commercial, residential, and municipal), transportation, solid waste, and water consumption, determining that the suite of programs could reasonably reduce emissions 15 percent below 2005 levels. Although the Sustainability Plan qualitatively compared future emissions to the AB 32 emissions reduction target, it did not adopt targets for greenhouse gas emissions.
- **Municipal Carbon Neutral Plan.** In 2015, the City of Hermosa Beach codified a local goal to become a carbon neutral municipal organization no later than 2020 through adoption of the Municipal Carbon Neutral Plan. This plan sets the City up to demonstrate environmental leadership at the municipal level and identifies carbon reduction programs and initiatives to achieve the carbon neutral goal. By setting an aggressive municipal goal, the City hopes to set an example to the Hermosa Beach community and to other communities in the region to take bold action to reduce greenhouse gas emissions and limit the degree of catastrophic impacts that climate change could have in the future.

4.6.4 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of PLAN Hermosa compared to existing conditions. This analysis uses the information provided in the 2015 City of Hermosa Beach GHG Inventory, Forecasting, Target-Setting Report for an Energy Efficiency Climate Action Plan (2015 GHG Inventory Report) and the local growth projections determined based on available land capacity (see Chapter 3.0, Project Description) as the basis

for projecting future GHG emissions in the city, as well as the Carbon Planning Tool developed to evaluate the GHG reduction potential of various policies.

As mentioned in the Environmental Setting subsection, the inventories were prepared consistent with industry protocols, including the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions, the Local Government Operations Protocol, and the California Association of Environmental Professionals whitepapers on inventorying, forecasting, and setting targets for GHG emissions.

The Hermosa Beach Carbon Planning Tool is an Excel-based tool built to estimate the effectiveness of implementing various programs on reducing greenhouse gas emissions, as well as the associated costs and benefits from implementing measures. The tool includes data and information specific to Hermosa Beach regarding energy consumption, travel patterns, and building stock and relies on best practices such as the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures to outline the assumptions and methods for calculating the greenhouse gas reduction potential of various implementation measures. The Carbon Planning Tool includes the links and sources used for each data point and assumptions used to calculate emissions reductions.

Draft PLAN Hermosa Policies and Implementation Actions

Understanding that over 50 percent of the community's GHG emissions come from transportation, the City proposes a land use plan that allows for more office space (more professional jobs in town) to reduce commute dependence, more community-serving retail dispersed more evenly throughout the community to reduce the length of trips or dependence on automobiles for local trips, a wide variety of transportation system improvements to provide safe walking, bicycling, and transit, and green infrastructure options. Additionally, the City proposes to reduce the carbon intensity from energy consumption by increasing the amount of renewable energy generated and by implementing efficiency and conservation programs to reduce the amount of energy consumed. PLAN Hermosa policies and implementation actions that reduce potential GHG-related impacts include the following:

Policies

Transportation

Governance Element

- **4.4 Regional transportation and infrastructure decisions.** Actively support regional transportation and infrastructure projects and investment decisions that benefit the City and the region.
- **6.4 Jobs-housing balance.** Strive to improve the jobs-housing balance in the city by actively pursuing employment uses that match the skill and educational levels of existing and future residents.

Land Use + Design Element

- **Land Use Designations –** The range and diversity of uses allowed within each land use designation plays a role in the number of trips a use generates and the mode of transportation chosen to make that trip. The more diversity in uses (between commercial, office/professional, residential, etc.) in a given area, combined with a safe transportation network, results in shorter trips that can be made by driving, walking, biking, or transit.
- **1.1 Diverse and distributed land use pattern.** Strive to maintain the fundamental pattern of existing land uses, preserving residential neighborhoods, while providing for enhancement

and transformation of corridors and districts in order to improve community activity and identity.

- **1.2 Focused infill potential.** Proposals for new development should be directed toward the city's commercial areas with an emphasis on developing transit-supportive land use mixes.
- **1.3 Access to daily activities.** Strive to create sustainable development patterns such that the majority of residents are within one-half mile walking distance to a variety of neighborhood goods and services, such as supermarkets, restaurants, churches, cafes, dry cleaners, laundry mats, farmers' markets, banks, personal services, pharmacies and similar uses.
- **1.4 Diverse commercial areas.** Promote the development of diversified and unique commercial districts with locally owned businesses and job- or revenue-generating uses.
- **4.2 Employment centers.** Encourage the development and co-location of additional office space and employment centers along corridors.
- **4.7 Access to transit.** Support the location of transit stations and enhanced stops near the intersection of Aviation Blvd and Pacific Coast Highway, and adjacent to Gateway Commercial uses to facilitate and take advantage of transit service, reduce vehicle trips and allow residents without private vehicles to access services.
- **4.10 Pedestrian access.** For all new development, encourage pedestrian access, and create strong building entries that are primarily oriented to the street.
- **6.2 Streetscaping.** Proactively beautify existing streetscapes with street trees, landscaping and pedestrian-scaled lighting.
- **6.3 Green infrastructure network.** Establish an interconnected green infrastructure network throughout Hermosa Beach that serves as a network for active transportation, recreation and scenic beauty and connects all areas of the city. In particular, connections should be made between the beach, parks, the Downtown, neighborhoods, and other destinations within the city. Consider the following components when designing and implementing the green/open space network:
  - Preserved open space areas such as the beach and the Greenbelt;
  - Living streets with significant landscaping and pedestrian and bicycle amenities; and
  - Community and neighborhood parks, and schools.
- **6.5 Provision of sidewalks.** Encourage pedestrian-friendly sidewalks on both sides of streets in neighborhoods.
- **6.7 Pedestrian-oriented design.** Eliminate urban form conditions that reduce walkability by discouraging surface parking and parking structures along walkways, long blank walls along walkways, and garage-dominated building facades.
- **6.8 Balance pedestrian/vehicular circulation.** Require vehicle parking design to consider pedestrian circulation. Require the following of all new development along corridors:
  - Where parking lots front the street, the City will work with existing property owners to add landscaping between the parking lot and the street.
  - Parking lots should be landscaped to create an attractive pedestrian environment and reduce the impact of heat islands.
  - The number of curb cuts and other intrusions of vehicles across sidewalks should be minimized.

  - When shared parking supply options are not available, encourage connections between parking lots on adjacent sites.
  - Above-ground parking structures should be designed according to the same urban design principles as other buildings.
  - Encourage the use of systems to increase parking lot efficiency, such as mechanical lift systems or occupancy sensors.

- **9.1 Ocean-based energy resources.** Encourage and support research and responsible development of renewable ocean-based energy sources. Renewable energy sources appropriate to Hermosa Beach shall be limited to wave, tidal, solar, and wind sources that meet the region's and state's need for affordable sources of renewable energy.
- **9.2 Renewable energy facilities.** To reduce or avoid conflicts, communicate and collaborate with affected ocean users, coastal residents and businesses, and applicants seeking state or federal authorization for the siting, development, and operation of renewable energy facilities.
- **9.3 Ecosystem preservation.** Ensure that any future proposed offshore facilities do not have unacceptable adverse effects on the integrity, stability, and complexity of the marine ecosystem, important marine habitat, and areas important to fisheries, navigation, recreation, and aesthetic enjoyment.
- **9.5 Reclamation.** Require renewable energy facility operations to restore the natural characteristics of a site to the extent practicable when a project is decommissioned and removed.
- **13.3 Fresh food offerings.** Encourage the continuation and expansion of fresh food offerings including farmers' markets, community gardens, and edible landscapes in Hermosa Beach.

Mobility Element

- **1.1 Consider all modes.** Require the planning, design, and construction of all new and existing transportation projects to consider the needs of all modes of travel to create safe, livable and inviting environments for all users of the system.
- **1.5 Require improvements**. Require new development to provide or pay its share of transportation and infrastructure improvements including any sidewalk improvements, landscaping, bicycle infrastructure, traffic calming, and public realm improvements.
- **2.5 Require sustainable practices.** Incorporate environmental sustainability practices into designs and strategic management of road space and public right-of-ways, prioritizing practices that can serve dual infrastructure purposes.
- **3.2 Invest in sidewalks.** Prioritize investment in designated priority sidewalks to ensure a complete network of sidewalks and pedestrian-friendly amenities that enhances pedestrian safety, access opportunities and connectivity to destinations.
- **3.3 Active transportation.** Require that all development or redevelopment projects accommodate active transportation through providing on-site amenities, necessary connections to existing and planned pedestrian and bicycle networks, and incorporate people-oriented design practices.
- **3.4 Access opportunities.** Provide enhanced mobility and access opportunities for local transportation and transit services in areas of the city with sufficient density and intensity of uses, mix of appropriate uses, and supportive bicycle and pedestrian network connections that can reduce vehicle trips within the city's busiest corridors.

- **3.5 Incentivize other modes.** Incentivize local shuttle/trolley services, rideshare and car share programs, and developing infrastructure that support low speed, low carbon (e.g. electric) vehicles.
- **3.6 Complete bicycle network.** Provide a complete bicycle network along all designated roadways while creating connections to other modes of travel including walking and transit.
- **4.1 Shared parking.** Facilitate park-once and shared parking policies among private developments that contribute to a shared parking supply and interconnect with adjacent parking facilities.
- **4.4 Provision of subsidized parking.** Ensure the provision of subsidized on-street residential parking is limited to residences which cannot provide adequate parking on-site.
- **4.5 Sufficient bicycle parking.** Require a sufficient supply of bicycle parking to be provided in conjunction with new vehicle parking facilities by both public and private developments.
- **4.6 Priority parking.** Provide priority parking and charging stations to accommodate the use of Electric Vehicles (EVs), including smaller short-distance neighborhood electric vehicles.
- **4.9 Encourage TDM strategies.** Encourage use of Transportation Demand Management (TDM) strategies and programs such as carpooling, ride hailing, and alternative transportation modes as a way to reduce demand for additional parking supply.
- **5.1 Prioritize development of infrastructure.** Prioritize the development of roadway and parking infrastructure that encourages private electric and other low carbon vehicle ownership and use throughout the city.
- **5.2 Local transit system.** Develop a local transit system that facilitates efficient transport of residents, hotel guests, and beachgoers between activity centers, and to Downtown businesses and the beach.
- **5.3 Incentivize TDM strategies.** Incentivize the use of Transportation Demand Management (TDM) strategies as a cost effective method for maximizing existing transportation infrastructure to accommodate mobility demands without significant expansion to infrastructure.
- **5.5 Encourage smart growth.** Encourage smart growth land use features in development projects to ensure more compact, mixed, connected, and multimodal development that supports reduced trip generation, trip lengths, and greater ability to utilize alternative modes.
- **6.1 Regional network.** Work with government agencies and private sector companies to develop a comprehensive, regionally integrated transportation network that connects the community to surrounding cities.
- **6.3 Support programs.** Facilitate greater local and regional mobility through programs for shared equipment or transportation options such as car sharing and bike sharing.
- **6.6 Greater utilization.** Consider exploring opportunities for greater utilization of the Beach Cities Transit system for improved mobility along major corridors and as a potential means of improved regional transit connections.

Sustainability + Conservation Element

- **2.4 Land use and transportation investments.** Promote land use and transportation investments that support greater transportation choice, greater local economic opportunity, and reduced number and length of automobile trips.
- **3.2 Mobile source reductions.** Support land use and transportation strategies to reduce vehicle miles traveled and emissions, including pollution from commercial and passenger vehicles.
- **3.3 Fuel efficient fleets.** Promote fuel efficiency and cleaner fuels for vehicles as well as construction and maintenance equipment by requesting that City contractors provide cleaner fleets.

Parks + Open Space Element

- **4.2 Enhanced access points.** Increase and enhance access to parks and open space, particularly access points that promote physical activity such as pedestrian- and bike-oriented access points.
- **4.3 Safe and efficient trail network.** Develop a network of safe and efficient trails, streets, and paths that connect residents, visitors, and neighboring communities to the beach, parks, and activity centers.
- **6.4 Transit access.** Coordinate with regional agencies and neighboring jurisdictions to improve regional and local transit access to beach access points.
- **6.5 Bicycle and pedestrian access.** Maximize bicycle and pedestrian access and safety getting to and around the Coastal Zone through infrastructure and wayfinding improvements.
- **6.12 Complete South Bay Bike Master Plan.** Prioritize completion of proposed South Bay Bike Master Plan improvements in the Coastal Zone that connect to other bike routes and paths throughout the city and to the surrounding region.

Infrastructure Element

- **2.4 Sidewalk improvements.** Consider innovative funding strategies, such as cost-sharing, ADA accessibility grants, or sidewalk dedications, to improve the overall condition, safety, and accessibility of sidewalks.
- **2.5 Active transportation dedications.** Require new development and redevelopment projects to provide land or infrastructure necessary to accommodate active transportation, such as sidewalks, bike racks, and bus stops.
- **2.6 Traffic signal coordination.** Maintain and operate the traffic signal system with advanced technologies to manage traffic operations and maintain traffic signal infrastructure.

Energy Consumption

Sustainability + Conservation Element

- **4.1 Renewable energy generation.** Require, promote, and facilitate the installation of renewable energy projects on homes and businesses.
- **4.2 Building energy disclosure.** Require large buildings to report their energy and water use on a regular basis.

- **4.3 Retrofit program.** Provide an energy retrofit program to assist home and building owners to make efficiency improvements.
- **4.4 Rental efficiency.** Adopt a financing program to incentivize rental efficiency retrofits, such as green leasing.
- **4.5 Municipal facilities.** Continue to work toward achieving carbon neutral municipal facilities by 2020.
- **4.6 Sustainable building standards.** Use sustainable building checklists to minimize or eliminate waste and maximize recycling in building design, demolition, and construction activities.

Infrastructure Element

- **6.4 Innovative and renewable technology.** Encourage the exploration and establishment of innovative and renewable utility service technologies.
- **6.5 Renewable energy facilities.** Unless a renewable energy facility would cause an unmitigatable impact to health or safety, allow them by right.
- **6.6 Community choice aggregation.** Collaborate with nearby local and regional agencies to develop a community choice aggregation system that provides greater renewable energy choices to the community.

Water Conservation

Sustainability + Conservation Element

- **5.1 Recycled water facilities.** Enhance the availability of recycled water supply and distribution facilities are available throughout the city.
- **5.3 Water conservation programs.** Update and improve water conservation and efficiency programs, requirements, and incentives on a regular basis.
- **5.5 Greywater.** Encourage the installation of greywater irrigation or disposal systems.

Infrastructure Element

- **3.2 Alternative water supplies.** Pursue expansion of recycled water infrastructure and other alternative water supplies to meet water demands of the community that cannot be offset through conservation measures.
- **3.3 Recycled water infrastructure**. Require the use of recycled water in areas currently served by infrastructure, and encourage integration of recycled water into new buildings which may be served by appropriate infrastructure in the future.
- **3.6 Water infrastructure.** Support the development of water storage, recycling, greywater treatment, and necessary transmission facilities.

Waste + Recycling

Sustainability + Conservation Element

- **6.1 Franchise agreements.** Ensure waste franchise agreements and program offerings provide progressively higher rates of waste diversion.
- **6.2 Food waste collection.** Ensure food waste collection is available and convenient for all residents, businesses, and organizations.

- **6.3 Multi-family and commercial recycling.** Require the provision of convenient recycling options in multi-family residential and commercial uses.
- **6.6 Composting programs.** Provide composting equipment at community facilities and events and encourage home and commercial composting.
- **6.9 Building salvage.** Maximize building salvage and deconstruction in remodeling or building demolition projects.

Construction Equipment

Sustainability + Conservation Element

- **3.4 Two-stroke engines.** Discourage the use of equipment with two-stroke engines and publicize the benefits and importance of alternative technologies.
- **3.5 Clean fuels.** Support increased local access to cleaner fuels and cleaner energy by encouraging fueling stations that provide cleaner fuels and energy to the community.

Other Sectors/Supportive Policies

Sustainability + Conservation Element

- **1.2 Highest return on investment.** Prioritize the implementation of greenhouse gas reduction projects that simultaneously reduce ongoing operational costs to the City.
- **1.4 Carbon offsets as needed.** When necessary, purchase carbon offsets to achieve municipal carbon neutral goal.
- **1.6 Demonstration and pilot projects.** Utilize demonstration and pilot projects as a means to evaluate the greenhouse gas reduction potential and cost effectiveness of projects.
- **2.1 State targets and goals.** Reduce greenhouse gas emissions in alignment with State targets and goals, and achieve carbon neutrality as a community no later than 2040.
- **2.2 Triple bottom line projects.** Prioritize the implementation of greenhouse gas reduction projects that simultaneously provide the greatest economic and health benefits to the community.
- **2.3 Diversify GHG reduction strategies.** Pursue a diverse mixture of greenhouse gas reduction strategies across the transportation, energy, waste sectors, commensurate with their share of the community's greenhouse gas emissions.
- **2.5 Carbon offsets as needed.** When necessary, purchase carbon offsets to achieve community carbon neutral goal.
- **2.7 Discretionary projects**. Require discretionary projects to substantially mitigate all feasible greenhouse gas emissions, and offset the remainder of greenhouse gas emissions produced to meet annual thresholds.
- **2.8 Ministerial projects.** Encourage ministerial projects to directly offset potential greenhouse gas emissions generated.

Parks + Open Space Element

- **2.4 Low-maintenance design.** Promote environmentally sustainable and low maintenance design principles in the renovation, addition, or maintenance of parks and recreation facilities.
- **3.6 Community gardens**. Increase available space and necessary infrastructure to incorporate community garden plots at parks.

- **8.10 Sustainable events.** Improve sustainability and environmental protection associated with special events.
- **10.1 Urban forest.** Expand the urban forest and green spaces citywide on public and private property.
- **10.2 Native landscapes.** Require the planting of native, non-invasive, and drought-tolerant landscaping and trees, and encourage the planting of edible landscapes and fruit trees.

Infrastructure Element

- **1.5 New technologies.** When feasible, utilize emerging technologies and funding strategies that improve infrastructure efficiency, sustainability, and resiliency.

Implementation Actions

- SUSTAINABILITY-1. Establish a local greenhouse gas impact fee for projects to offset their fair share of greenhouse gas emissions generated, by providing funding for implementation of local GHG reduction projects.
- SUSTAINABILITY-2. Establish greenhouse gas emissions thresholds of significance and standardize potential mitigation measures for both discretionary and ministerial actions.
- SUSTAINABILITY-4. Identify, prioritize, and implement greenhouse gas reduction projects utilizing the City's carbon reduction planning tools for community and municipal operations.
- SUSTAINABILITY-5. Regularly monitor and evaluate the City's greenhouse gas emissions inventory and report on progress toward greenhouse gas reduction goals.

Thresholds of Significance

The impact analysis provided below is based on the application of the following CEQA Guidelines Appendix G thresholds of significance. Greenhouse gas–related impacts are considered significant if implementation of PLAN Hermosa would:

1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
2) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Subsequent development allowed under PLAN Hermosa would result in the generation of GHG emissions associated with future construction activities, consisting primarily of emissions from equipment use and construction worker transportation, as well as long-term operations, consisting primarily of new stationary source emissions such as natural gas used for heating, transportation emissions, and indirect source emissions such as electricity usage for lighting.

Addressing GHG generation impacts requires an agency to make a determination as to what constitutes a significant impact. The amendments to the CEQA Guidelines (Section 15064.4) specifically allow lead agencies to determine thresholds of significance that illustrate the extent of an impact and are a basis from which to apply mitigation measures. This means that each agency is left to determine whether a project's GHG emissions will have a "significant" impact on the environment. The guidelines direct that agencies are to use "careful judgment" and "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" the project's GHG emissions (14 California Code of Regulations [CCR] Section 15064.4(a)).

A number of regulatory agencies throughout the state have drafted or adopted varying threshold approaches and guidelines for analyzing greenhouse gas emissions in CEQA documents. The different thresholds include compliance with a qualified GHG reduction strategy, performance-based reductions, numeric "bright-line" thresholds, and efficiency-based thresholds.

The California Supreme Court decision in the *Centers for Biological Diversity et al. vs. California Department of Fish and Wildlife, the Newhall Land and Farming Company* (November 30, 2015, Case No. S217763) confirmed that when an "agency chooses to rely completely on a single quantitative method to justify a no-significance finding, CEQA demands the agency research and document the quantitative parameters essential to that method."

While the calculation of an efficiency metric is useful to evaluate new development within the context of a long-term goal, the proposed PLAN Hermosa buildout time frame of 2040 extends beyond the time horizon identified in the metrics proposed by the SCAQMD (2020, 2035). Additionally, because PLAN Hermosa includes policies to reduce GHG emissions comprehensively from both new and existing development, it is more appropriate to utilize the State's long-term GHG reduction goals and scientific consensus to determine whether PLAN Hermosa includes policies and programs to reduce greenhouse gas emissions to a level that is considered less than significant.

In order to align with or be on a trajectory to meet the State's long-term greenhouse gas reduction goals and the scientific consensus of the emissions reductions needed to limit global warming to two degrees Celsius, the City of Hermosa Beach would need to reduce emissions equivalent to the following levels:

- To 1990 levels by 2020 (equivalent to 15 percent below 2005 levels) – consistent with AB 32
- To 40 percent below 1990 levels by 2030 (equivalent to 49 percent below 2005 levels) – consistent with SB 32 and EO B-30-15
- To 80 percent below 1990 levels by 2050 (equivalent to 83 percent below 2005 levels) – consistent with EO S-3-05

Since PLAN Hermosa has a buildout time horizon of 2040, the minimum equivalent GHG reduction needed to be consistent with long-term state targets would be 60 percent below 1990 levels by 2040, which equates to 66 percent below 2005 levels.

Additionally, since the City of Hermosa Beach has adopted and codified a GHG reduction goal for municipal operations, PLAN Hermosa would be considered significant if it conflicted with the City's goal to achieve carbon neutrality in municipal operations by 2020.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.6-1 ***Would PLAN Hermosa Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in additional greenhouse gas emissions generated. However, the plan also includes numerous policies and actions to reduce or eliminate GHG emissions from both new and existing development through incentives and voluntary actions that will meet or exceed the long-term greenhouse gas reduction goals to reduce emissions at least 66 percent below 2005 levels by 2040 (excluding offsets—see discussion on page 4.6-22) through direct and local programs. However, since the City is relying on incentive-based or voluntary actions to achieve GHG reduction goals, there is a lower degree of certainty that the emissions reductions thresholds would be met compared to regulatory or mandatory actions. This impact would be* ***potentially significant.***

GHG emissions contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change. No single land use project could generate enough GHG emissions to noticeably change the global average temperature. The combination of GHG emissions from past, present, and future projects contributes substantially to global climate change and its associated environmental impacts and as such is addressed only as a cumulative impact.

Emissions Forecast and Local Target

The City's GHG inventory report assessed baseline/current emissions levels in Hermosa Beach. The inventory relied on standardized protocols including the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions and the Association of Environmental Professionals Supplement to the Protocol for California to calculate the estimated emissions generated by activities in Hermosa Beach. In 2005, Hermosa Beach generated approximately 137,160 $MTCO_2e$ annually from activities related to transportation, electricity use, natural gas use, waste disposal, and water/wastewater activities. Between 2005 and 2012, emissions in Hermosa Beach decreased to 126,611 $MTCO_2e$, which represents a 7.7 percent decrease in emissions or an average decrease in emissions of 1.1 percent per year (City of Hermosa Beach 2015a).

Annual emissions generated vary from year to year based on a variety of factors, but often increase as the number of people living or working in a given area increases. The 2015 GHG inventory report forecast emissions levels for Hermosa Beach in 2035 if population, housing, and employment forecasts reached the levels projected by the Southern California Association of Governments (SCAG) in the 2035 Regional Transportation Plan and no new programs to reduce emissions were implemented, referred to as a business-as-usual or BAU forecast. Since the 2015 report was prepared, the City of Hermosa Beach provided more locally relevant information to SCAG on population, housing, and employment forecasts that were incorporated into the 2040 Regional Transportation Plan. Subsequently, the City of Hermosa Beach developed an updated BAU forecast for the year 2040 using the local projections adopted by SCAG and the Carbon Planning Tool developed by the City. It should be noted that 2040 emissions are projected to be lower than 2005 emissions due to the decreases achieved between 2005 and 2012, and the limited increase in the number of additional residents, employees, and housing units expected between 2012 and 2040.

Table 4.6-3 (Hermosa Beach Baseline (2005), Forecast (2040) Emissions, and Target Level (2040)) depicts the baseline emissions in 2005, the BAU forecast for 2040, and the emissions levels needed to be on a similar trajectory to long-term state targets by 2040.

TABLE 4.6-3
HERMOSA BEACH BASELINE (2005), FORECAST (2040) EMISSIONS, AND TARGET LEVEL (2040)

Time Frame/Target	Emissions Levels ($MTCO_2e$)
Baseline Emissions (2005)	137,160
Business-as-Usual Forecast Emissions (2040)	133,430
Emissions Levels to Meet State Target (2040)/66% below 2005 levels	46,630
Reductions Needed to Achieve 2040 Target	-86,800

Source: City of Hermosa Beach 2016

State Programs to Reduce Emissions Locally

Legislation, such as AB 1493 and the Advanced Clean Cars Program, the Low Carbon Fuel Standard, the Renewables Portfolio Standard, and the California Building Energy Efficiency Standards and Green Building Standards, described in **Table 4.6-4 (California Policies Reducing**

Emissions Locally), is geared toward reducing GHG emissions on a statewide level. However, these legislative actions will help to reduce GHG emissions locally, as residents and businesses purchase additional fuel-efficient and electric vehicles or consume electricity consume energy produced with greater amounts of renewable energy.

TABLE 4.6-4
CALIFORNIA POLICIES REDUCING EMISSIONS LOCALLY

Legislation	Description
Assembly Bill 1493 and Advanced Clean Cars Program	AB 1493 (the Pavley Standard) (Health and Safety Code Sections 42823 and 43018.5) aims to reduce GHG emissions from noncommercial passenger vehicles and light-duty trucks of model years 2009–2016. By 2025, when all rules will be fully implemented, new automobiles will emit up to 24 percent fewer CO_2e emissions and 75 percent fewer smog-forming emissions.
Low Carbon Fuel Standard (LCFS)	EO S-01-07 (2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California. The regulation took effect in 2010 and is codified at Title 17, California Code of Regulations Sections 95480–95490. The LCFS will reduce greenhouse gas emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020.
Renewables Portfolio Standard (Senate Bill X12 & Senate Bill 350)	The Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020. The 33 percent standard is consistent with the RPS goal established in the Scoping Plan. The passage of Senate Bill 350 in 2015 updates the RPS to require the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. The bill would make other revisions to the RPS program and to certain other requirements on public utilities and publicly owned electric utilities.
California Building Energy Efficiency Standards	In general, the California Building Energy Efficiency Standards require the design of building shells and building components to conserve energy. The California Energy Commission adopted changes to the 2013 Building Energy Efficiency Standards contained in the California Code of Regulations, Title 24, Part 6 (also known as the California Energy Code) and associated administrative regulations in Part 1. The amended standards took effect in the summer of 2014. The 2013 Building Energy Efficiency Standards are 25 percent more efficient than previous standards for residential construction and 30 percent better for nonresidential construction. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. Energy-efficient buildings require less electricity, and increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.
California Green Building Standards	The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the CALGreen Code, is a statewide mandatory construction code that was developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics. The most recent update to the CALGreen Code went into effect July 1, 2014.

** Senate Bill 375 is codified at Government Code Sections 65080, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, 65588, 14522.1, 14522.2, and 65080.01, as well as at Public Resources Code Sections 21061.3 and 21159.28 and Chapter 4.2.*

These actions require limited local action and are accounted for in the City's emissions forecasts to provide a more accurate picture of future emissions and the remaining gap to be filled with local policies and programs to reduce emissions to levels consistent with state recommendations. This forecast is called the adjusted BAU forecast. **Table 4.6-5 (Comparison of BAU and Adjusted BAU Emissions (2040))** summarizes the projected community GHG emissions for the city through 2040. Through 2020, the implementation of state programs and regulations is expected to reduce

local emissions approximately 23 percent below baseline emissions, exceeding the State-recommended goal of 15 percent below baseline emissions by approximately 8 percent (City of Hermosa Beach 2016).

TABLE 4.6-5
COMPARISON OF BAU AND ADJUSTED BAU EMISSIONS (2040)

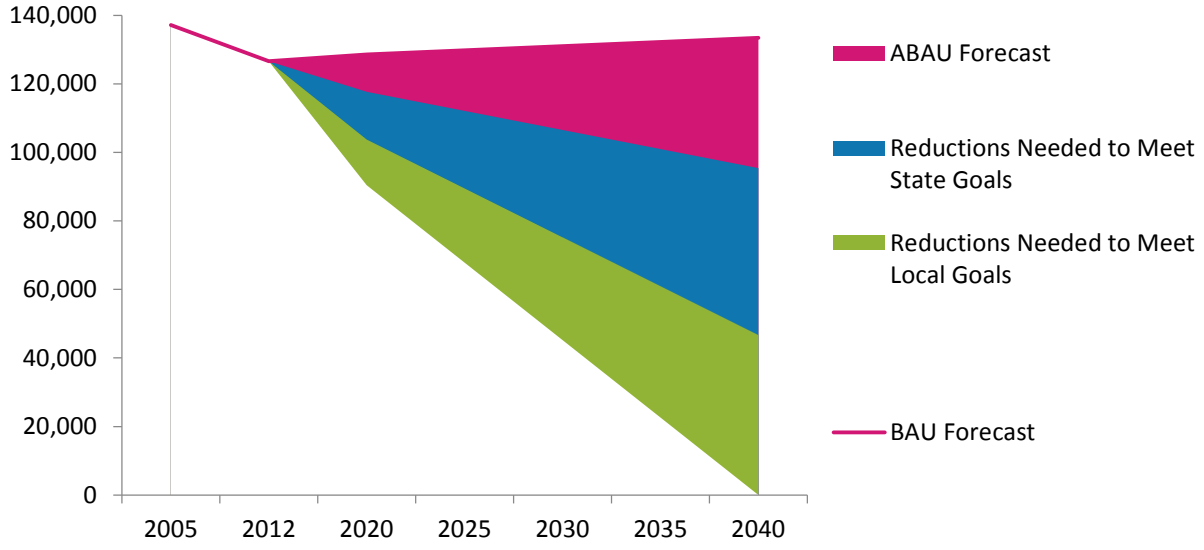
Sector	BAU	ABAU	Percentage Reduction
On-Road Transportation	64,560	43,320	33%
Off-Road Sources	1,090	730	33%
Nonresidential Energy	24,120	16,460	32%
Residential Energy	37,400	29,800	20%
Solid Waste	3,480	3,480	0%
Water & Wastewater	2,780	1,630	41%
Total Emissions	133,430	95,420	28%

Source: City of Hermosa Beach 2016

As shown, the city's adjusted BAU emissions are estimated to be approximately 95,420 $MTCO_2e$ in 2040. This change represents a 28 percent reduction from BAU levels in 2040 or approximately 38,000 $MTCO_2e$ reduced annually from implementation of state legislation.

As depicted in **Figure 4.6-3 (Emissions Reductions Needed to Meet State and Local Targets)**, the impact of state legislation on local emissions in 2040 would leave a remaining gap of 48,800 $MTCO_2e$ to be reduced by local policy to achieve state goals and a remaining gap of 95,420 $MTCO_2e$ to achieve a carbon neutral goal by 2040 as proposed in the draft of PLAN Hermosa.

FIGURE 4.6-3
EMISSIONS REDUCTIONS NEEDED TO MEET STATE AND LOCAL TARGETS



PLAN Hermosa Emissions Reductions

As noted previously, numerous policies and implementation actions are included in PLAN Hermosa that are intended to facilitate the reduction of greenhouse gas emissions from both existing and future activities. The applicable policies and implementation actions can be found in every element of PLAN Hermosa and are intended to reduce emissions associated with transportation and travel patterns, related to energy consumption from residential and commercial uses, from the disposal of solid waste in landfills, and from the energy needed to transport and treat the water consumed and the wastewater produced in Hermosa Beach.

Building Efficiency

PLAN Hermosa seeks to improve the efficiency of both existing and future buildings and associated activities by reducing the amount of energy needed to operate heating and cooling equipment, lighting, and household appliances, thereby reducing GHG emissions. Goals and policies contained in the Sustainability + Conservation Element are intended to reduce energy-related emissions from buildings that already exist today by requiring disclosure of energy use (Sustainability + Conservation Element Policy 4.2) and by offering incentives, financing options, and retrofit programs (Sustainability + Conservation Element Policies 4.3 and 4.4), while Sustainability + Conservation Element Policy 4.6 aims to minimize energy consumption from new buildings.

Renewable Energy Generation

While building efficiency policies and programs can help to reduce energy demand, energy consumption can almost never be completely eliminated. However, GHG emissions from energy used by residential, commercial, and other uses in Hermosa Beach can be further reduced by switching from traditional fossil fuel–based energy sources to cleaner and renewable sources of energy production. Policies in the Sustainability + Conservation Element aiming to increase renewable energy projects include Policy 4.1 to require, promote, and facilitate the installation of renewable energy projects on homes and businesses and Policy 4.5 to achieve carbon neutral municipal facilities. Additionally, policies in the Land Use + Design Element speak to identifying locations appropriate for additional renewable energy technologies (Policy 9.1), ensuring they are compatible with surrounding uses and protect ocean resources (Policies 9.2 and 9.3), and that sites with renewable energy systems are returned to the natural characteristics of a site at the end of their useful life (Policy 9.5). Finally, policies in the Infrastructure Element speak to encouraging the exploration and establishment of innovative and renewable utility service technologies (Policy 6.4), to allow renewable energy facilities by right when they would not cause an unmitigatable impact on health or safety (Policy 6.5), and to collaborate with nearby local and regional agencies to develop a community choice aggregation system that provides greater renewable energy choices (Policy 6.6).

Transportation and Land Use

PLAN Hermosa seeks to reduce the environmental impact (including GHG emissions) of land development by increasing the viability of walking, biking, and transit and by reducing reliance on the automobile through cohesive land use patterns, thus reducing GHG emissions. This reduction is due to the sustainability-related aspects of the proposed policy provisions of the Land Use + Design Element, Mobility Element, and Sustainability + Conservation Element. Mobility Element Policy 5.5 seeks to encourage smart growth land use features in development projects to ensure that more compact, mixed, connected, and multimodal development supports reduced trip generation, reduced trip lengths, and a greater ability to utilize alternative modes. In addition, Land Use + Design Element Policy 1.2 states that proposals for new development should be directed toward the city's commercial areas with an emphasis on developing transit-supportive land use mixes. Land Use + Design Element Policy 4.10 requires all new development to consider

pedestrian access. Mobility Element Policy 3.2 would prioritize investment in designated priority sidewalks to ensure a complete network of sidewalks and pedestrian-friendly amenities that enhances pedestrian safety, access opportunities, and connectivity to destinations. Mobility Element Policy 4.5 requires a sufficient supply of bicycle parking to be provided in conjunction with new vehicle parking facilities by both public and private developments.

Section 4.14, Transportation, identifies the effects of PLAN Hermosa's policy provisions on traffic generation, vehicle miles traveled, and thus mobile source GHG emissions, which are the predominant source of GHG emissions in the city. As described in Section 4.14, daily traffic trips and the daily rate of vehicle miles traveled (VMT) are projected to decrease under PLAN Hermosa compared to existing conditions by approximately 12.9 percent. This reduction in VMT would roughly equate to 2,600 fewer daily vehicle trips and 30,000 less vehicle miles traveled per day, due to the mobility-related policy provisions described above. An expanded discussion of the PLAN Hermosa policies reducing VMT is provided in Section 4.14 and **Appendix G-2**.

Other Sectors and Offsets

There are also policies within PLAN Hermosa for reducing GHG emissions from waste disposal and the transport/treatment of water and wastewater. Sustainability + Conservation Element Policies 6.1, 6.2, 6.3, 6.6, and 6.9 identify methods to achieve the zero waste goal, which include food waste collection, multi-family and commercial recycling, composting programs, and greater use of recycled or salvaged materials. Policies under Sustainability + Conservation Element Goal 5 identify policies to facilitate greater use of greywater, recycled water, and rainwater.

Finally, PLAN Hermosa also includes several policies to support the reduction of GHG emissions that are not specific to a certain activity or sector. For instance, Sustainability + Conservation Element Policy 2.1 states that Hermosa Beach will reduce its GHG emissions in alignment with state targets and goals and will also achieve carbon neutrality no later than 2040. Implementation action SUSTAINABILITY-1 will establish a GHG impact fee for all future development projects to offset their fair share of GHG contribution, and SUSTAINABILITY-5 requires the City to regularly monitor and evaluate Hermosa Beach's progress toward community-wide carbon neutrality.

Sustainability + Conservation Element Policy 2.5 directs the City to purchase carbon offsets when necessary to achieve community-wide carbon neutrality goals. The emissions reductions achieved from the purchase of carbon offsets or implementation of projects outside of Hermosa Beach to achieve carbon neutrality are included in the emissions reductions calculations to demonstrate achievement toward carbon neutrality, but they are excluded from demonstrating the community's ability to achieve the greenhouse gas reduction targets by 2040 consistent with long-term state goals. While offsets are included to achieve a carbon neutral goal, the degree to which they can be relied upon to demonstrate consistency with state goals is limited at this time. While the California Air Resources Board has developed guidance for organizations or operators subject to cap-and-trade regulation on how to select, verify, and register offset projects counted toward cap-and-trade compliance, this guidance has not yet been approved for use or to demonstrate compliance by organizations or jurisdictions that are excluded from cap-and-trade regulation.

Summary of Greenhouse Gas Reductions

As noted in the Thresholds of Significance discussion above, PLAN Hermosa needs to demonstrate an ability to achieve long-term statewide goals by reducing community GHG emissions by approximately 66 percent below 2005 levels by 2040 to be considered a less than significant impact. Full implementation of the policies and actions in PLAN Hermosa has the potential to reduce emissions through local projects by at least 66 percent below 2005 levels by 2040 and up to 100 percent by 2040 through the purchase of additional offsets. Additional emissions reductions to achieve the community carbon neutral goal contained in the Sustainability + Conservation

Element would come from emissions reduction projects outside of Hermosa Beach or through the purchase of carbon offsets or credits. **Table 4.6-6 (Summary of Annual Emissions Reductions by Sector in 2040)** illustrates the range of activities and the estimated level of emissions reductions to be achieved by 2040. The assumptions and data used to calculate the estimated reductions in GHG emissions are documented in **Appendix E** of this EIR.

TABLE 4.6-6
SUMMARY OF ANNUAL EMISSIONS REDUCTIONS BY SECTOR IN 2040

	Share of Carbon Reductions (%)	Annual Carbon Reduction ($MTCO_2e$)
Baseline 2005 Emissions		137,160
2012 Emissions	-7.7%	126,610
BAU Emissions (2040)	+5.0%	133,430
State Programs (2040)	-27.7%	38,010
Local Remaining Emissions to Be Reduced		95,420
Building Efficiency		
New Construction Residential Efficiency	-1.3%	1,810
Existing Buildings Residential Efficiency	-4.4%	6,100
New Construction Nonresidential Efficiency	-2.0%	2,810
Existing Buildings Nonresidential Efficiency	-2.0%	2,770
Subtotal	**-9.8%**	**13,490**
Renewable Energy Generation		
Rooftop Solar	-5.9%	8,100
Community Solar	-0.4%	550
Community Choice Aggregation	-7.3%	10,010
Purchased Renewables (Green Rate)	-0.0%	0
Subtotal	**-13.6%**	**18,660**
Transportation + Land Use		
Land Use & Transportation Alternatives	-4.0%	5,500
Additional Transportation Strategies	-1.9%	2,560
Electric Vehicles	-7.4%	10,100
Subtotal	**-13.0%**	**18,160**
Other Sectors + Offsets		
Waste + Recycling	-2.5%	3,480
Water + Wastewater	-0.2%	330
Purchase Offsets	-30.1%	41,310
Subtotal	**-32.9%**	**45,120**
TOTAL	**-100.0%**	**95,420**

Source: City of Hermosa Beach 2016

As shown in **Table 4.6-6**, full implementation of the policies and actions in PLAN Hermosa has the potential to achieve emissions reduction targets consistent with the State's long-term emissions reduction goals. However, the degree of certainty at which the city can meet GHG targets beyond 2020 is limited since attainment would at least be partially reliant on implementation of statewide programs and because some of the policies included in PLAN Hermosa are reliant on voluntary or incentive-based actions. Because the implementation of PLAN Hermosa is partially reliant on voluntary or incentive-based policies and actions, as well as state regulations to be implemented in the future, the impact would be considered **potentially significant** and **cumulatively considerable**.

Mitigation Measures

MM 4.6-1a The City of Hermosa Beach will utilize the climate action plan, under development by the South Bay Cities Council of Governments, or other appropriate tools to research current data gaps, identify specific actions, and define the responsible parties and time frames needed to achieve the greenhouse gas reduction goals (monitoring milestones) identified in mitigation measure MM 4.6-1b.

MM 4.6-1b The City of Hermosa Beach will re-inventory community GHG emissions and evaluate implementation progress of policies to reduce GHG emissions for the calendar year of 2020 and a minimum of every five years thereafter. The interim reduction goals to be achieved for consistency with long-term state goals include:

- 2020: 15 percent below 2005 levels
- 2025: 31 percent below 2005 levels
- 2030: 49 percent below 2005 levels
- 2035: 57 percent below 2005 levels
- 2040: 66 percent below 2005 levels

MM 4.6-1c The City will revise PLAN Hermosa and/or the City's Climate Action Plan when, upon evaluation required in mitigation measure MM 4.6-1b, the City determines that Hermosa Beach is not on track to meet the applicable GHG reduction goals. Revisions to PLAN Hermosa, the Climate Action Plan, or other City policies and programs will include additional regulatory measures that provide a higher degree of certainty that emissions reduction targets will be met. Use of an adaptive management approach would allow the City to evaluate progress by activity sector (e.g., transportation, energy, water, waste) and prescribe additional policies or programs to be implemented in the intervening five years for activity sectors that are not on track to achieve the GHG reduction goals.

Level of Significance After Mitigation

With the addition of mitigation measures **MM 4.6-1 a** through **MM 4.6-1c**, the City of Hermosa Beach is committing to achieving specific emissions reduction targets within every five-year time period and modifying policies and programs, including the addition of new policies or modification of existing policies to become mandatory, to achieve greater levels of emissions reductions if the City falls short of meeting the established targets in mitigation measure **MM 4.6-1b**. The implementation of PLAN Hermosa policies to reduce greenhouse gas emissions, in conjunction with mitigation measures **MM 4.6-1a** through **MM 4.6-1c,** will add the degree of certainty needed

to determine that PLAN Hermosa would have a **less than significant** impact on greenhouse gas emissions and would **not be cumulatively considerable**.

CEQA GUIDELINES FOR A QUALIFIED GREENHOUSE GAS REDUCTION STRATEGY

This section is provided for informational purposes and is not meant to serve as an analysis in determining levels of significance for PLAN Hermosa. Instead, the following description is meant to demonstrate how PLAN Hermosa meets the criteria for a Qualified GHG Reduction Strategy and that future projects may streamline environmental analysis, and determine the project has a less than significant impact for greenhouse gas emissions, by demonstrating their consistency with PLAN Hermosa as a Qualified GHG Reduction Strategy.

As previously stated, the California Natural Resources Agency and the Governor's Office of Planning and Research have identified the necessary components of a greenhouse gas reduction strategy that should be incorporated to be deemed a Qualified GHG Reduction Strategy. PLAN Hermosa is designed to serve as the City of Hermosa Beach's Qualified Greenhouse Gas Reduction Strategy, and this EIR elaborates how each of the required components for such a strategy are met. The discussion below is a summary of how PLAN Hermosa meets the intent of each component, with more details and explanation included earlier in this section.

- Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area.

  The City of Hermosa Beach, in collaboration with the South Bay Cities Council of Governments, used actual activity data and emissions factors to estimate the contribution of greenhouse gas emissions, including carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), from existing activities within the geographic boundaries of Hermosa Beach for the calendar years 2005, 2007, 2010, and 2012. These emissions inventories relied upon standardized protocols including the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions and the Association of Environmental Professionals Supplement to the Protocol for California to calculate the estimated emissions generated by activities in Hermosa Beach. In 2005, Hermosa Beach generated approximately 137,160 $MTCO_2e$ annually from activities related to transportation, electricity use, natural gas use, waste disposal, and water/wastewater activities.

  To project emissions over the time horizon of PLAN Hermosa (2040), the City of Hermosa Beach used the population, housing, and employment forecasts that were incorporated into the 2040 Regional Transportation Plan to develop a business-as-usual forecast for the year 2040 using the Carbon Planning Tool developed by the City. BAU emissions in 2040 are projected to be lower than 2005 emissions due to the decreases achieved between 2005 and 2012, and the limited increase in the number of additional residents, employees, and housing units expected between 2012 and 2040. Additionally, the projections considered the effect that legislation and regulation at the state level would have on reducing emissions locally by developing an adjusted BAU forecast for 2040.

- Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable.

  In order to limit global temperature increases to two degrees Celsius and prevent the most catastrophic effects of climate change, the IPCC and organizations like the Union of Concerned Scientists have indicated that the United States and other developed countries would need to reduce greenhouse gas emissions anywhere from 78 to 95 percent below 1990 levels, with most organizations identifying an approximately 80 percent reduction below 1990 levels by 2050 to provide stabilization at the two degree

Celsius threshold (IPCC 2014). California has taken early action and efforts to avoid the most catastrophic effects of climate change by establishing aggressive statewide greenhouse gas reduction goals through legislation and executive orders (AB 32, SB 32, EO B-30-15, EO S-3-05).

In order to align with or be on a trajectory to meet the State's long-term greenhouse gas reduction goals and the scientific consensus of the emissions reductions needed to limit global warming to 2 degrees Celsius, the City of Hermosa Beach would need to reduce emissions equivalent to the following levels:

- To 1990 levels by 2020 (equivalent to 15 percent below 2005 levels) – consistent with AB 32
- To 40 percent below 1990 levels by 2030 (equivalent to 49 percent below 2005 levels) – consistent with SB 32 and EO B-30-15
- To 80 percent below 1990 levels by 2050 (equivalent to 83 percent below 2005 levels) – consistent with EO S-3-05

Since PLAN Hermosa has a buildout time horizon of 2040, the minimum equivalent GHG reduction needed to be consistent with long-term state targets and determine that the cumulative activities in Hermosa Beach as less than cumulatively considerable would be a target to reduce emissions 60 percent below 1990 levels by 2040, which equates to 66 percent below 2005 levels.

- Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area.

The goals, policies, and actions to reduce GHG emissions in Hermosa Beach included in PLAN Hermosa, and detailed earlier in this section, are designed to meet or exceed the GHG reduction target of 66 percent below 2005 levels by 2040 when fully implemented. The potential emissions reductions were quantified for the year 2040 using the Hermosa Beach Carbon Planning Tool. The Carbon Planning Tool is an Excel-based tool built to estimate the effectiveness of implementing various programs on reducing greenhouse gas emissions, as well as the associated costs and benefits from implementing measures. The tool includes data and information specific to Hermosa Beach regarding energy consumption, travel patterns, and building stock and relies on best practices such as the CAPCOA Quantifying Greenhouse Gas Mitigation Measures to outline the assumptions and methods for calculating the greenhouse gas reduction potential of various implementation measures. The Carbon Planning Tool includes the links and sources used for each data point and assumptions used to calculate emissions reductions and is provided in **Appendix E.**

The GHG reduction strategies included in PLAN Hermosa are organized by goal or topic area to correspond with the sectors and sources of GHG emissions as follows:

- Building Efficiency
- Renewable Energy Generation
- Transportation and Land Use
- Other Sectors and Offsets

The measures included in PLAN Hermosa are a diverse mix of regulatory, educational, and incentive-based programs. The reduction measures are intended to reduce GHG emissions from each source to avoid reliance on any one strategy or sector to achieve the target. In total, existing actions, state programs, and the goals, policies, and actions of

PLAN Hermosa, along with mitigation measures **MM 4.6-1a, MM 4.6-1b,** and **MM 4.6-1c**, will reduce GHG emissions in Hermosa Beach at least 66 percent below 2005 levels by 2040.

- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.

  To facilitate individual project consistency and keep Hermosa Beach on track to collectively achieve the specified emissions level, implementation actions in PLAN Hermosa direct the City to:

  - SUSTAINABILITY-1. Establish a local greenhouse gas impact fee for projects to offset their fair share of greenhouse gas emissions generated, by providing funding for implementation of local GHG reduction projects.
  - SUSTAINABILITY-2. Establish greenhouse gas emissions thresholds of significance and standardize potential mitigation measures for both discretionary and ministerial actions.

  By establishing a greenhouse gas impact fee and standardizing potential measures for individual projects to implement, the City will have the tools necessary to ensure individual projects are minimizing the levels of greenhouse gas emissions generated, while offering projects multiple pathways to compliance.

- Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels.

  The estimated emissions reduction potential from implementation of PLAN Hermosa exceeds the trajectory of the State's long-term greenhouse gas reduction goals (66 percent below 2005 levels by 2040). However, the degree of certainty at which the city can meet GHG targets beyond 2020 is limited since attainment would at least be partially reliant on implementation of statewide programs and because some of the policies included in PLAN Hermosa are reliant on voluntary or incentive-based actions taken by the community. To address this uncertainty, PLAN Hermosa includes implementation action SUSTAINABILITY-5 to "Regularly monitor and evaluate the City's greenhouse gas emissions inventory and progress toward greenhouse gas reduction goals." This EIR further strengthens that implementation action by incorporating specific metrics to be achieved for each five-year time increment through mitigation measure MM 4.6-1b.

  The combination of implementation actions and mitigation measures intended to regularly evaluate progress and institute a mechanism to amend PLAN Hermosa when emissions reduction goals are not met will ensure the City is consistently making progress toward the long-term state goals and local targets.

- Be adopted in a public process following environmental review.

  As the City's integrated General Plan and Local Coastal Program, PLAN Hermosa is legally required to be reviewed by the Planning Commission, and the Planning Commission must hold at least one public hearing before providing a recommendation to the City Council pursuant to California Government Code Section 65353(a). Any amendment to a general plan is also further obligated to undergo environmental review prior to approval or adoption. Prior to holding public hearings at which the City Council will consider adoption, the City of Hermosa Beach will complete the environmental review process for PLAN Hermosa, which will include a 60-day public review period on the Draft EIR, preparation of response to comments, and a Final EIR.

Beyond the obligations of state law to adopt PLAN Hermosa through a public process following environmental review, the community engagement and opportunities for the community to provide feedback during this process to date have included:

- Five community workshops or walking tours
- A three-part educational series
- An online portal, in addition to email and in-person opportunities to submit comments, questions, and feedback
- A 15-member community working group (which met on more than a dozen occasions)
- Twenty study sessions with the Planning Commission, City Council, Parks and Recreation Commission, Emergency Preparedness Commission, and Public Works Commission
- Numerous informal opportunities to present PLAN Hermosa to community groups and local organizations at their standing meetings

This extensive level of community engagement over a three-year period has helped to raise the community's awareness in the need to address greenhouse gas emissions and participate in the identification of potential opportunities to achieve the long-term goals.

IMPACT 4.6-2 ***Would PLAN Hermosa Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that is consistent with state and local plans, policies, or regulations adopted to reduce greenhouse gas emissions. The applicable plans, policies, and regulations include the AB 32 Scoping Plan, the City of Hermosa Beach Sustainability Plan, and the City of Hermosa Beach Municipal Carbon Neutral Plan. PLAN Hermosa includes goals, policies, and actions that would meet or exceed the goals established within each of these applicable plans; therefore, the impact would be* ***less than significant****.*

PLAN Hermosa's consistency with the AB 32 Scoping Plan, Hermosa Beach Sustainability Plan, and Municipal Carbon Neutral Plan is evaluated below.

AB 32 and Climate Change Scoping Plan

AB 32 is the primary legislation that has driven GHG regulation and analysis in California. Under AB 32, the legislature directed CARB to develop and periodically update the AB 32 Climate Change Scoping Plan document to detail the latest scientific understanding of climate change, describe California's motivations to address climate change and preserve the California lifestyle, evaluate accomplishments and next steps for reducing emissions, and describe the role of regional and local governments in achieving the State's emissions reduction goals. While AB 32 does not mandate or prescribe local governments to achieve certain emissions reduction targets, the AB 32 Scoping Plan recognizes that local governments are essential partners to achieving statewide goals given that local jurisdictions have a higher degree of influence and authority over significant sources of GHG emissions.

The first AB 32 Scoping Plan, developed in 2007, suggested that local governments should aim to reduce emissions 15 percent below current levels (2005–2008) by 2020 and assist with meeting regional vehicle miles traveled (VMT) targets mandated by SB 375. PLAN Hermosa is consistent with the AB 32 Scoping Plan and fulfills the recommended role of local governments in achieving statewide goals by reducing emissions 15 percent below 2005 levels by 2020 and by meeting VMT targets established for the Southern California Association of Governments and detailed in the

Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (see Section 4.9, Land Use and Planning, for discussion of consistency with the RTP/SCS).

Hermosa Beach Sustainability Plan

The Sustainability Plan adopted by the City of Hermosa Beach in 2011 describes community and municipal GHG emissions, compares future emissions to the AB 32 emissions reduction target (15 percent below 2005 levels by 2020), and outlines a series of strategies and actions to reduce GHG emissions. The strategies address emissions from building energy (commercial, residential, and municipal), transportation, solid waste, and water consumption, determining that the suite of programs could reasonably reduce emissions 15 percent below 2005 levels. As described previously, the City of Hermosa Beach is likely to reduce emissions 23 percent below 2005 levels by 2020 through implementation of state and local measures. PLAN Hermosa supports and is consistent with the Hermosa Beach Sustainability Plan by incorporating and further developing policy to reduce emissions from building energy, transportation, solid waste, and water consumption sources. The specific policies included in PLAN Hermosa to reduce emissions from each sector are further described under the discussion of Impact 4.6-1.

Municipal Carbon Neutral Plan

In 2015, the City of Hermosa Beach adopted a local goal to become a carbon neutral municipal organization no later than 2020 through adoption of the Municipal Carbon Neutral Plan. This plan sets the City up to demonstrate environmental leadership at the municipal level and identifies carbon reduction programs and initiatives to achieve the carbon neutral goal. PLAN Hermosa includes Sustainability + Conservation Element Goal 1 (carbon neutral municipal facilities and operations by 2020 and sustained into the future), which is consistent with the goal adopted in 2015 to be a carbon neutral municipal organization by 2020. To further support the goal, Policies 1.1 through 1.7 speak to prioritizing projects that provide the highest return on investment, aligning projects to reduce emissions with the current sources of emissions, using pilot or demonstration projects, and purchasing carbon offsets when necessary to reach the goal. The policies included in PLAN Hermosa mirror the Municipal Carbon Neutral Plan recommendations to pursue a diverse mixture of emissions reduction projects, to utilize offsets, and to evaluate the costs and savings/benefits of various projects prior to implementing.

Conclusion

A core objective in the development of PLAN Hermosa has been to identify policies to reduce greenhouse gas emissions and set Hermosa Beach on a path to a low- or no-carbon future. As described above, PLAN Hermosa is consistent with the goals of AB 32 and the Climate Change Scoping Plan, the Hermosa Beach Sustainability Plan, and the Municipal Carbon Neutral Plan to reduce greenhouse gas emissions. PLAN Hermosa has further been developed to serve as the City of Hermosa Beach's Qualified Greenhouse Gas Reduction Strategy, as defined by the CEQA Guidelines. Therefore, the impact of PLAN Hermosa would be **less than significant.**

Mitigation Measures

None required.

4.6.5 REFERENCES

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4.7 Hazards and Hazardous Materials

4.7.1 INTRODUCTION

This resource section evaluates the potential environmental effects related to hazards and hazardous materials from implementation of PLAN Hermosa. Natural hazards related to flooding, tsunamis, and sea level rise are addressed in Section 4.8, Hydrology and Water Quality, seismic and other geotechnical hazards are addressed in Section 4.5, Geology and Soils, and hazards related to climate change are addressed in Section 4.6, Greenhouse Gas Emissions. The analysis includes a review of state hazardous materials databases, hazards related to schools, and emergency response procedures related to hazardous materials. PLAN Hermosa Public Safety Element policies and implementation actions ensure new development, businesses, and public safety are prepared for emergencies and the potential release of hazards or hazardous materials in the planning area.

NOP Comments: No comments were received in response to the Notice of Preparation (NOP) addressing hazards or hazardous materials. Comments included written letters and oral comments provided at the NOP scoping meeting.

Reference Information: Information for this chapter is based on numerous sources, including the PLAN Hermosa Technical Background Report and other publicly available documents. The Technical Background Report prepared for the project is attached to this EIR as **Appendix C**.

4.7.2 ENVIRONMENTAL SETTING

Appendix C-10 describes the regional and local conditions related to hazards and hazardous materials. Key findings of the environmental setting are presented below.

HAZARDOUS SITES

A hazardous material is any material that, due to its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released. Hazardous materials include but are not limited to hazardous substances, hazardous wastes, and any material that a business or local implementing agency has a reasonable basis to believe would be injurious to the health and safety of persons or would be harmful to the environment if released.

The State Water Resources Control Board (SWRCB) maintains the GeoTracker database, which provides information to easily identify the location of a hazardous waste site and details regarding the type of contamination and remediation action. In 2014, when the Technical Background Report included in **Appendix C** was compiled, GeoTracker reported one leaking underground storage tank (LUST) site in the planning area (SWRCB 2014). As of 2015, GeoTracker identified the site's status as "completed – case closed," meaning there are no active LUST sites in the planning area (SWRCB 2015). Including the site mentioned above, GeoTracker identifies 15 LUST sites that have completed cleanup and monitoring activities (SWRCB 2015).

In addition to the information sources listed above, the E&B Oil Drilling and Production Project Final Environmental Impact Report certified in 2014 identifies the City Maintenance Yard at 555 6th Street as contaminated from historical uses, with existing lead and total petroleum hydrocarbon (TPH) contamination in the northeast corner of the yard and extending onto the property to the immediate north. Ten of the 73 soil samples taken at the site exceeded Regional Water Quality Control Board guidelines for TPH. Six of the samples exceeded the US Environmental Protection Agency (EPA) Region 9 Industrial Regional Screening Levels for lead. In addition, a series of groundwater borings conducted in 2013 found the presence of TPH, lead, barium, and arsenic in the groundwater below the yard that exceeded the Maximum Contaminant Levels established for drinking water by the Regional Water Quality Control Board (City of Hermosa Beach 2014).

SCHOOLS

Please refer to Section 4.13, Public Services, Community Services, and Utilities, for additional information regarding schools in the planning area.

AIRPORT HAZARDS

No airports are located in the city. The nearest airports are Torrance Airport 5.4 miles to the southeast, Los Angeles International Airport 5.5 miles to the north, and Hawthorne Municipal Airport 5.9 miles to the northeast.

TRANSPORTATION OF HAZARDOUS MATERIALS

The California Department of Toxic Substances Control (DTSC) provides a summary of all registered routes for transportation of hazardous material in the state. As of February 2014, there were no registered routes in Hermosa Beach (DTSC 2015). However, the City has designated truck routes that can be used for transportation of hazardous materials. Such major transportation include Pacific Coast Highway (State Route 1) and portions of Pier Avenue, Valley Drive, Herondo Street, and Artesia Boulevard. When acutely toxic hazardous materials are transported, the California Highway Patrol must be notified; the Hermosa Beach Police Department and the Hermosa Beach Fire Department must also be notified if city streets are used. The City does not designate specific haul routes for hazardous materials.

FIRE HAZARDS

Public Resources Code Sections 4201–4204 and Government Code Sections 51175–51189 require identification of fire hazard severity zones in California. Fire hazard severity zones are modeled based on vegetation, topography, weather, fuel load type, and ember production and movement within the area in question. Fire hazard severity zones are defined as moderate, high, and very high fire hazard severity by the California Department of Forestry and Fire Protection (Cal Fire). Fire prevention areas considered to be under state jurisdiction are referred to as state responsibility areas, while areas under local jurisdiction are called local responsibility areas." Cal Fire (2007) has not identified any fire hazard severity zones in the planning area.

4.7.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to hazards and hazardous materials in the planning area. They provide the regulatory framework for addressing all aspects of hazards and hazardous materials that would be affected by implementation of PLAN Hermosa. The regulatory setting for hazards and hazardous materials is discussed in detail in **Appendix C-10**. Key regulations used to reduce potential impacts of the proposed project are summarized below.

FEDERAL

- **Resource Conservation and Recovery Act:** At the federal level, the principal agency regulating the generation, transport, and disposal of hazardous substances is the EPA, under the authority of the Resource Conservation and Recovery Act (RCRA). The RCRA established an all-encompassing federal regulatory program for hazardous substances that is administered by the EPA. Under the act, the EPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances.
- **Hazardous Materials Transport Regulations:** The US Department of Transportation (USDOT) regulates transportation of hazardous materials between states. The USDOT Federal Railroad Administration enforces the Hazardous Materials Regulations, which are promulgated by the Pipeline and Hazardous Materials Safety Administration for rail

transportation. These regulations include requirements that railroads and other transporters of hazardous materials, as well as shippers, have and adhere to security plans and also train employees involved in offering, accepting, or transporting hazardous materials on both safety and security matters.

- **Comprehensive Environmental Response, Compensation, and Liability Act:** Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act, commonly known as Superfund, in 1980. The act established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified
- **Regulation of Polychlorinated Biphenyls and Lead-Based Paint:** The Toxic Substances Control Act of 1976 (Title 15, United States Code, Section 2605) banned the manufacture, processing, distribution, and use of polychlorinated biphenyls (PCB) in enclosed systems. The EPA Region 9 PCB Program regulates remediation of polychlorinated biphenyls in several states, including California. The Residential Lead-Based Paint Hazard Reduction Act of 1992 amended the Toxic Substances Control Act to include Title IV, Lead Exposure Reduction. The EPA regulates renovation activities that could create lead-based paint hazards in target housing and child-occupied facilities and has established standards for lead-based paint hazards and lead dust cleanup levels in most pre-1978 housing and child-occupied facilities.

STATE

- **California Hazardous Materials Release Response Plans and Inventory Law:** The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires hazardous materials business plans to be prepared and inventories of hazardous materials to be disclosed, including an inventory of the hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee safety and emergency response training (California Health and Safety Code, Division 20, Chapter 6.95, Article 1).
- **Hazardous Waste Control Act:** The Hazardous Waste Control Act is codified in California Code of Regulations Title 26, which describes requirements for the proper management of hazardous wastes. The act created the state's hazardous waste management program, which is similar to but more stringent than the federal RCRA program.
- **Government Code Section 65962.5 (Cortese List):** The provisions of Government Code Section 65962.5 are commonly referred to as the Cortese List. The Cortese List is a planning document used by the state and local agencies to provide information about hazardous materials release sites. Government Code Section 65962.5 requires the California Environmental Protection Agency (Cal/EPA) to develop an updated Cortese List annually, at minimum. The DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the list.
- **California Emergency Response Plan:** California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the California Governor's Office of Emergency Services, which coordinates the responses of other agencies, including Cal/EPA, the California Highway Patrol, the Regional Water Quality Control Board, and the Los Angeles County Emergency Services Program.

- **California Coastal Act**: The California Coastal Act of 1972 created the California Coastal Commission to enact policies and standards in its coastal development permit decisions. Among many issues, the California Coastal Commission and the coastal development permit program protect against oil and hazardous substance spills and regulate the disposal of hazardous substances at sea.

LOCAL

- **Certified Uniform Program Agency:** The Los Angeles County Fire Department Health Hazardous Materials Division is the designated Certified Unified Program Agency (CUPA) for Hermosa Beach. The CUPA was created by the California legislature to minimize the number of business inspections and fees imposed on businesses.
- **City of Hermosa Beach Local Hazard Mitigation Plan:** The City's Local Hazard Mitigation Plan, last updated in 2005, meets the requirements of the Disaster Mitigation Act of 2000. The act requires local governments to prepare plans that identify hazards and risks within a community, and create appropriate mitigation. The purpose of the plan is to integrate hazard mitigation strategies into the City's daily activities and programs.
- **City of Hermosa Beach Emergency Operations Plan**: The City's Emergency Operations Plan addresses Hermosa Beach's planned response to emergencies associated with natural disasters, technological incidents, and national security emergencies (City of Hermosa Beach 2011). It provides an overview of operational concepts, identifies components of the City's emergency management organization in the Standardized Emergency Management System and National Incident Management System, and describes the overall responsibilities of the federal, state, and county entities and the City for protecting life and property and ensuring the overall well-being of the population.

4.7.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of the EIR, impacts on hazards and hazardous materials would be considered significant if adoption and implementation of PLAN Hermosa would:

1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment.

3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

4) 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 the environment

5) For a project located within an airport land use plan, result in a safety hazard for people residing or working in the project area.

6) For a project locate within 2 miles of a private airstrip, result in a safety hazard for people residing or working in the project area.

7) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

8) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

No sites in Hermosa Beach are included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. There is no airport located in the planning area, and the city is not in a fire hazard severity zone as identified by Cal Fire; therefore, the EIR does not evaluate impacts 4, 5, and 6.

ANALYSIS APPROACH

The impact analysis is based on the likely consequences of PLAN Hermosa implementation compared to existing conditions. The following analysis of impacts on hazards and hazardous materials is qualitative and based on available hazards and hazardous materials information for the planning area. The analysis assumes that all future and existing development in the planning area would comply with applicable laws, regulations, design standards, and plans.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa policies and implementation actions that address potential hazards and hazardous materials include the following:

Policies

Governance Element

- **7.5 Evaluation and disclosure.** Require an evaluation and disclosure (e.g. Health checklists, Health Impact Assessments) of environmental and health impacts or benefits for major discretionary projects.

Public Safety Element

- **3.1 Hazardous material setbacks.** Restrict the storage and transport of hazardous materials only to areas where risks to residents are adequately minimized through setbacks or other measures.
- **3.2 Hazardous material incident response.** Coordinate with allied agencies to prepare for and respond to hazardous materials incidents.
- **3.3 Use, storage, and transport.** Require businesses that use, store, or transport hazardous materials to ensure that adequate measures are taken to protect public health and safety.
- **3.4 Hazardous materials in coastal zone.** Restrict the siting of new uses involving hazardous materials in the Coastal Zone to coastal-related industrial uses in the Cypress District.
- **3.5 Safe disposal practices.** Maintain City's website and other outlets with information regarding the safe handling and disposal of household chemicals.
- **4.1 Public awareness.** Increase public awareness of hazards, emergency response, and recovery through updated evacuation routes and informational signage.
- **4.2 Promote community-based programs.** Promote community-based programs in fire safety and emergency preparedness, including neighborhood-level programs and programs with businesses.
- **4.3 SEMS and NIMS training.** Increase City employee capacity through the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) compliant training and Emergency Operations Center (EOC) drills to identify hazards, and assist in emergency preparedness, response, and recovery.

- **4.4 Utilize City media resources.** Establish communication protocols and utilize City media resources to provide information prior to, during, or after events posing risk to community health, safety, and welfare.
- **4.5 Responsive neighborhood groups.** Encourage neighborhood groups to identify, consider, and prepare for the needs of neighbors with access and functional needs to adequately respond to disasters.
- **4.6 Vulnerable populations.** Establish an emergency plan to take care of vulnerable populations, such as children, the elderly, and tourists during hazardous events.

Implementation Actions

- SAFETY-16. Include updated hazardous materials considerations in regular Emergency Operation Plan updates and work with the County of Los Angeles to update local Hazardous Materials Area Plans on a regular basis.
- SAFETY-17. Provide information, opportunities, and incentives to the community for the proper disposal of toxic materials to avoid environmental degradation to the air, soil, and water resources from toxic materials contamination.
- SAFETY-18. Designate an emergency response team to monitor and respond to regional disasters such as oil spills and other shoreline disasters. Such a team must maintain an emergency response plan that includes coordination with other agencies and jurisdictions in the region on initial response, aid, and recovery.
- SAFETY-24. Periodically update the emergency operations plan.
- SAFETY-25. Periodically update the Local Hazard Mitigation Plan and concurrently amend the Public Safety Element to maintain eligibility for maximum grant funding.
- SAFETY-29. Identify hazard-specific evacuation routes and share with the public, businesses, and other government agencies.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.7-1 ***Would PLAN Hermosa Create a Significant Hazard to the Public and Environment Through the Transport, Use, or Disposal of Hazardous Materials?*** *Implementation of PLAN Hermosa would guide future development in the city in a manner that could result in the public's exposure to hazardous materials from increased transport, use, or accidental release of hazardous materials. Compliance with existing federal and state regulations and implementation of PLAN Hermosa policies would reduce risks of accidents associated with the routine transport, use, or disposal of hazardous materials to a* ***less than significant*** *level.*

PLAN Hermosa would guide future development and reuse projects in the city. New development could result in increased transport, use, storage, and disposal of hazardous materials in the planning area. Of particular concern are facilities that would handle hazardous materials such as light industrial uses, gas stations, automotive repair shops, and dry cleaners. Facilities developed consistent with PLAN Hermosa that would use hazardous materials on-site would be required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases and protect public health.

The transport, use, and storage of hazardous materials would be required to comply with all applicable local, state, and federal regulations as noted above. Facilities that use hazardous materials are required to obtain permits and comply with appropriate regulatory agency standards designed to avoid hazardous waste releases. Federally, the Resource Conservation and Recovery

Act gives the EPA the authority to control the generation, transportation, treatment, storage, and disposal of hazardous waste.

Additionally, the City will continue to enforce disclosure laws that require users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport, and to notify the appropriate agencies in the event of a violation. By recognizing these hazards and ensuring that an educated public is able to work with City officials to minimize risks associated with hazardous materials in the urban environment, safe conditions would be maintained throughout the planning area.

The amount of hazardous materials transported through the planning area on roadways, local routes, and Pacific Coast Highway (State Route 1) may increase as a result of PLAN Hermosa implementation. The US Department of Transportation governs the transportation of hazardous materials. The Federal Motor Carrier Safety Administration issues regulations concerning highway routing of hazardous materials, including hazardous materials endorsements for a commercial driver's license, highway hazardous material safety permits, and financial responsibility requirements for motor carriers of hazardous materials.

The following PLAN Hermosa Public Safety Element policies recognize and account for potential risks associated with hazardous materials and support compliance with and enforcement of state and federal hazardous materials regulations. Policy 3.1 ensures that the storage and transport of hazardous materials is restricted only to areas where risks to residents are adequately minimized. Policy 3.2 directs the City to coordinate with allied agencies to prepare for and respond to hazardous materials incidents. Policy 3.3 requires businesses that use, store, or transport hazardous materials to ensure that adequate measures are taken to protect public health and safety. Policy 3.4 directs the City to restrict the siting of new uses involving hazardous materials in the Coastal Zone to coastal-related industrial uses in the Cypress District. Policy 3.5 directs the City to maintain its website and other outlets with information regarding the safe handling and disposal of household chemicals. Policy 4.1 directs the City to increase awareness of hazards, emergency response, and recovery. Finally, implementation action SAFETY-16 directs the City to work with the County of Los Angeles to update local Hazardous Materials Area Plans on a regular basis.

Continued compliance with and enforcement of existing federal, state, and local regulations concerning the routine transport, use, or disposal of hazardous materials, supported by implementation of PLAN Hermosa policies and implementation actions, would reduce potential impacts to a **less than significant** level.

Mitigation Measures

None required.

IMPACT 4.7-2 ***Would PLAN Hermosa Create a Significant Hazard to the Public or Environment Through Accidental Release of Hazardous Materials into the Environment?*** *Implementation of PLAN Hermosa would guide future development in the city in a manner that could lead to accidental release of hazardous materials into the environment. Compliance with existing federal and state regulations and implementation of PLAN Hermosa policies would reduce risks associated with the accidental release of hazardous materials. However, development of the City's Maintenance Yard or other sites in the city could release known or unknown hazardous materials, which would be* ***potentially significant.***

Known Contamination

As described above there is only one location of known contamination in Hermosa Beach, the City's Maintenance Yard. The contaminated site is currently operational and is not included in the

GeoTracker database. Given the history of the site, which has been used in a similar capacity since the late nineteenth century, potential contamination could come from a number of activities related to the function of the site, including oil changes and fleet maintenance, storage of materials such as paint or cleaning materials, and collection of waste or debris from sites throughout the city. These are common activities at maintenance yards, and it is not uncommon for these sites to be further evaluated for potential contamination. According to PLAN Hermosa, land uses allowed on and around the City Maintenance Yard would be light industrial. Nonetheless, any construction on the site that would entail uses for commercial or residential purposes would require remediation and cleanup activities be implemented as outlined in 40 CFR Part 260, Hazardous Remediation Waste Management Requirements. Because development could potentially take place on the existing City Maintenance Yard site, impacts would be **potentially significant**.

Unknown Contamination

Future development that would take place in the city under PLAN Hermosa could encounter unknown hazardous materials contamination. PLAN Hermosa Public Safety Element policies recognize and account for potential risks associated with accidental release of hazardous materials into the environment. Policy 3.5 directs the City to maintain its website and other outlets with information regarding the safe handling and disposal of household chemicals, while Policy 4.1 directs the City to increase awareness of hazards, emergency response, and recovery. Policy 4.4 would establish communication protocols and utilize City media resources to provide information prior to, during, or after events posing risk to community health safety, and welfare, such as exposure to unknown contaminants. Implementation action SAFETY-16 directs the City to work with the County of Los Angeles to update local Hazardous Materials Area Plans on a regular basis. Implementation action SAFETY-18 designates an emergency response team to monitor and respond to regional disasters such as oil spills and other shoreline disasters.

Compliance with existing regulations concerning the upset and/or accidental release of hazardous materials, supported by implementation of PLAN Hermosa policies, would ensure that the general public would not be exposed to any unusual or excessive risks related to accidental upset and/or release of hazardous materials into the environment. Nonetheless, unknown contamination during construction activities could be discovered and this impact is **potentially significant**.

Mitigation Measures

MM 4.7-2a For any development activities that would encroach upon or take place at the City's Maintenance Yard, the City shall require the preparation and implementation of a Human Health Risk Assessment (HHRA) and a Remedial Action Plan (RAP) to be approved by the appropriate agencies.

MM 4.7-2b Future discretionary projects involving the use of hazardous materials that may be accidentally released or encountered during construction shall be required to implement the following procedures:

- Stop all work in the vicinity of any discovered contamination or release.
- Identify the scope and immediacy of the problem.
- Coordinate with responsible agencies (Department of Toxic Substances Control, Regional Water Quality Control Board, or US Environmental Protection Agency).

- Conduct the necessary investigation and remediation activities to resolve the situation before continuing construction work as required by state and local regulations.

Significance After Mitigation

Implementation of mitigation measures **MM 4.7-2a** and **MM 4.7-2b** would ensure that accidental release of hazardous materials into the environment, either from redevelopment at the City Maintenance Yard or from unknown contamination, would be remediated in accordance with state and local regulations in a manner that would protect public health during construction activities and later use of the site. Project impacts would be reduced to a **less than significant** level.

IMPACT 4.7-3 ***Emission or Handling of Hazardous or Acutely Hazardous Materials, Substances, or Waste within One-Quarter Mile of an Existing or Proposed School.*** *PLAN Hermosa implementation would guide future development in the city. Such development, which could emit or handle hazardous waste, could occur in the proximity of new or existing schools. Compliance with existing regulations would reduce the risk of emissions or the handling of hazardous materials near schools to a* ***less than significant*** *level.*

PLAN Hermosa implementation could lead to development that would emit or handle hazardous materials within a quarter mile of a school. Schools located in the city are mostly surrounded by residential development, and future development under PLAN Hermosa concentrates on both residential and nonresidential development. Hazardous materials handled in residential neighborhoods are typical of household hazardous materials like cleaners and yard maintenance materials, and are usually in small quantities that do not pose threats to school uses.

The California Department of Education enforces school siting requirements through its School Site Selection and Approval Guide, and based on these requirements, new school facilities would not be constructed within one-quarter mile of facilities emitting or handling materials. CEQA Guidelines Section 15186, School Facilities, requires that school projects, as well as projects proposed to be located near schools, examine potential health impacts resulting from exposure to hazardous materials, wastes, and substances. Furthermore, permitting requirements for individual hazardous material handlers or emitters, including enforcement of Public Resources Code Section 21151.4, would require evaluation and notification where potential hazardous materials handling and emissions could occur in proximity to existing schools.

Compliance with existing regulations for both known and unknown contamination as well as handling of hazardous materials, as outlined above in the Regulatory Setting subsection, would minimize impacts from implementation of PLAN Hermosa to a **less than significant** level.

Mitigation Measures

None required.

IMPACT 4.7-4 ***Would PLAN Hermosa Cause Interference with an Adopted Emergency Response Plan?*** *Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that would ensure conformance with countywide emergency response programs and continued cooperation with emergency response service providers. Therefore, this impact would be* ***less than significant.***

PLAN Hermosa implementation could generate additional peak traffic conditions that could interfere with emergency response and evacuation plans, while new development could create new hazards in the city that would require emergency response personnel in case of a man-made or natural disaster.

The Los Angeles County Fire Department (LACFD) Health Hazardous Materials Division is the Certified Unified Program Agency (CUPA) for the City of Hermosa Beach, with the Hermosa Beach Fire Department (HBFD) authorized as a participating agency. The LACFD and the HBFD work together to implement the City's Emergency Operations Plan that addresses Hermosa Beach's planned response to emergencies.

The City's Local Hazard Mitigation Plan includes mitigation measures to ensure emergency response in the city is done in a coordinated manner. For example, the plan includes measures to continually assess emergency response operations, gather data regarding hazards in the city to enhance emergency response plans, and continue local mutual aid agreements for emergency response with other jurisdictions. Additionally, the City maintains an Emergency Preparedness Advisory Commission and operates a Community Emergency Response Team to educate and prepare the public to respond and survive in case of natural or man-made disasters.

PLAN Hermosa Public Safety Element policies and actions support implementation of the City's Emergency Operations Plan and Local Hazard Mitigation Plan. For example, Policy 4.1 directs the City to increase public awareness of hazards, emergency response, and recovery, while Policy 4.2 promotes community-based programs in fire safety and emergency preparedness, including neighborhood-level programs and programs with businesses. Policy 4.3 increases City employee capacity through SEMS- and NIMS-compliant training and EOC drills to identify hazards and assist in emergency preparedness, response, and recovery. Policy 4.4 would establish communication protocols and utilize City media resources to provide information prior to, during, or after events posing risk to community health safety, and welfare. Policy 4.5 encourages neighborhood groups to identify, consider, and prepare for the needs of neighbors with access and functional needs to adequately respond to disasters. Implementation action SAFETY-29 directs the City to identify hazard-specific evacuation routes and share them with the public, businesses, and other government agencies.

Implementation of PLAN Hermosa policies and programs as outlined above and compliance with existing federal, state, and local laws and regulations would minimize impacts on emergency response and evacuation plans from new development. Therefore, PLAN Hermosa implementation would result in **less than significant** impacts related to emergency access.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative setting for hazards and human health risks associated with PLAN Hermosa includes Hermosa Beach, surrounding cities, and the surrounding areas in Los Angeles County. Most hazardous materials, human health, and safety impacts are site-specific and not cumulative in nature.

IMPACT 4.7-5 ***Would PLAN Hermosa Contribute to a Cumulative Impact on the Transport, Use, or Disposal of Hazardous Materials?*** *Implementation of PLAN Hermosa, along with increased urban development in Los Angeles County, would not result in cumulative hazards impacts. This impact would be* ***less than cumulatively considerable****.*

Potential exposure to or generation of hazardous conditions in the city is site-specific rather than associated with the combination of other hazards in the region resulting in a significant effect. As described in Impacts 4.7-1 and 4.7-2, adherence to existing federal, state, and local regulations regarding the handling, transport, and disposal of hazardous materials, as well as implementation of PLAN Hermosa policies**,** would minimize potential risks associated with accidental release and exposure to hazardous materials. Therefore, this impact would be **less than cumulatively considerable**.

Mitigation Measures

None required.

4.7.5 REFERENCES

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4.8 Hydrology and Water Quality

4.8.1 INTRODUCTION

This resource section evaluates the potential environmental effects related to hydrology and water quality associated with implementation of PLAN Hermosa. The analysis includes a review of the watershed, surface water, groundwater, flooding, tsunami, wave run-up, sea level rise, stormwater, and surface water and groundwater quality. Water supply and wastewater treatment are discussed in Section 4.13, Public Services, Community Facilities, and Utilities. Topics including erosion and sedimentation are discussed in Section 4.5, Geology and Soils. Issues regarding wetlands and waters of the United States are discussed in Section 4.3, Biological Resources, and contamination from hazardous materials is discussed in Section 4.7, Hazards and Hazardous Materials. Policies and implementation actions from the PLAN Hermosa Infrastructure Element, Sustainability + Conservation Element, and Public Safety Element guide development and infrastructure practices to protect surface water and groundwater from degradation associated with runoff and pollution, reduce water consumption, and protect against flooding hazards.

NOP Comments: No comments were received in response to the Notice of Preparation (NOP) addressing hydrology and water quality concerns. Comments included written letters and oral comments provided at the NOP scoping meeting.

Reference Information: Information for this resource section is based on numerous sources, including the PLAN Hermosa Technical Background Report and other publicly available documents. The Technical Background Report prepared for the project is attached to this EIR as **Appendix C-11**.

4.8.2 ENVIRONMENTAL SETTING

Appendix C-11 describes in detail the regional and local hydrology as well as the groundwater hydrology of the planning area. Federal Emergency Management Agency (FEMA) flood zones are described and mapped. Surface water and groundwater quality are also discussed. Key findings from the Technical Background Report are summarized below.

HYDROLOGY

- **Watershed:** The planning area is located in the Santa Monica Bay Watershed, which overlies the West Coast subbasin of the Coastal Plain of the Los Angeles Basin. The West Coast subbasin is adjudicated and commonly referred to as the West Coast Basin. It is bounded on the north by the Ballona Escarpment, an abandoned erosional channel from the Los Angeles River. It is bounded on the east by the Newport-Inglewood fault zone and on the south and west by the Pacific Ocean and consolidated rocks of the Palos Verdes Hills (DWR 1999). The Los Angeles River crosses the southern surface of the subbasin through the Dominguez Gap, and the San Gabriel River crosses the subbasin through the Alamitos Gap. Both rivers then flow into San Pedro Bay (DWR 2004). Major hydrologic inputs to the basin include precipitation and flows from the South Lahontan Region and the Colorado River Region. The Santa Monica Bay Watershed flows into the Pacific Ocean. The watershed has an annual discharge of more than 30 billion gallons of stormwater and urban runoff each year through 200 outlets. Urban runoff is caused by precipitation falling on impermeable pavement.
- **Surface Water:** No freshwater waterways or surface water bodies are located in the city. Approximately 1.8 miles of the western edge of the planning area abuts the south end of Santa Monica Bay. This area includes a 400-foot-wide sandy beach between the Pacific Ocean and urban development. Urban runoff (stormwater) flows from inland locations through the city to the Pacific Ocean through a network of drainage lines identified in Figure 11-1 in **Appendix C-11,** and included below as **Figure 4.8-1 (Stormwater Drainage**

Map). The network is a mix of County-owned and City-owned lines that generally run east to west along major roads, including 16th Street, Pier Avenue, and 2nd Street. The lines generally terminate through one of 11 outfalls at the west end of the city on the beach or in the Pacific Ocean.

- **Groundwater:** The planning area is in the West Coast subbasin of the Coastal Plain of the Los Angeles Basin. The water in underlying aquifers is confined throughout most of the basin. Table 11-1 in **Appendix C-11** identifies the principal aquifers in the West Coast subbasin. The Silverado aquifer is confined, underlies most of the basin, and is the most productive aquifer in the basin. It ranges from 100 to 500 feet thick and yields 80 to 90 percent of the groundwater extracted annually from the basin. The storage capacity of the Silverado aquifer is estimated to be 6.5 million acre-feet (DWR 1961). Groundwater recharge in the planning area is limited because Hermosa Beach is generally built out with urban development, with the exception of open space areas such as parks, the Hermosa Valley Greenbelt, and the beach.
- **Floodplain:** Figure 11-2 in **Appendix C-11,** included below as **Figure 4.8-2 (FEMA Flood Zone Map)**, illustrates FEMA's (2008) 100-year flood zone areas for Hermosa Beach. The entirety of the city's sandy beaches (extending from offshore waters to The Strand) are identified as a 100-year flood zone with the designation of Zone A, which means no base flood elevations were determined. The remainder of the city is outside of the 100-year flood zone. Because of projected sea level rise, the area inundated by 100-year floods is expected to increase through the planning horizon; however, no regulatory maps currently identify floodplains under projected conditions.
- **Tsunami:** The probability of a tsunami in the planning area is low. However, if a tsunami should occur, the consequences would be great (City of Hermosa Beach 2005). As illustrated in Figure 11-3 in **Appendix C-11,** included below as **Figure 4.8-3 (Tsunami Inundation Zone)**, the tsunami inundation line runs parallel with Hermosa Avenue, except in the northern part of the planning area where it extends eastward as much as one city block.
- **Wave Run-Up:** The Hermosa Beach coastline is exposed to waves generated by winter and summer storms originating in the Pacific Ocean. It is not uncommon for these storms to cause 15-foot swells. The occurrence of such a storm event, in combination with high astronomical tides and strong winds, can cause a wave run-up and allow storm waves to come in higher than at normal elevations along the coastline. Hermosa Beach has large areas along the beachfront that are less than 15 feet above sea level. Normally, the very wide beach will buffer these areas from the surf. During heavy storm seasons, the beach can be eroded to such an extent that properties may be subject to wave run-up. This has occurred during past El Niño events and during astronomical high tides. Resulting damage has been primarily to private property, although the extent of the damage has not been documented (City of Hermosa Beach 2005).
- **Sea Level Rise:** For the Los Angeles region, sea level rise is expected with an increase of 0.3 inches to 2.0 feet from 2000 to 2050 and 1.3 to 5.6 feet from 2000 to 2100 (NRC 2012; Grifman et al. 2013). As noted above, coastal flooding is exacerbated by storm surge and high tides. Although there is variability in sea level rise projections, even a minor increase in sea level could lead to substantial increases in coastal flooding severity and frequency. These conditions could affect coastal infrastructure and increase the effect of flooding from coastal-related events in the planning area. The City is conducting a project to forecast how coastal shallow groundwater elevation and salinity may respond to project increases in sea level rise in the sandy, low-lying coastal soils to evaluate the vulnerability of existing storm drain outfalls that could be inundated at high tide and cause localized flooding.

WATER QUALITY

Surface Water

- There are no potable surface water resources in the city. However, Hermosa Beach and Santa Monica Bay are designated as "water quality–limited" for impairments under federal Clean Water Act Section 303(d), indicating that these water bodies are not reasonably expected to attain or maintain water quality standards due to impairments without additional regulation. Impairment is measured by Total Maximum Daily Load (TMDL), the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards. Table 11-2 in the Technical Background Report (see **Appendix C-11**) identifies the listing category, pollutant, and pollutant type for Hermosa Beach and Santa Monica Bay.
- The Los Angeles Regional Water Quality Control Board (RWQCB) and the US Environmental Protection Agency (EPA) have developed two TMDLs for Hermosa Beach: the Santa Monica Bay Bacteria Dry Weather TMDL and the Santa Monica Bay Bacteria Wet Weather TMDL (Los Angeles RWQCB 2002a, 2002b). The Santa Monica Bay Bacteria Dry Weather TMDL (Resolution No. 02-004, Amendment to the Water Quality Control Plan–Los Angeles Region) notes that elevated bacterial indicator densities were causing impairment of water contact recreation beneficial uses at many Santa Monica Bay beaches. Dry weather bacteriological objectives identified in the Los Angeles Region Basin Plan include limits for total coliform density, fecal coliform density, and enterococcus density. The Santa Monica Bay Bacteria Dry Weather TMDL sets the number of days that can be in exceedance of the limits identified in the basin plan. Weekly shoreline monitoring is conducted at seven sites under the Coordinated Shoreline Monitoring Plan for the Santa Monica Bay beaches bacteria TMDL.
- The City of Hermosa Beach is not aware of any significant water quality degradation in the watershed during the latest reporting year (2014–15). Two shoreline monitoring sites predominantly influenced by runoff from the city have maintained consistently better water quality than the reference beach site monitoring location.[1] An open beach shoreline monitoring location at the extension of 26th Street in Hermosa Beach has historically exhibited a lower rate of exceedence than the reference beach. The nearest storm drain outfall ends approximately 300 feet from the shoreline. TMDL bacteria objectives for this site were not exceeded during the 2014–15 reporting year.
- The City has implemented several projects to reduce and minimize pollutants in stormwater runoff generated by land uses in the city to help protect water quality. The Hermosa Strand Infiltration Trench is a subsurface trench approximately 1,000 feet long along The Strand and diverts dry weather flows year-round from the 36-acre area of the Pier Avenue storm drain. Monitoring shows that the system effectively removes bacteria load from runoff diverted to the trench. The Pier Avenue Improvement Project is a "green" multi-benefit streetscape improvement that retrofitted the city's main street to capture and treat stormwater/urban runoff from residential areas and commercial development in the downtown corridor (36-acre drainage area). The project has reduced dry weather flows and wet weather low flows through infiltration in both subwatersheds. The City's Public Works Department implements green streets retrofits whenever the opportunity arises as part of capital improvement projects through installation of infiltration boxes within the public right-of-way. A section of Hermosa Avenue has been retrofitted with this system. The

[1] The reference beach is Leo Carillo Beach at the outlet of Arroyo Sequit Canyon, a freshwater creek draining 12 square miles of almost entirely undeveloped open space.

City has also installed trash filter/capture inserts on several catch basins. As part of the infrastructure vulnerability assessment noted above, the City is assessing how projected increases in sea level rise could affect existing and planned stormwater infiltration systems and low-flow diversions designed to meet stormwater quality standards.

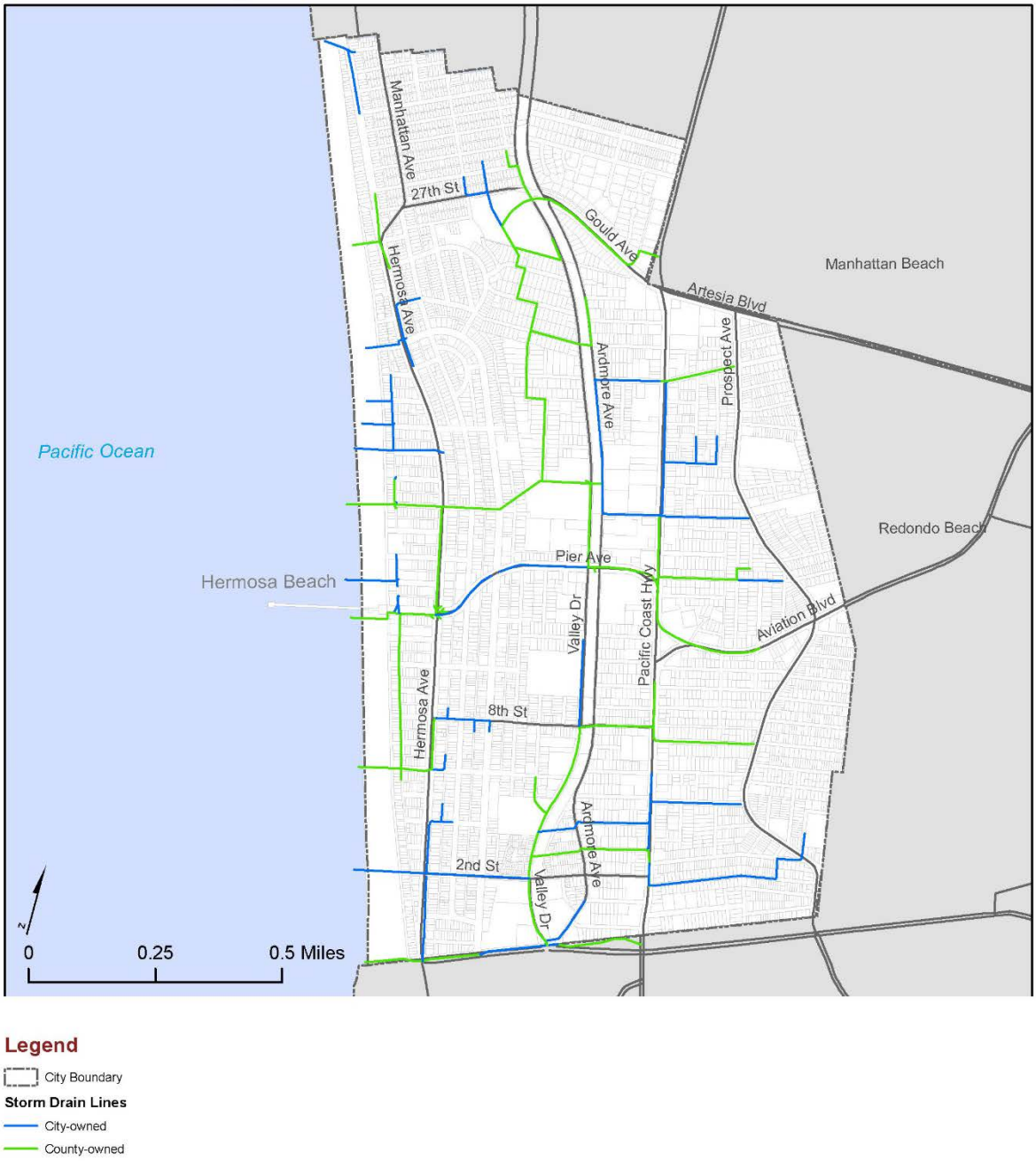
- Two additional TMDLs were approved by the Los Angeles RWQCB and the EPA after the 303(d) list: Santa Monica Bay Total Maximum Daily Loads for DDTs and PCBs (2012) and Santa Monica Bay Nearshore and Offshore Debris TMDL (2010). As a co-permittee to the Los Angeles MS4 NPDES Permit (see below), the City of Hermosa Beach is responsible for meeting water quality–based effluent limitations that allow Santa Monica Bay to meet TMDL targets identified in the Santa Monica Bay Total Daily Maximum Loads for DDTs and PCBs and the Santa Monica Bay Nearshore and Offshore Debris TMDL.
- Stormwater runoff into Santa Monica Bay is regulated primarily through four National Pollutant Discharge Elimination System (NPDES) permits:
  - The municipal separate storm sewer system (MS4) NPDES permit issued to the municipalities in the urbanized area of Los Angeles County, except the City of Long Beach, which has its own MS4 NPDES permit.
  - A separate statewide stormwater permit specifically for the California Department of Transportation (Caltrans)
  - The statewide Construction Activities Stormwater General Permit
  - The statewide Industrial Activities Stormwater General Permit

  The Los Angeles MS4 permit was first issued in 1990 and includes 85 co-permittees, including Los Angeles County and the City of Hermosa Beach. The latest revision of the permit (Order No. R4-2012-0175) was issued on November 8, 2012, and amended by the State Water Resources Control Board (Order No. WQ 2015-0075) on June 16, 2015.

Groundwater

- In the Silverado zone, the character of water varies considerably. In the coastal region, the water is calcium chloride in character, transitioning into sodium bicarbonate moving inland. Data from 45 public supply wells shows average total dissolved solids content of 720 milligrams per liter and a range of 170 to 5,510 milligrams per liter (DWR 2004).

FIGURE 4.8-1
STORMWATER DRAINAGE MAP



Legend

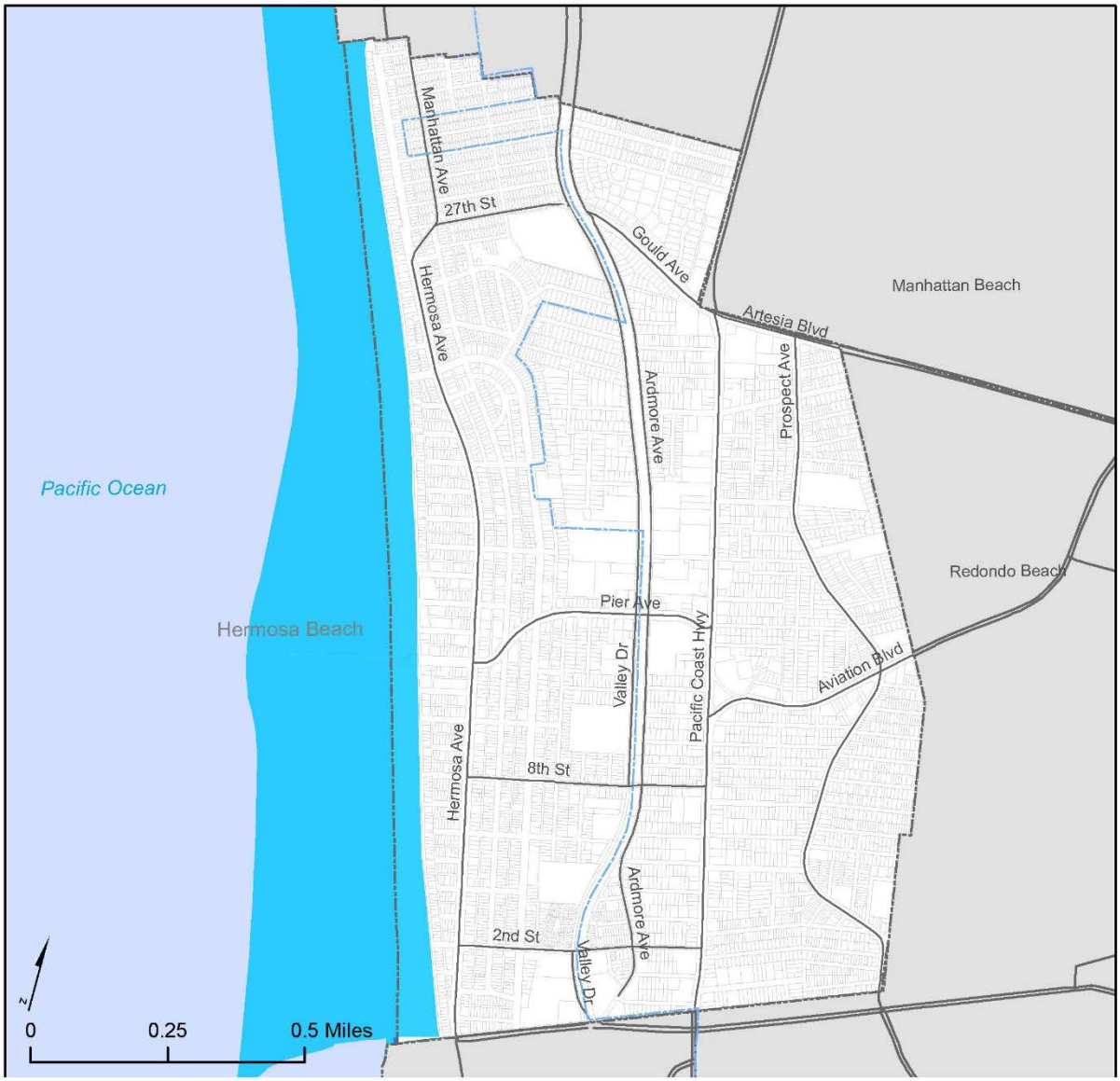
City Boundary

Storm Drain Lines

City-owned

County-owned

FIGURE 4.8-2
FEMA FLOOD ZONE MAP



Legend

City Boundary

Coastal Zone Boundary

Flood Zone Type

100 Year Flood Zone

500 Year Flood Zone

FIGURE 4.8-3
TSUNAMI INUNDATION ZONE

4.8.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies pertain to hydrology and water quality in the planning area. They provide the regulatory framework for addressing all aspects of hydrology and water quality that would be affected by implementation of PLAN Hermosa. The regulatory setting for hydrology and water quality is discussed in detail in **Appendix C-11**. Key regulations used to reduce potential impacts of the proposed project are summarized below.

FEDERAL

- **Clean Water Act:** The Clean Water Act (CWA) of 1972 is the primary federal law that governs and authorizes the EPA and the states to implement activities to control water quality. The following sections outline the various water quality elements of the CWA that apply to PLAN Hermosa.
  - Water Quality Criteria and Standards. The EPA is the federal agency with primary authority for implementing regulations adopted under the Clean Water Act. The EPA has delegated to the State of California the authority to implement and oversee most of the programs authorized or adopted for CWA compliance through the State's Porter-Cologne Act, described below. Under federal law, the EPA has published water quality regulations under Volume 40 of the Code of Federal Regulations. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the CWA, water quality standards consist of the designated beneficial uses of the water body in question and criteria that protect the designated uses. Section 304(a) requires the EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use.
  - National Pollutant Discharge Elimination System Permit Program. The CWA established the NPDES permit program to regulate municipal and industrial discharges to surface waters of the United States. A discharge from any point source is unlawful unless the discharge is in compliance with an NPDES permit. Federal NPDES permit regulations have been established for broad categories of point source discharges including industrial wastewater, municipal wastewater, and point sources of stormwater runoff, including municipal separate storm sewer systems and industrial stormwater which includes construction sites. NPDES permits generally establish effluent and receiving water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge, prohibitions on discharges not specifically allowed under the permit, and provisions that describe required actions by the discharger, including industrial pretreatment, pollution prevention, self-monitoring, and other activities. The City is regulated because its stormwater is managed as part of a large, interconnected flood control system operated by the Los Angeles County Flood Control District. Construction sites in the planning area that disturb 1 acre or more must obtain coverage under the statewide NPDES Construction General Permit. Currently there are no industrial facilities in the planning area that are subject to the statewide NPDES Industrial General Permit. The RWQCBs implement the NPDES permit system (see additional information under the State subsection below). The planning area is within the jurisdiction of the Los Angeles RWQCB.
  - Section 401 Water Quality Certification or Waiver. Under Section 401 of the CWA, an applicant for a Section 404 permit (to discharge dredged or fill material into waters of the United States) must first obtain a certificate from the appropriate state agency

indicating that the fill is consistent with the state's water quality standards and criteria. In California, the nine Regional Water Quality Control Boards have the authority to grant water quality certification or waive requirements.

– Section 303(d) Impaired Waters List. Section 303(d) of the CWA requires states to develop lists of water bodies that would not attain water quality objectives after implementation of required levels of treatment by point-source dischargers (municipalities and industries). Section 303(d) requires that the state develop a TMDL for each of the listed pollutants. As noted previously, the TMDL is the amount of loading that the water body can receive and still be in compliance with water quality objectives. The TMDL can also act as a plan to reduce loading of a specific pollutant from various sources to achieve compliance with water quality objectives. The state-prepared TMDL must include an allocation of allowable loadings to point and nonpoint sources, with consideration of background loadings (sources of naturally occurring pollutants) and a margin of safety. The TMDL must also include an analysis that shows links between loading reductions and the attainment of water quality objectives. NPDES permit limits for listed pollutants must be consistent with the waste load allocation prescribed in the TMDL. After implementation of a TMDL, it is intended that the problems which led to placement of a given pollutant on the Section 303(d) list would be remediated.

- **National Flood Insurance Program:** FEMA administers the National Flood Insurance Program to provide subsidized flood insurance to communities that comply with FEMA regulations limiting development in floodplains. FEMA also issues Flood Insurance Rate Maps (FIRMs) that identify which land areas are subject to flooding. These maps provide flood information and identify flood hazard zones in communities. FEMA established the design standard for flood protection in areas covered by FIRMs, with the minimum level of flood protection for new development determined to be a 1-in-100 probability of annual exceedance (i.e., the 100-year flood event). As developments are proposed and constructed, FEMA is also responsible for issuing revisions to FIRMs, such as Conditional Letters of Map Revision and Letters of Map Revision through the local agencies that work with the National Flood Insurance Program.
- **US Army Corps of Engineers:** The US Army Corps of Engineers (USACE) is responsible for issuing permits for the placement of fill or discharge of material into waters of the United States. These permits are required under Clean Water Act Sections 401 and 404. Water supply projects that involve stream construction, such as dams or other types of diversion structures, trigger the need for these permits and related environmental reviews by the USACE. The USACE also is responsible for flood control planning and assisting state and local agencies with the design and funding of local flood control projects.

STATE

- **California Coastal Act of 1976:** The California Coastal Act of 1976 and the California Coastal Commission, the state's coastal protection and planning agency, were established by voter initiative in 1972 to plan for and regulate new development and to protect public access to and along the shoreline. The Coastal Act considers water quality and water-related public safety concerns as issues of public importance.
- **State Water Resources Control Board:** In California, the State Water Resources Control Board (SWRCB) has broad authority over issues related to controlling water quality for the state. The SWRCB is responsible for developing statewide water quality policy and exercises the powers delegated to the state by the federal government under the Clean Water Act. Regional authority for planning, permitting, and enforcement is delegated to the nine Regional Water Quality Control Boards (RWQCBs). The regional boards are required to

formulate and adopt basin plans for all areas in the region and establish water quality objectives in the plans. California water quality objectives (or "criteria" under the CWA) are found in the basin plans adopted by the SWRCB and each of the nine regional boards. The Los Angeles RWQCB is responsible for the Hermosa Beach planning area and the surrounding region. In 2006, the SWRCB adopted Order Number 2006-003 establishing General Waste Discharge Requirements for all publicly owned or operated sanitary sewer systems in California. The Waste Discharge Requirements require owners and operators of sewer collection systems to report sanitary sewer overflows using the California Integrated Water Quality System and to develop and implement a Sewer System Management Plan. The Hermosa Beach Sanitary Sewer Master Plan, adopted in 2009 and updated in 2011, details sewer collection system operations, maintenance, repair, and funding. Section 4.13, Public Services, Community Facilities, and Utilities, of this EIR addresses wastewater treatment issues and the state regulations that apply to the demonstration of adequate water supply for the future water demands caused by implementation of PLAN Hermosa.

- **Title 22 Standards:** California's drinking water quality standards are contained in Title 22 of the California Code of Regulations. Water quality standards are enforceable limits composed of two parts: the designated beneficial uses of water and criteria (i.e., numeric or narrative limits) to protect those beneficial uses. Municipal and domestic supply is among the "beneficial uses" defined in Section 13050(f) of the Porter-Cologne Act as uses of surface water and groundwater that must be protected against water quality degradation. Drinking water maximum contaminant levels (MCLs) directly apply to water supply systems "at the tap" (i.e., at the point of use by consumers in, for example, their home and office) and are enforceable by the State and the Los Angeles County Department of Public Health. When fully health-protective, MCLs may also be used to interpret narrative water quality objectives prohibiting toxicity to humans in water designated as a source of drinking water in the basin plan.
- **Porter-Cologne Water Quality Control Act:** The Porter-Cologne Act is California's statutory authority for the protection of water quality. Under the act, the State must adopt water quality policies, plans, and objectives that protect the state's waters for the use and enjoyment of the people. The act sets forth the obligations of the SWRCB and the RWQCBs to adopt and periodically update basin plans. Basin plans are the regional water quality control plans required by both the Clean Water Act and the Porter-Cologne Act in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The act also requires waste dischargers to notify the RWQCBs of their activities through the filing of reports of waste discharge and authorizes the SWRCB and the RWQCBs to issue and enforce waste discharge requirements (WDR), NPDES permits, Section 401 water quality certifications, or other approvals. The RWQCBs also have authority to issue waivers to reports of waste discharge and/or WDRs for broad categories of "low threat" discharge activities that have minimal potential for adverse water quality effects when implemented according to prescribed terms and conditions.
- **Los Angeles Regional Water Quality Control Board Basin Plan:** The planning area is in the jurisdiction of the Los Angeles RWQCB, which is responsible for the preparation and implementation of the water quality control plan for the Los Angeles region (Los Angeles RWQCB 1995). The basin plan defines the beneficial uses, water quality objectives, implementation programs, and surveillance and monitoring programs for waters of the coastal drainages in the Los Angeles region between Rincon Point on the coast of western Ventura County and the eastern Los Angeles County line. The basin plan contains specific numeric water quality objectives that apply to certain water bodies or portions of water bodies. Objectives have been established for bacteria, dissolved oxygen, pH, pesticides,

electrical conductivity, total dissolved solids, temperature, turbidity, and trace elements. Numerous narrative water quality objectives have also been established.

- **California Ocean Plan:** Section 13170.2 of the California Water Code directs the SWRCB to formulate and adopt a water quality control plan for California's ocean waters. The SWRCB first adopted this plan, known as the California Ocean Plan, in 1972. The California Water Code also requires a review of the California Ocean Plan at least every three years to guarantee that current standards are adequate and are not allowing degradation to indigenous marine species or posing a threat to human health. The current iteration of the California Ocean Plan (SWRCB 2012) establishes water quality objectives for California's ocean waters and provides the basis for regulation of wastes discharged into the state's coastal waters.
- **California State Nondegradation Policy:** In 1968, the SWRCB adopted a nondegradation policy aimed at maintaining high quality for waters in California. The nondegradation policy states that the disposal of wastes into state waters shall be regulated to achieve the highest water quality consistent with maximum benefit to the people of the state and to promote the peace, health, safety, and welfare of the people of California. The policy provides as follows:
  - Where the existing quality of water is better than required under existing water quality control plans, such quality would be maintained until it has been demonstrated that any change would be consistent with maximum benefit to the people of the state and would not unreasonably affect present and anticipated beneficial uses of such water.
  - Any activity which produces waste or increases the volume or concentration of waste and which discharges to existing high-quality waters would be required to meet waste discharge requirements, which would ensure (1) pollution or nuisance would not occur and (2) the highest water quality consistent with the maximum benefit to the people of the state would be maintained.
- **NPDES Permit System and Waste Discharge Requirements for Construction:** The SWRCB and the Los Angeles RWQCB have adopted specific NPDES permits for a variety of activities that have potential to discharge wastes to waters of the State. The SWRCB General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ) applies to all land-disturbing construction activities that would affect 1 acre or more. The Los Angeles Regional Water Quality Control Board has issued a general NPDES permit and general WDRs governing construction-related dewatering discharges in the Los Angeles RWQCB's jurisdictional area (Los Angeles RWQCB Order No. R4-2003-0111; NPDES No. CAG994004). The Los Angeles RWQCB may also issue site-specific WDRs, or waivers to WDRs, for certain waste discharges to land or waters of the State. Activities subject to the NPDES general permit for construction activity must develop and implement a stormwater pollution prevention plan (SWPPP). The SWPPP includes a site map and description of construction activities and identifies the best management practices that will be employed to prevent soil erosion and discharge of other construction-related pollutants, such as petroleum products, solvents, paints, and cement that could contaminate nearby water resources.
- **Municipal Stormwater Permit Program:** The SWRCB Municipal Storm Water Permitting Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s). The current MS4 permit (Order No. R4-2012-0175 [NPDES Permit No. CAS004001, Waste Discharge Requirements for Municipal Separate Storm Sewer System [MS4] Discharges within the Coastal Watersheds of Los Angeles County], as amended by Order No. WQ 2015-0075) requires the discharger to develop and implement a stormwater

management plan/program with the goal of reducing the discharge of pollutants in stormwater to the maximum extent practicable (MEP). The MEP is the performance standard specified in federal Clean Water Act Section 402(p). The management programs specify what best management practices will be used to address certain program areas. The permit establishes new performance criteria for new development and redevelopment projects in the Coastal Zone, including low impact development (LID). The City of Hermosa Beach is a co-permittee under the MS4 permit. As a co-permittee, the City is required to maintain adequate legal authority within its respective jurisdiction to control pollutant discharges and to require the use of control measures to prevent or reduce the discharge of pollutants into the MS4 to achieve water quality standards.

- **Recycled Wastewater Requirements:** Wastewater recycling in California is regulated under California Code of Regulations Title 22, Division 4, under the jurisdiction of the California Department of Public Health. The intent of these regulations is to ensure protection of public health associated with the use of recycled water. The regulations establish acceptable levels of constituents in recycled water for a range of uses and prescribe means for ensuring reliability in the production of recycled water. Using recycled water for nonpotable uses is common throughout the state and is an effective means of maximizing use of water resources. The Los Angeles RWQCB establishes water reclamation requirements under the Title 22 regulations and is responsible for implementing wastewater recycling projects.

REGIONAL

- **Enhanced Watershed Management Plan for Beach Cities:** Following adoption of the MS4 permit, the Cities of Hermosa Beach, Manhattan Beach, Redondo Beach, and Torrance, together with the Los Angeles County Flood Control District (LACFCD), collectively referred to as the Beach Cities Watershed Management Group (Beach Cities WMG) agreed to collaborate on the development of an Enhanced Watershed Management Program (EWMP) for the Santa Monica Bay and Dominguez Channel Watershed areas within their jurisdictions (referred to as the Beach Cities EWMP Area). Under Part IV.C of the MS4 permit (Watershed Management Program), the permittees are afforded the flexibility to develop watershed management programs to implement the requirements of the permit on a watershed scale through customized strategies, control measures, and best management practices. The Beach Cities EWMP summarizes watershed-specific water quality priorities identified by the Beach Cities WMG; outlines the program plan, including specific strategies, control measures, and best management practices to achieve water quality targets; and describes the quantitative analysis completed to support target achievement and permit compliance. A reasonable assurance analysis was prepared in conjunction with the EWMP to demonstrate on a quantitative basis that the EWMP will achieve the requirements of the MS4 permit for the members of the Beach Cities Watershed Management Group. A timeline, estimated costs, and potential funding sources are also described in the EWMP.

  Currently, regional best management practices have been constructed within the Beach Cities EWMP planning area, including two in Hermosa Beach (Pier Avenue Improvement project and Hermosa Strand Infiltration Trench project). Future projects proposed in Hermosa Beach are the Hermosa Beach Infiltration Beach project, the Hermosa Beach Greenbelt Infiltration project, and two green street projects. The projects in Hermosa Beach have not been funded, and a schedule for implementation has not yet been developed.

  The Beach Cities EWMP was approved by the Los Angeles RWQCB on April 18, 2016, under its authority to administer the MS4 permit. The EWMP does not establish policies or regulations that the participating cities must impose on new development or

redevelopment, nor does the program require the construction of the specific features identified in the EWMP. However, the approach described in the EWMP, in combination with the required LID-based best management practices that each participating city must impose on development, is anticipated to protect and potentially improve water quality in Santa Monica Bay from pollutants in stormwater runoff.

LOCAL

- **Stormwater and Urban Runoff Pollution Control Regulations:** Chapter 8.44 of the Hermosa Beach Municipal Code ensures consistency with the requirements of the federal Clean Water Act and the California Porter-Cologne Water Quality Control Act, and acts amendatory thereof or supplementary thereto, applicable implementing regulations, and the Municipal NPDES Permit, and any amendment, revision, or reissuance thereof.
- **Low Impact Development Ordinance:** The City has been requiring LID best management practices for certain residential and commercial projects since 2015, when it adopted a customized amendment to the California Green Building Code. As required by the current MS4 permit, Hermosa Beach Municipal Code Section 8.44.095 (LID Ordinance) sets forth low impact development requirements for new development and redevelopment (Ordinance No. 15-1351). All new development or new building construction in Hermosa Beach will be required to comply with the LID requirements regardless of the area of impervious surface or acreage disturbed, which exceeds the minimum applicability requirements of the MS4 permit. Consistent with the MS4 permit, redevelopment projects of any type that add or replace more than 5,000 square feet of impervious surface area will also be required to comply with the LID requirements, with the further proviso that redevelopment projects located directly adjacent to a significant ecological area will be subject to LID requirements if they propose addition or replacement of more than 2,500 square feet of impervious surface area.[2] The City has been implementing the LID Ordinance requirements since 2015.
- **Green Street Policy:** The City adopted a policy (Resolution No. 15-0013) in 2015 to implement green street best management practices as elements of street and roadway projects, including public works capital improvement projects, to the maximum extent practicable. This policy is intended to demonstrate compliance with the MS4 permit. Water quality improvement and groundwater replenishment benefits are achieved through designs that minimize impervious area and incorporate bioretention elements (e.g., vegetated swales) to facilitate natural pollutant removal while allowing stormwater retention and/or infiltration.
- **Floodplain Management Regulations:** Hermosa Beach Municipal Code Chapter 8.52 regulates development in floodplains to minimize public and private losses due to flood conditions through provisions designed to protect human life and health; minimize expenditure of public money for costly flood control projects; minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; minimize prolonged business interruptions; and minimize damage to public facilities and utilities. To accomplish these purposes, this chapter includes regulations to restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities; require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction; control the alteration of natural floodplains, stream channels, and natural protective barriers which

[2] The complete text of the LID Ordinance may be found at: http://www.codepublishing.com/CA/HermosaBeach/#!/hermosabeach08/HermosaBeach0844.html#8.44.095

help accommodate or channel floodwaters; control filling, grading, dredging, and other development which may increase flood damage; and prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards in other areas.

4.8.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on hydrology and water quality are considered significant if implementation of PLAN Hermosa would:

1) Violate any water quality standards or waste discharge requirements.
2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation.
4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding.
5) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
6) Otherwise substantially degrade water quality.
7) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.
8) Place within a 100-year flood hazard area structures that would impede or redirect flood flows.
9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.
10) Result in inundation by seiche, tsunami, or mudflow.

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of implementation of PLAN Hermosa compared to existing conditions. The following analysis of impacts on hydrology and water quality is qualitative and based on available hydrologic and water quality information for the planning area, along with a review of regional information. The analysis assumes that all future and existing development in the planning area complies with applicable laws, regulations, and plans. An analysis of cumulative impacts uses qualitative information for the planning area, Santa Monica Bay, and the West Coast subbasin of the Coastal Plain of the Los Angeles Basin.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa policies and implementation actions that address hydrology and water quality include the following:

Policies

Public Safety Element

- **1.1 Evaluate risks.** New buildings and infrastructure will evaluate seismic, fire, flood, and coastal storm hazard risks and comply with California Building Code standards to minimize risk.
- **1.3 Tsunami Playbook.** Utilize the Los Angeles County Tsunami Playbook in the evaluation and response of tsunami risk.
- **1.5 Minimize coastal flooding.** Natural interventions, green infrastructure, and infiltration systems will be utilized to minimize damage from coastal flooding.
- **1.6 Minimize coastal hazards.** Injuries and loss of life are prevented, and property loss and damage from coastal hazards are minimized.
- **1.7 Reduce flood vulnerability.** Encourage existing structures, critical facilities, and infrastructure to reduce flood vulnerability.
- **1.8 Reduce stormwater runoff.** Reduce stormwater runoff consistent with local stormwater permits.
- **1.11 Secure funds.** Establish centralized internal procedures to coordinate efforts for securing funds that support risk reduction measures.
- **2.1 Integrate resilience.** Integrate resilience to anticipated sea level rise impacts into project designs when repairing and replacing aging infrastructure.
- **2.2 Mitigate impacts.** Require new development and redevelopment projects to consider and mitigate relevant sea level rise impacts.
- **2.3 Enhance awareness.** Enhance local understanding of sea level rise and keep decision-makers and the community aware of potential impacts based on best available science.
- **2.4 Provide public information.** Provide public information describing new flooding risks under a 55-inch sea level rise scenario in areas previously not affected by flooding.
- **2.5 Maintain beach widths.** Current beach widths are maintained under changing sea level conditions.
- **2.6 Consider sea level rise.** Consider the combined effects of sea level rise when evaluating potential tsunami and storm surge impacts.
- **2.7 Support regional approaches.** Support regional approaches to sediment management, beach replenishment, and adaptive shoreline protection to allow Hermosa Beach to voice its needs, allow for coordination with neighboring jurisdictions, and identify creative finance mechanisms to continue the replenishment program.
- **2.8 Identify erosion problems.** Continue to monitor beach width and elevations to identify potential erosion problems.
- **4.1 Public awareness.** Increase public awareness of hazards, emergency response, and recovery.

- **4.2 Promote community-based programs.** Promote community-based programs in fire safety and emergency preparedness, including neighborhood-level programs and programs with businesses.
- **4.3 SEMS and NIMS training.** Increase City employee capacity through the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) compliant training and Emergency Operations Center (EOC) drills to identify hazards, and assist in emergency preparedness, response, and recovery.
- **4.4 Utilize City media resources.** Establish communication protocols and utilize City media resources to provide information prior to, during, or after events posing risk to community health safety, and welfare.
- **4.5 Responsive neighborhood groups.** Encourage neighborhood groups to identify, consider, and prepare for the needs of neighbors with access and functional needs to adequately respond to disasters.
- **4.6 Vulnerable populations.** Establish an emergency plan to take care of vulnerable populations such as children, the elderly, and tourists during hazardous events.
- **6.1 Regularly update plans.** Regularly update disaster preparedness and emergency response plans.
- **6.2 Coastal incidents.** Collaborate and maintain communication between the City, LA County Lifeguards, and the United States Coast Guard concerning incidents on or near the coast.
- **6.3 Invest in critical facilities.** Invest in public and critical facilities to make them more resilient to the potential impacts of natural disasters.

Infrastructure Element

- **4.8 Holistic systems planning.** Develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness.
- **5.1 Integration of stormwater best practices.** Integrate stormwater infiltration best practices when initiating streetscape redevelopment or public facility improvement projects.
- **5.2 Green infrastructure.** Naturalize flood channels that enhance flood protection capacity before employing other management solutions.
- **5.3 Natural features.** Integrate natural features, such as topography, drainage, and trees, into the design of streets and rights-of-way.
- **5.4 Conservation behavior.** Encourage community behavior changes to reduce urban runoff pollution.
- **5.5 Stormwater system maintenance.** Maintain, fund, and regularly monitor the City's stormwater infrastructure.
- **5.6 Stormwater system repairs.** Ensure that stormwater system repairs are included in maintenance plans for other City infrastructure and that repairs and maintenance are completed in a timely manner to prevent additional repair costs.
- **5.7 Stormwater permits.** Strictly implement, enforce, and monitor MS4 NPDES Permit requirements through stormwater ordinances.

- **5.8 Low impact development.** Require new development and redevelopment projects to incorporate low impact development (LID) techniques in project designs, including but not limited to on-site drainage improvements using native vegetation to capture and clean stormwater runoff.

Sustainability + Conservation Element

- **5.2 Rainwater collection.** Encourage innovative water recycling techniques such as rainwater capture, use of cisterns, and installation of greywater.
- **7.1 Permeable pavement.** Require the use of permeable pavement in parking lots, sidewalks, plazas, and other low-intensity paved areas.
- **7.2 Soil erosion.** Minimize soil erosion by ensuring best practices are used in grading and construction.

Implementation Actions

- SUSTAINABILITY-9. Maintain and periodically update the Water Efficient Landscape Ordinance and Water Conservation and Drought Management Plan sections of the Municipal Code to facilitate the use of new technologies or practices to conserve water.
- SAFETY-5. Evaluate tsunami preparation, evacuation, and response policies/practices to reflect current inundation maps and design standards. Include updated information in the periodically updated hazard mitigation plan.
- SAFETY-9. Continue working with regional partners to develop a local sea level rise model that evaluates erosion potential, provides detailed inundation maps, and provides combined sea level rise and tsunami maps.
- SAFETY-10. When the mean high water level exceeds 1 foot above the baseline level, partner with FEMA as a cooperating technical partner to conduct a Hydrologic and Hydraulic Study, and facilitate necessary revisions to applicable Flood Insurance Rate Maps.
- SAFETY-11. Prepare for changing shoreline conditions by establishing and applying the following development review requirements:
  - Require new development or redevelopment project proposals within the designated area subject to flooding, inundation, or erosion due to sea level rise to describe and illustrate in site plans how the proposed project considers and mitigates potential flood hazards during the economic lifespan of the structure. Potential flood mitigation measures include, but are not limited to, flood proofing; increased ground floor elevation (a minimum of 1-foot freeboard); ground-floor, flood-resistant exterior materials; and restricting fencing or yard enclosures that cause water to pond.
  - Require new development or redevelopment projects to assure stability and structural integrity and neither create nor contribute significantly to erosion, geologic instability, or destruction of the project site or surrounding area.
  - As local flood, erosion, and tsunami data becomes more precise, amend the General Plan and Zoning Code to establish more specific development standards and conditions.
- SAFETY-12. Amend the Municipal Code to establish a definition of "economic lifespan" for structural development as between 75 to 100 years, unless otherwise specified, and provide restrictions for specific development proposals.

- SAFETY-13. Amend the Municipal Code to require flood risk disclosure and active acknowledgment of expanded flood risk when properties subject to inundation or flooding are developed or redeveloped.
- SAFETY-14. Continue to participate in regional sediment management planning.
- SAFETY-15. Develop a long-term adaptive shoreline management program with a strong preference for beach replenishment over shoreline protective structures.
- INFRASTRUCTURE-1. Create a comprehensive, long-range (20-year) infrastructure plan integrating roadway, water, wastewater, stormwater, waste disposal, and utility infrastructure systems.
  - Consider the best available science describing potential climate change impacts as a basis for preparing the infrastructure plan.
  - Use the infrastructure plan as a resource when preparing five-year Capital Improvement Plans (CIPs) and setting and enforcing discretionary development requirements.
  - Incrementally update the infrastructure plan following the preparation of each CIP to ensure it remains consistent with changes in growth, traffic, funding sources, climate change impacts, and state and regional regulation.
- INFRASTRUCTURE-9. Consult with Cal Water to estimate and evaluate water supplies, provide public information and incentives for water conservation best practices.
- INFRASTRUCTURE-10. Install greywater systems and rainwater collection cisterns in parks and community facilities.
- INFRASTRUCTURE-11. Support efforts by Cal Water to construct necessary pump and storage facilities to ensure adequate water supply and proper water system balance.
- INFRASTRUCTURE-12. Amend the Municipal Code to require the installation of dual water plumbing hookups for landscaping irrigation, grading, and other non-contact uses in new development and redevelopment projects where recycled water is available or expected to be available.
- INFRASTRUCTURE-13. Continue to implement the Water Conservation and Drought Management Plan and any implementing ordinances, including imposition of fines and other appropriate enforcement tools, for violations of water conservation rules.
- INFRASTRUCTURE-18. Continue to implement and incorporate revisions to the Clean Bay Restaurant Program and Grease Control Ordinance.
- INFRASTRUCTURE-19. Update program requirements to integrate the latest available Best Management Practices into the City Stormwater Management and Discharge Control Ordinance, Low Impact Development (LID) Ordinance, and Green Street Policy and regularly monitor results.
- INFRASTRUCTURE-20. Complete municipal demonstration projects showing residential and business property best practices in urban runoff, green streets, and LID.
- INFRASTRUCTURE-21. Continue to require new development and redevelopment projects to incorporate green street BMPs that address stormwater runoff from the project area using the Green Street BMP Selection Guidelines identified in Attachment A of the City's Green Street Policy.
- INFRASTRUCTURE-22. Continue to install educational signs or symbols on major public storm drains.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.8-1 ***Would PLAN Hermosa Adversely Affect Water Quality Standards and Waste Discharge Requirements?*** *Implementation of PLAN Hermosa would provide for future development and reuse projects that could alter existing stormwater runoff and associated pollutants. However, the potential for stormwater flows to affect water quality would be controlled through implementation of Municipal Code Chapter 8.44 (Stormwater and Urban Runoff Pollution Control Regulations), which includes the City's Low-Impact Development (LID) Ordinance (Municipal Code Section 8.44.095), and the City's Green Street Policy. Construction activities resulting from implementation of PLAN Hermosa would also temporarily increase the amount of sediments and pollutants in stormwater runoff. However, implementation of PLAN Hermosa policies and implementation actions and enforcement of existing grading and erosion regulations (Municipal Code Section 8.44.090 and NPDES Construction General Permit SWPPP requirements) would result in a* ***less than significant*** *impact.*

Water quality standards and waste discharge requirements that are applicable to PLAN Hermosa are set forth in the Basin Plan and various NPDES permits, which are described in the Regulatory Setting subsection. From a hydrologic perspective, the primary way in which PLAN Hermosa would result in water quality impacts is a function of pollutants contained in stormwater runoff, which could occur during construction and/or occupancy of projects. Hermosa Beach is generally built out with urban development, with the exception of open space areas such as parks, vacant parcels, the Hermosa Valley Greenbelt, and the beach. Urbanized land in Hermosa Beach is not anticipated to substantially increase with the implementation of PLAN Hermosa because the city is largely built out, with new development limited to infill and redevelopment where existing impervious surfaces and developed conditions already exist. Therefore, the potential for future development and reuse projects consistent with PLAN Hermosa to result in a substantial alteration in existing city water quality impacts is limited.

Construction activities such as grading, excavation, and trenching may result from development associated with implementation of PLAN Hermosa. These types of land-disturbing construction activities result in the potential for increased soil erosion and sedimentation in stormwater runoff. In addition, general construction activities would contribute pollutants such as construction waste, diesel and oil from equipment, solvents, and lubricants. Sediment and contaminants could enter the stormwater drainage system and eventually enter Santa Monica Bay. The potential increase in soil erosion, siltation, and construction-related pollutants could degrade downstream surface water or groundwater. However, future projects would be required to comply with NPDES requirements. Construction activities disturbing 1 acre or more would be subject to the NPDES Construction Activities Stormwater General Permit and would be required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters and consider the use of post-construction permanent best management practices. Projects over 1 acre would also be required to develop and implement a stormwater pollution prevention plan with best management practices that would be employed to prevent soil erosion and discharge of other construction related pollutants, as well as a monitoring program to ensure that best management practices are implemented appropriately and are effective at controlling discharges of pollutants related to stormwater. Hermosa Beach Municipal Code Title 8, Chapter 8.44, Section 8.44.090 describes requirements for sediment and erosion control best management practices and SWPPPs. Best management practices may consist of a wide variety of measures appropriate to reduce pollutants in stormwater.

PLAN Hermosa includes several policies and implementing actions that would apply to new development and redevelopment. Public Safety Element Policy 1.8 directs the City to reduce stormwater runoff consistent with local stormwater permits. Infrastructure Element Policy 4.8 directs the City to develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness.

The Infrastructure Element contains Policies 5.1, 5.3, 5.4, 5.5, 5.6, 5.7, and 5.8 that would further reduce impacts to water quality. Policy 5.1 integrates stormwater infiltration best practices when initiating streetscape redevelopment or public facility improvement projects. Policy 5.3 directs the City to integrate natural features, such as topography, drainage, and trees, into the design of streets and rights-of-way. Policy 5.4 encourages community behavior changes to reduce urban runoff pollution. Policy 5.5 directs the City to maintain, fund, and regularly monitor the city's stormwater infrastructure. Policy 5.6 ensures that stormwater system repairs are included in maintenance plans for other city infrastructure and that repairs and maintenance are completed in a timely manner to prevent additional repair costs. Policy 5.7 directs the City to strictly implement, enforce, and monitor MS4 NPDES permit requirements. Policy 5.8 requires new development and redevelopment projects to incorporate LID techniques in project designs, including but not limited to on-site drainage improvements using native vegetation to capture and clean stormwater runoff.

Sustainability + Conservation Element Policy 5.2 encourages innovative water recycling techniques such as rainwater capture, use of cisterns, and installation of greywater systems. Additionally, Policy 7.1 requires the use of permeable pavement in parking lots, sidewalks, plazas, and other low-intensity paved areas, while Policy 7.2 would seek to minimize soil erosion by ensuring best practices are used in grading and construction.

Infrastructure Element implementation action INFRASTRUCTURE-12 would amend the Municipal Code to require the installation of dual plumbing to facilitate use of recycled water for landscaping irrigation, grading, and other non-contact uses in new development and redevelopment projects where recycled water is available or expected to be available. INFRASTRUCTURE-18 directs the City to continue to fully implement and expand the Clean Bay Restaurant Program and the Grease Control Ordinance. INFRASTRUCTURE-1 directs the City to incorporate stormwater infrastructure improvements in a comprehensive, long-range (20-year) infrastructure plan. INFRASTRUCTURE-19 updates program requirements in the City's Storm Water Management and Discharge Control Ordinance and regularly monitors results. INFRASTRUCTURE-20 directs the City to continue to implement the Low Impact Development Ordinance and monitor ordinance effectiveness. INFRASTRUCTURE-21 requires new development and redevelopment projects to incorporate green street best management practices that address stormwater runoff from the project area using the Green Street BMP Selection Guidelines identified in Attachment A of the City's Green Street Policy.

Implementation of these policies, in combination with continued implementation of Municipal Code Chapter 8.44 (Stormwater and Urban Runoff Pollution Control Regulations), Municipal Code Section 8.44.095 (Low-Impact Development (LID) Ordinance), and the City's Green Street Policy would ensure projects developed under PLAN Hermosa would be in compliance with applicable water quality standards (e.g., the Basin Plan) and waste discharge requirements (e.g., NPDES MS4 permit) and would offset any new development impacts to water quality. Since 2010, the City has required LID best management practices in certain projects, and beginning in 2015–16, all projects have been required to comply with the City's LID Ordinance, which provides greater stormwater protection than required by the MS4 permit by requiring projects to maintain stormwater runoff on-site, among other requirements. The City also has implemented several projects to control pollutants in stormwater runoff that have been demonstrated to provide effective pollutant

removal and meet water quality objectives and has identified additional projects in the Beach Cities EWMP to help further improve water quality. This EWMP is based on a Reasonable Assurance Analysis to ensure the requirements of the MS4 permit will be met, and will be implemented during the life of the PLAN Hermosa. The proposed PLAN Hermosa policies and implementation actions related to hydrology and water quality are consistent with and support applicable plans and regulations. Therefore, adoption and implementation of PLAN Hermosa would not violate water quality standards or waste discharge requirements, and impacts would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.8-2 ***Would PLAN Hermosa Deplete Groundwater Supplies or Substantially Interfere with Groundwater Recharge?*** *Implementation of PLAN Hermosa would provide for future development and reuse projects that would minimally affect groundwater recharge because existing areas of open space would be preserved, and implementation of the City's LID Ordinance, Green Street Policy, and PLAN Hermosa policies and implementation actions would require permeable area in new development, redevelopment, and infrastructure improvements, resulting in a* ***less than significant*** *impact.*

Hermosa Beach is generally built out with urban land uses and has minimal areas of vacant, developable permeable land. Proposed PLAN Hermosa land use policies promote the redevelopment of existing urbanized areas, and the overall net area of urbanized land is not anticipated to substantially increase. Redevelopment would generally occur in underutilized areas that are currently covered with impervious surfaces. Site redevelopment may provide opportunities to create new permeable surfaces through new landscaping and use of porous pavements, potentially reducing the amount of runoff and associated pollutants. Thus, very small amounts of new impervious surface would result from development associated with implementation of the plan, which would not significantly affect infiltration of water into the ground. With incorporation of the LID requirements, development that occurs as the result of PLAN Hermosa would have lower runoff and higher permeability than observed in baseline conditions.

The potential for groundwater recharge impacts would be further reduced through implementation of PLAN Hermosa policies. Infrastructure Element contains policies Policy 5.1, 5.2, 5.3, 5.8, that would address potential impacts to groundwater recharge. Policy 5.1 that integrates stormwater infiltration best practices when initiating streetscape redevelopment or public facility improvement projects. Policy 5.2 directs the City to naturalize flood channels that enhance flood protection capacity before employing other management solutions. Policy 5.3 directs the City to integrate natural features, such as topography, drainage, and trees, into the design of streets and rights-of-way. Policy 5.8 requires new development and redevelopment projects to incorporate low impact development techniques in project designs, including but not limited to on-site drainage improvements using native vegetation to capture and clean stormwater runoff. Sustainability + Conservation Element Policy 5.2 encourages innovative water recycling techniques such as rainwater capture, use of cisterns, and installation of greywater systems. Policy 7.1 requires the use of permeable pavement in parking lots, sidewalks, plazas, and other low-intensity paved areas. Each of these policies individually and in combination would maintain and possibly improve recharge opportunities in the subbasin.

In addition to the policies listed above, Infrastructure Element Policy 4.8 directs the City to develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness. PLAN Hermosa also contains implementation actions intended to increase groundwater recharge over baseline conditions. INFRASTRUCTURE-19 directs the City to continue

to implement the Low Impact Development Ordinance and to monitor ordinance effectiveness. INFRASTRUCTURE-21 requires new development and redevelopment projects to incorporate green street best management practices that address stormwater runoff from the project area using the Green Street BMP Selection Guidelines identified in Attachment A of the City's Green Street Policy.

Because of the minimal amount of new impervious surface that would result with implementation of PLAN Hermosa, the rate of infiltration needed to support groundwater recharge would not be substantially decreased. Additionally, implementation of PLAN Hermosa policies and actions, in combination with the City's LID Ordinance, Green Street Policy, and projects anticipated in the Beach Cities EWMP, would help maintain and protect groundwater recharge resources by ensuring infiltration potential is not reduced and that pollutants as specified in the management plan are removed to the maximum extent practicable. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.8-3 ***Would PLAN Hermosa Alter the Existing Drainage Pattern of the Site or Area so as to Result in Substantial On- or Off-Site Erosion or Siltation?*** *Implementation of PLAN Hermosa would provide for future development and reuse projects that would minimally alter drainage patterns and the amount of stormwater runoff, which would minimize the potential for erosion or siltation. Continued implementation and enforcement of existing grading, erosion, and flood control regulations, in combination with the City's LID Ordinance, Green Street Policy, and PLAN Hermosa policies and implementation actions, would result in a* ***less than significant*** *impact.*

As described above in Impact 4.8-1, Hermosa Beach is generally built out with urban development and has minimal areas of vacant permeable land, with the exception of parkland, the Hermosa Valley Greenbelt, and the beach. The city has no natural drainage features. With only a few vacant parcels that are small and generally not contiguous, new development would not be of such scale that drainage patterns would be substantially altered, which would limit the potential for increased erosion or sedimentation. For example, most recent development in the city has included demolition and reconstruction of single-family homes, small commercial redevelopment, or two-unit condominium projects. Development along shoreline areas, which could be susceptible to erosion from wave and tidal action and/or sea level rise effects, would be limited under PLAN Hermosa.

The potential for erosion or siltation impacts would be further reduced through implementation of PLAN Hermosa policies and implementation actions. Public Safety Element Policy 1.5 directs the City to use natural interventions, green infrastructure, and infiltration systems to minimize damage from coastal flooding. Policy 1.8 reduces stormwater runoff consistent with local stormwater permits. Policy 2.8 directs the City to continue to monitor beach width and elevations to identify potential erosion problems. Infrastructure Element Policy 4.8 directs the City to develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness. Policy 5.1 integrates stormwater infiltration best practices when initiating streetscape redevelopment or public facility improvement projects. Policy 5.2 directs the City to naturalize flood channels that enhance flood protection capacity before employing other management solutions. Policy 5.3 directs the City to integrate natural features, such as topography, drainage, and trees, into the design of streets and rights-of-way. Policy 5.5 directs the City to maintain, fund, and regularly monitor stormwater infrastructure. Policy 5.8 requires new development and

redevelopment projects to incorporate LID techniques in project designs, including but not limited to on-site drainage improvements using native vegetation to capture and clean stormwater runoff. Sustainability + Conservation Element Policy 7.1 requires the use of permeable pavement in parking lots, sidewalks, plazas, and other low-intensity paved areas. Policy 7.2 would minimize soil erosion by ensuring best practices are used in grading and construction.

PLAN Hermosa contains implementation actions intended to mitigate erosion and sedimentation impacts. INFRASTRUCTURE-1 incorporates stormwater infrastructure improvements in a comprehensive, long-range infrastructure plan. INFRASTRUCTURE-19 updates program requirements in the City's Storm Water Management and Discharge Control Ordinance and directs the City to regularly monitor results, as well as directs the City to continue to implement the LID Ordinance and monitor its effectiveness, which is also required under the applicable NPDES Permit. INFRASTRUCTURE-21 requires new development and redevelopment projects to incorporate green street best management practices that address stormwater runoff from the project area using the Green Street BMP Selection Guidelines identified in Attachment A of the City's Green Street Policy.

Existing requirements and regulations, as well as PLAN Hermosa policies and implementation actions, would reduce the amount of surface water runoff in the planning area through measures such as compliance with the NPDES permit requirements, flood control measures, water conservation measures, and maintenance of pervious surfaces and through implementation of the Enhanced Watershed Management Program. Compliance with these regulations and the minimal amount of new surface runoff that would result from implementation of PLAN Hermosa would minimize the potential for existing drainage patterns to be altered in a manner that could cause increased erosion or sedimentation. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.8-4 ***Would PLAN Hermosa Substantially Alter the Existing Drainage Pattern of the Site or Area so as to Result in On- or Off-Site Flooding?*** *Implementation of PLAN Hermosa would provide for future development and reuse projects that would minimally alter drainage patterns and the amount of stormwater runoff, which would minimize the potential for on- and off-site flooding. Continued implementation and enforcement of existing grading, erosion, and flood control regulations, in combination with the City's LID Ordinance, Green Street Policy, and PLAN Hermosa policies and implementation actions, would result in a* ***less than significant*** *impact.*

Impact 4.8-3 described the potential for PLAN Hermosa to alter drainage systems or patterns. The area's drainage systems and patterns are not anticipated to be substantially altered due to the existing built-out conditions of the city, plans for new development to focus on infill locations, and programs to require on-site retention and infiltration of stormwater. Because drainage patterns would be minimally affected and the rate and amount of stormwater would be controlled through implementation of LID requirements (see Impact 4.8-1), surface runoff would not substantially add to an increased risk of flooding.

Existing requirements and regulations, as well as PLAN Hermosa policies and implementation actions described in Impact 4.8-3, would reduce the amount of surface water runoff through measures such as compliance with the NPDES permit requirements, flood control measures, LID development standards, retention and infiltration-focused infrastructure improvements, water conservation measures, and maintenance of pervious surfaces. Compliance with these regulations and the minimal amount of new surface runoff that would result from implementation

of PLAN Hermosa would minimize the potential for existing drainage patterns to be altered in a manner that could cause increased on- or off-site flooding. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.8-5 ***Would PLAN Hermosa Create or Contribute Runoff Water Exceeding the Capacity of Existing or Planned Stormwater Drainage Systems or Providing Substantial Additional Sources of Polluted Runoff?*** *Implementation of PLAN Hermosa would provide for future development and reuse projects that would generate stormwater runoff that would be discharged to the storm drain system and would contain urban pollutants. Continued implementation and enforcement of existing grading and erosion regulations, in combination with the City's LID Ordinance and Green Street Policy, the Beach Cities EWMP, and PLAN Hermosa policies and implementation actions, would result in a* ***less than significant*** *impact.*

Given the built-out nature of the planning area, most new development that would occur as the result of PLAN Hermosa would be redevelopment. As a conservative estimate, assuming 33 acres of vacant land are entirely converted to urban uses with impervious surfaces, the increase in newly developed land would be approximately 5 percent. With a small change in impervious surface, the rate and amount of stormwater runoff generated would not be expected to increase to levels that would affect the capacity of storm drainage systems (see Impact 4.13.6-3 in Section 4.13, Public Services, Community Facilities, and Utilities, of this EIR).

The potential for storm drainage capacity impacts would be further reduced through implementation of several PLAN Hermosa policies. Sustainability + Conservation Element Policy 7.1 would require the use of permeable pavement in parking lots, sidewalks, plazas, and other low-intensity paved areas. Infrastructure Element Policy 4.8 would develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness. Policy 5.1 would integrate stormwater infiltration best practices when initiating streetscape redevelopment or public facility improvement projects. Policy 5.3 would integrate natural features, such as topography, drainage, and trees, into the design of streets and rights-of-way. Policy 5.4 would encourage community behavior changes to reduce urban runoff pollution. Policy 5.5 would maintain, fund, and regularly monitor the city's stormwater infrastructure. Policy 5.6 would ensure that stormwater system repairs are included in maintenance plans for other city infrastructure and that repairs and maintenance are completed in a timely manner to prevent additional repair costs. Policy 5.7 would strictly implement, enforce, and monitor MS4 NPDES Permit requirements. Policy 5.8 would require new development and redevelopment projects to incorporate low impact development techniques in project designs, including but not limited to on-site drainage improvements using native vegetation to capture and clean stormwater runoff.

Construction activities may result from development associated with implementation of PLAN Hermosa and generate the potential for increased pollutants in runoff or provide substantial additional sources of polluted runoff, as described in Impact 4.8-1. However, adherence to the regulatory requirements described in Impact 4.8-1 would serve to reduce the amount of stormwater runoff and pollutants generated during construction. Specifically, projects would be required to comply with NPDES requirements, prepare a stormwater pollution prevention plan, and comply with Hermosa Beach Municipal Code Section 8.44.090. Mandatory compliance with these requirements would control construction activities and minimize, to the greatest extent practicable, the degradation of water quality. These requirements would include best

management practices appropriate to reduce the overall discharge volume and amount of pollutants in stormwater.

There would not be a substantial increase in pollutants in stormwater runoff as a result of PLAN Hermosa. This would be primarily accomplished through the City's LID Ordinance. The LID Ordinance requires new development and redevelopment projects to control pollutants and runoff volume from the project site by minimizing the impervious surface area through effective design and use of water-permeable surfaces to the extent technically feasible on not less than 50 percent of exterior surface areas, excluding building footprints, and controlling runoff through infiltration, bioretention, and/or rainfall harvest and use. A stormwater management plan (SWMP) that includes necessary best management practices to control pollution would be required for each project. Prior to issuing a discretionary permit, the City must ensure the project plans include LID features and other design requirements, and prior to issuing a certificate of occupancy, the City must verify that the features have been constructed. The LID Ordinance also requires projects to have an operation and maintenance plan. Implementation of PLAN Hermosa policies and implementation actions listed in Impact 4.8-1 above, which also address water quality, would further reduce impacts on stormwater runoff. On a citywide scale, the City would continue to implement its Green Street Policy and further its efforts toward implementing the improvements proposed in the Beach Cities EWMP, which would help reduce pollutant loads in stormwater.

Because only small areas of new impervious surface would result from development associated with implementation of the plan, the increased volumes or rates of discharge and associated pollutants in runoff would be minimal. Additionally, adherence to applicable water quality regulations and implementation of PLAN Hermosa policies and implementation actions would minimize the potential to create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.8-6 ***Would PLAN Hermosa Substantially Degrade Water Quality?*** *Implementation of PLAN Hermosa would provide for future development and reuse projects that would not result in substantial degradation of water quality with continued implementation of Municipal Code Chapter 8.44 (Stormwater and Urban Runoff Pollution Control Regulations), which includes the City's Low-Impact Design (LID) Ordinance (Municipal Code Section 8.44.095), the City's Green Street Policy, existing grading and erosion regulations (Municipal Code Section 8.44.090 and NPDES Construction General Permit SWPPP requirements), participation in the Beach Cities EWMP, and implementation of PLAN Hermosa policies and implementation actions. This would be a* ***less than significant*** *impact.*

Impacts 4.8-1, 4.8-3, and 4.8-5 analyze in detail the potential water quality impacts and applicable permits, regulations, plans, and PLAN Hermosa policies and implementation actions that would ensure no significant adverse water quality impacts would occur as a result of the plan. No additional water quality impacts beyond those described in Impacts 4.8-1, 4.8-3, and 4.8-5 have been identified. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.8-7 ***Would PLAN Hermosa Place Housing Within a 100-Year Flood Hazard Area?*** *Implementation of PLAN Hermosa would not place housing within a 100-year flood hazard area. Additionally, PLAN Hermosa includes policies and implementation actions to decrease exposure to and impacts from flood hazards throughout the city. Therefore, this impact would be* ***less than significant****.*

Though most surface water is controlled by storm drainage infrastructure in the city, flooding may occur in Hermosa Beach as a result of excessive precipitation, storm runoff, coastal flooding, or inadequate, undersized, or unmaintained storm drainage infrastructure. As identified in **Figure 4.8-2**, the delineated 100-year flood hazard area is limited to the beach on the city's western edge and does not include any housing, nor does PLAN Hermosa allow housing to be placed on the beach.

Flooding can occur outside of delineated flood zones, typically as the result of combined heavy precipitation, storm surge, and high tide events. PLAN Hermosa does not allow development, residential or otherwise, in an existing 100-year flood hazard area. However, PLAN Hermosa does include numerous policies and implementation actions to mitigate the impacts of flooding, in addition to the stormwater management policies and programs mentioned above. Public Safety Element Policy 1.1 requires new buildings and infrastructure to evaluate seismic, fire, flood, and coastal storm hazard risks and comply with California Building Code standards to minimize risk. Policy 1.5 directs the City to use natural interventions, green infrastructure, and infiltration systems to minimize damage from coastal flooding. Policy 1.7 encourages existing structures, critical facilities, and infrastructure to reduce flood vulnerability. Policy 2.8 directs the City to continue to monitor beach width and elevations to identify potential erosion problems. Policy 6.3 directs the City to invest in public and critical facilities to make them more resilient to the potential impacts of natural disasters.

Because Hermosa Beach is a built-out community and PLAN Hermosa land use policies would not place areas of residential development in flood hazard areas, and because all future development would be required to comply with flood hazard development regulations and requirements, the plan would not create risk due to the placement of housing in flood hazard areas. Additionally, implementation of PLAN Hermosa policies and implementation actions would minimize flooding potential and flood hazards throughout the city. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.8-8 ***Would PLAN Hermosa Place Within a 100-Year Flood Hazard Area Structures That Would Impede or Redirect Flood Flows?*** *Implementation of PLAN Hermosa would allow development or expansion of facilities to support coastal access in the 100-year flood hazard area. However, adoption and implementation of PLAN Hermosa policies and implementation actions and adherence to development regulations specific to flood hazard areas would result in a* ***less than significant*** *impact.*

As identified in **Figure 4.8-2**, the delineated 100-year flood hazard area is limited to the beach on the city's western edge. Existing development in this area is limited to coastal recreational buildings and enhancements including the pier, restrooms, and playgrounds.

Policies and implementation actions in PLAN Hermosa could lead to the development of new or enhanced coastal facilities, including accessible walkways onto the beach. As noted in the Land Use + Design Element, infrastructure or amenities such as restrooms, playgrounds, and stormwater drainages are allowed, provided they do not create visual obstructions or impede recreational

activities. New or enhanced infrastructure or amenities could impede or redirect flood flows. However, the uses allowed by PLAN Hermosa are consistent with existing land uses and are not expected to significantly increase the number or size of structures in the 100-year flood hazard area.

Because PLAN Hermosa would continue existing land use patterns and any new development would be required to comply with flood hazard development regulations and requirements, implementation of the plan would not substantially redirect or impede flood flows due to placement of structures in flood hazard areas. Additionally, PLAN Hermosa policies and implementation actions would minimize flooding potential and flood hazards. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.8-9 ***Would PLAN Hermosa Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Flooding?*** *Implementation of PLAN Hermosa would not allow habitable development in locations currently designated as 100-year flood hazard areas, which generally precludes loss, injury, or death from flooding, including flooding from the failure of a dam or levee. However, sea level rise is more likely than not to expand the area exposed to flooding conditions in the future. Adoption and implementation of PLAN Hermosa policies and implementation actions that prepare the city for sea level rise and adherence to development regulations specific to flood hazard areas would result in a* ***less than significant*** *impact.*

As described in Impact 4.8-7, implementation of PLAN Hermosa would not allow habitable development in flood hazard areas, although, as previously mentioned, coastal recreational supportive structures would continue to be allowed in the 100-year flood hazard area, which could expose people or structures to the risk of loss, injury, or death involving flooding. However, these potential impacts were found to be less than significant. Because PLAN Hermosa continues existing land use allowances, any new development would be required to comply with applicable regulations and building standards in flood hazard areas. Flooding hazards and risks are also minimized through PLAN Hermosa policies and implementation actions, as previously described in Impact 4.8-7. Thus, increased exposure to flooding hazards that might result in significant loss, injury, or death would be minimal with implementation of the plan.

The analysis above focuses on flood exposure under current conditions. However, sea level rise will likely expand the area of the city exposed to flooding through the planning horizon and beyond. In Hermosa Beach, the area where a 100-year flood could cause inundation is projected to increase by about 300 percent under a scenario of 55 inches of sea level rise (from 0.034 square miles at present to 0.1 square miles). The projected flood zone extends beyond the sandy beach into developed portions of the Coastal Zone (see PLAN Hermosa Figure 6.4). PLAN Hermosa policies and implementation actions could result in development that is in a 100-year flood zone under likely future climate conditions, which means the risk of loss, injury, or death is possible in expanded areas of the city. However, in addition to general flood mitigation regulations, development standards, policies, and implementation actions mentioned in Impacts 4.8-7 and 4.8-8, PLAN Hermosa contains policies and implementation actions to assess, prepare for, and respond to the risk of loss, injury, or death involving flooding related to sea level rise. Public Safety Element Policy 2.1 directs the City to integrate resilience to anticipated sea level rise impacts into project designs when repairing and replacing aging infrastructure. Policy 2.2 requires new development and redevelopment projects to consider and mitigate relevant sea level rise impacts. Policy 2.3 directs the City to enhance local understanding of sea level rise and keep decision-makers and the community aware of potential impacts based on best available science.

Policy 2.4 directs the City to provide public information describing new flooding risks under a 55-inch sea level rise scenario in areas previously not affected by flooding. Policy 2.5 directs the City to maintain current beach widths under changing sea level conditions. Policy 2.6 directs the City to consider the combined effects of sea level rise when evaluating potential tsunami and storm surge impacts. Policy 2.7 directs the City to support regional approaches to sediment management, beach replenishment, and adaptive shoreline protection to allow Hermosa Beach to voice its needs, allow for coordination with neighboring jurisdictions, and identify creative finance mechanisms to continue the replenishment program. Policy 2.8 directs the City to continue to monitor beach width and elevations to identify potential erosion problems. Implementation action SAFETY-13 directs the City to amend the Municipal Code to require flood risk disclosure and active acknowledgment of expanded flood risk in property purchases/turnovers. SAFETY-11 directs the City to prepare for changing shoreline conditions by establishing and applying specific development review listed in the implementation action.

Hermosa Beach is not in a location that could be subject to flood hazards resulting from the structural failure of a levee or dam and therefore has no risk of loss, injury, or death involving flooding as a result of such a structure.

Adherence to applicable development requirements and regulations in flood hazard areas and implementation of PLAN Hermosa policies related to stormwater management, flood hazard mitigation, and sea level rise would reduce the potential for loss, injury, or death from flooding. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.8-10 ***Would PLAN Hermosa Expose People or Structures to Inundation by Seiche, Tsunami, or Mudflow?*** *Implementation of PLAN Hermosa would provide for future development and reuse projects that would be in locations that may be subject to inundation by tsunami or mudflow. However, adoption and implementation of PLAN Hermosa policies and implementation actions would result in a* ***less than significant*** *impact.*

Some areas of California are exposed to seismically induced waves known as seiches that can overtop dams and cause flooding. Because the city does not contain any surface waters, other than the Pacific Ocean, Hermosa Beach would not be subject to inundation from a seiche.

Coastal areas of California are subject to seismically induced ocean waves known as tsunamis. **Figure 4.8-3** displays the tsunami inundation zones in the city. PLAN Hermosa would continue to provide for development in locations that may be subject to inundation by tsunami. As mentioned in Impacts 4.8-7, 4.8-8, and 4.8-9, development that would occur as the result of PLAN Hermosa would be subject to building and development standards intended to mitigate general flood hazards. Also mentioned above, PLAN Hermosa includes numerous policies and implementation actions that would reduce or mitigate flood impacts. In addition, PLAN Hermosa includes policies and actions related to tsunamis. Public Safety Element Policy 1.3 directs the City to utilize the Los Angeles County Tsunami Playbook in the evaluation of and response to tsunami risk. Policy 2.6 directs the City to consider the combined effects of sea level rise when evaluating potential tsunami and storm surge impacts. Implementation action SAFETY-5 directs the City to evaluate tsunami preparation, evacuation, and response policies/practices to reflect current inundation maps and design standards and include updated information in the periodically updated hazard mitigation plan.

A mudflow can develop when water accumulates in the ground during periods of heavy rainfall and results in a flowing river of mud, rock, and other materials. There is no known risk of mudflow in Hermosa Beach.

PLAN Hermosa would continue to allow development in tsunami inundation zones, which could lead to inundation. Because PLAN Hermosa policies and implementation actions provide a comprehensive framework for addressing inundation, including preparation for and response to a tsunami, and because all future development would be required to comply with flood hazard development regulations and requirements, the risk of inundation above baseline conditions as a result of adoption and implementation of PLAN Hermosa is **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

Water quality and hydrology are not confined by jurisdictional boundaries; rather, they are dependent on the regional watershed and hydrologic conditions in surrounding areas. As described in the Environmental Setting subsection, the planning area is located in the Santa Monica Bay Watershed and the West Coast subbasin of the Coastal Plain, Los Angeles Basin. When analyzing cumulative impacts to water quality and hydrology, it is necessary to consider upstream and downstream areas and water bodies that could influence or be influenced by actions within the planning area. Thus, the watershed and the subbasin are the general areas of influence used in analysis of cumulative impacts for this topic.

IMPACT 4.8-11 ***Would PLAN Hermosa Contribute to Cumulative Effects on Water Quality, Water Quality Standards, or Waste Discharge Requirements?*** *Anticipated regional growth in the Santa Monica Bay Watershed could increase the amount of impervious surface in the watershed, thereby potentially increasing the total volume, peak discharge rate of stormwater runoff, and associated pollutants. Additionally, construction activities resulting from regional growth could increase the amount of sediments and pollutants in stormwater runoff and could lead to water quality degradation. PLAN Hermosa's contribution would be less than cumulatively considerable because it would result in minimal changes in stormwater flows and pollutants with implementation of PLAN Hermosa policies and implementation actions, the City's LID Ordinance and Green Street Policy, participation in regional plans such as the Beach Cities EWMP, and compliance with existing regulations. This impact would be* ***less than cumulatively considerable****.*

Planned development or redevelopment under PLAN Hermosa, in addition to other cumulative development in the watershed, could result in an increase in the amount of impervious surfaces and increased runoff. Surface water runoff could carry increased levels of sediment and urban contaminants from both construction and long-term operation that could affect receiving water quality in Santa Monica Bay and other receiving water bodies. Additionally, construction and operational activities in the region could result in impacts to water quality, water quality standards, and waste discharge requirements.

Development in all jurisdictions whose stormwater flows to Santa Monica Bay is subject to policies and regulations to improve water quality and minimize potential to degrade water quality, as described in the Regulatory Setting subsection above. Federal, state, and local laws, regulations, and permitting processes, such as the Clean Water Act, NPDES permitting requirements, and the Porter-Cologne Water Quality Control Act, apply to all development within the watershed. Various

programs and requirements are specific to the maintenance and improvement of regional water quality, including the Los Angeles RWQCB Basin Plan, the NPDES General Permits administered by the SWRCB and the Los Angeles RWQCB, and the Los Angeles County Standard Urban Stormwater Mitigation Plan. These regulations apply to all development that would take place in the city as well as in neighboring jurisdictions.

Additionally, the Cities of Hermosa Beach, Manhattan Beach, Redondo Beach, and Torrance, together with the Los Angeles County Flood Control District, collectively referred to as the Beach Cities WMG, agreed to collaborate on the development of an Enhanced Watershed Management Program (EWMP) for the Santa Monica Bay and Dominguez Channel Watershed areas within their jurisdictions (referred to as the Beach Cities EWMP Area). The Beach Cities EWMP summarizes watershed-specific water quality priorities identified by the Beach Cities WMG; outlines the program plan, including specific strategies, control measures, and best management practices to achieve water quality targets; and describes the quantitative analysis completed to support target achievement and permit compliance. The approach described in the EWMP, in combination with the required LID-based best management practices that each participating city must impose on development, is anticipated to protect and potentially improve water quality in Santa Monica Bay from pollutants in stormwater runoff.

Because development projects whose stormwater would flow into Santa Monica Bay must comply with federal, state, and local regulations and requirements, the cumulative potential for increased pollutants or runoff would be minimized. Additionally, implementation of PLAN Hermosa is anticipated to result in minimal, and potentially positive, effects to water quality or wastewater discharge, as described in Impacts 4.8-1, 4.8-5, and 4.8-6. Policies and implementation actions in the plan have been developed to improve overall water quality in Hermosa Beach. For these reasons, PLAN Hermosa's contribution to cumulative water quality violations or waste discharge requirements would not be considerable, and the impact is considered **less than cumulatively considerable.**

Mitigation Measures

None required.

IMPACT 4.8-12 ***Would PLAN Hermosa Contribute to Cumulative Effects on Groundwater Supply and Recharge?*** *Anticipated regional growth overlying the West Coast subbasin of the Coastal Plain, Los Angeles Basin, could increase the amount of impervious surface, thereby potentially decreasing the area available for groundwater recharge. PLAN Hermosa's contribution would be less than cumulatively considerable because new areas of impervious surface as a result of implementing PLAN Hermosa would be minimal, and new development, redevelopment, and infrastructure improvements would be required to include more permeable surfaces than under baseline conditions. With implementation of PLAN Hermosa policies and implementation actions, the City's LID Ordinance and Green Street Policy, participation in regional plans such as the Beach Cities EWMP, and compliance with existing regulations, this impact would be* ***less than cumulatively considerable.***

Per the California Department of Water Resources, natural replenishment of the West Coast Basin's groundwater supply is largely limited to underflow from the Central Basin through and over the Newport-Inglewood fault zone. Water spread in the Central Basin percolates into aquifers there, and eventually some crosses the Newport-Inglewood fault to supplement the groundwater supply in the West Coast Basin. The West Coast Basin covers approximately 140 square miles and is bounded on the north by the Baldwin Hills and the Ballona Escarpment (a bluff just south of the Ballona Creek), on the east by the Newport-Inglewood fault zone, to the south by San Pedro Bay

and the Palos Verdes Hills, and to the west by Santa Monica Bay. Aquifers in the West Coast Basin are generally confined and receive the majority of their natural recharge from adjacent groundwater basins or from the Pacific Ocean (seawater intrusion) (WRD 2005). As such, groundwater recharge opportunities are minimal in Hermosa Beach and surrounding jurisdictions.

Proposed development or redevelopment under PLAN Hermosa, in addition to other cumulative development in the Santa Monica Bay Watershed, could increase the amount of impervious surfaces and result in less pervious surface to serve as groundwater recharge areas. Nonetheless, most of the watershed is highly urbanized. Development that would take place under PLAN Hermosa would generally be small and located on infill sites, similar to the jurisdictions surrounding the city. As such, future development in the watershed would likely be in existing urbanized areas, with only small areas of infringement into currently undeveloped lands.

As described under Impact 4.8-2, implementation of PLAN Hermosa is not anticipated to create substantial new areas of impervious surfaces, as the city is mostly built out. PLAN Hermosa policies and implementation actions described in the discussion of Impact 4.8-2 would minimize the amount of new impervious surface in the planning area, direct the use of more natural pervious drainage features to absorb stormwater, and implement water conservation measures to reduce water consumption. For these reasons, PLAN Hermosa's contribution to cumulative groundwater recharge or supply impacts would not be considerable. The impact is considered **less than cumulatively considerable.**

Mitigation Measures

None required.

IMPACT 4.8-13 ***Would PLAN Hermosa Contribute to Cumulative Alteration of Stormwater Drainage Systems and Patterns Resulting in Erosion and Flooding?*** *Anticipated regional growth throughout the Santa Monica Bay Watershed could increase the amount of impervious surface in the watershed, thereby potentially increasing the total volume and peak discharge rate of stormwater runoff and the potential for erosion and sedimentation. PLAN Hermosa's contribution would be less than cumulatively considerable because the planning area is generally built out, which would result in minimal changes in drainage patterns and therefore erosion potential with implementation of PLAN Hermosa policies and implementation actions, the City's LID Ordinance and Green Street Policy, participation in regional plans such as the Beach Cities EWMP, and compliance with existing regulations. This impact would be* ***less than cumulatively considerable.***

As described in Impact 4.8-1, Hermosa Beach is generally built out with urban land uses. The Santa Monica Bay Watershed area is generally built out and mirrors Hermosa Beach in terms of available developable land. Drainages are formalized in the watershed via culverts, stormwater drains, gutters, channels, etc. Additionally, there is a countywide drainage system, which, due to the built-out nature of the county and the watershed area, would not be greatly modified by new development. Because of the developed nature of the area, new development would be mainly infill and would be already served by adequate drainage facilities. Drainage modifications would include increased capacity and new connections if needed.

Cumulative development in the Santa Monica Bay Watershed would be subject to regulatory requirements designed to minimize potential erosion and flooding that may result during construction and operational conditions. Compliance with best management practices as part of the NPDES permit process, SWPPP and SWMP requirements (as applicable), any site-specific waste discharge requirements issued by the Los Angeles RWQCB, and compliance with the Los Angeles Region Basin Plan would minimize cumulative stormwater drainage effects. These

requirements are applicable to all jurisdictions in the watershed. Additionally, as discussed above, the Beach Cities Watershed Management Group has an adopted and approved Enhanced Watershed Management Program that would further reduce runoff, thus minimizing the possibility of erosion and flooding from modification of drainage patterns.

PLAN Hermosa policies and implementation actions would reduce the amount of surface water runoff through measures such as compliance with NPDES permit requirements, flood control measures, and water conservation measures. These measures would minimize the potential for erosion and flooding from modification of drainage patterns. Therefore, PLAN Hermosa's contribution to cumulative impacts related to alteration of stormwater drainage that could result in increased erosion or flooding would not be considerable. The impact is **less than cumulatively considerable**.

Mitigation Measures

None required.

IMPACT 4.8-14 ***Would PLAN Hermosa Contribute to Cumulative Exposure of People or Structures to a Significant Risk of Loss, Injury, or Death Involving Flooding?*** *Anticipated regional growth throughout the Santa Monica Bay Watershed, in combination with PLAN Hermosa, could result in development in locations designated as 100-year flood hazard areas, which could result in loss, injury, or death from flooding, including flooding from the failure of a dam or levee. Impacts would be site-specific and would generally not combine to create a cumulative impact. However, with implementation of PLAN Hermosa policies and implementation actions and compliance with existing regulations, PLAN Hermosa's contribution would be* ***less than cumulatively considerable****.*

Flooding may occur throughout the Santa Monica Bay Watershed when streams and channels overflow as a result of excessive precipitation, storm runoff, or inadequate, undersized, or unmaintained storm drainage infrastructure. As described previously, FEMA mapping delineates areas located in flood hazard zones. New development in the watershed could potentially result in housing located within 100-year flood hazard areas, or new or redeveloped housing may continue to be allowed in flood hazard areas in other jurisdictions. Future development throughout the watershed could place structures that would impede or redirect flood flows within a 100-year flood hazard area. Generally, development is not possible in a major flood control channel; however, development could occur in other locations designated as 100-year flood hazard areas that may carry surface water flows during flood conditions.

However, all future projects, regardless of jurisdiction, would be required to comply with regulatory requirements related to floodplain development. FEMA has established the design standard for flood protection in areas covered by Flood Insurance Rate Maps, with the minimum level of flood protection for new development determined to be within a 100-year flood hazard area. The California Building Code also contains requirements for constructing structures in flood hazard zones. Required compliance with these regulations and building codes would minimize risk due to the placement of housing in flood hazard zones, thereby reducing the potential cumulative impact.

Additionally, as described under Impact 4.8-7, PLAN Hermosa does not allow residential development in an existing 100-year flood hazard area. Multiple PLAN Hermosa policies and implementation actions would minimize flooding potential and reduce hazards associated with flooding, and future development would be required to comply with flood hazard development regulations and requirements. Therefore, PLAN Hermosa's contribution to cumulative impacts

related to the placement of housing in flood hazard areas would not be considerable, and the impact would be **less than cumulatively considerable**.

Mitigation Measures

None required

IMPACT 4.8-15 ***Would PLAN Hermosa Contribute to Cumulative Impacts Related to Inundation by Seiche, Tsunami, or Mudflow?*** *Anticipated regional growth throughout the Santa Monica Bay Watershed, in combination with PLAN Hermosa, could result in development in locations that may be subject to inundation by tsunami or mudflow. Impacts would be site-specific. PLAN Hermosa would not place new land uses in locations that could be subject to inundation by a tsunami, but existing uses could be at risk of tsunami. However, with implementation of PLAN Hermosa policies and implementation actions and compliance with existing regulations, PLAN Hermosa's contribution would be* ***less than cumulatively considerable****.*

Impact 4.8-10 discusses the potential for a seismically induced wave, known as a seiche, that can overtop a dam and cause flooding. Coastal areas of California are subject to seismically induced ocean waves known as tsunamis. In the Santa Monica Bay Watershed, all coastal communities could be exposed to a tsunami. Mudflows can develop when water accumulates in the ground during periods of heavy rainfall and results in a flowing river of mud, rock, and other materials. The risk of mudflow inundation is a relatively site-specific impact and is generally dependent on the immediate development in the area and on the specific hillside. Regional growth anticipated in the watershed could increase inundation risk associated with seiches, tsunamis, and mudflows.

However, Hermosa Beach is not located adjacent to any surface water bodies that could experience a seiche and has no known mudslide hazards. As described above, Hermosa Beach is exposed to tsunamis, but the land use pattern promoted by PLAN Hermosa would not place new land uses in locations that could be subject to inundation by a tsunami. PLAN Hermosa includes policies and implementation actions to mitigate, prepare for, and respond to tsunami-related inundation. Therefore, PLAN Hermosa's contribution to cumulative inundation impacts from seiches, tsunamis, and mudflows would not be considerable, and the impact would be **less than cumulatively considerable.**

Mitigation Measures

None required.

4.8.5 REFERENCES

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4.9 Land Use and Planning

4.9.1 INTRODUCTION

This section evaluates the potential environmental effects related to land use and planning from implementation of PLAN Hermosa. The analysis includes a review of PLAN Hermosa and existing land use regulations, like the Southern California Association of Governments (SCAG) Regional Comprehensive Plan and Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

NOP Comments: In response to the Notice of Preparation (NOP), one comment from SCAG indicated that PLAN Hermosa is regionally significant and should address consistency with the SCAG 2012–2035 RTP/SCS. The consistency comparison with the SCAG 2012–2035 RTP/SCS is included in this resource section.

Reference Information: Information for this chapter is based on numerous sources, including the PLAN Hermosa Technical Background Report and other publicly available documents. The Technical Background Report prepared for the project is attached to this EIR as **Appendix C**.

4.9.2 ENVIRONMENTAL SETTING

Appendix C-12 describes the existing land use conditions in Hermosa Beach, including regulations, and key issues in the inland and Coastal Zone areas. Key findings related to the environmental setting are presented below.

Hermosa Beach is located in southwest Los Angeles County and encompasses 1.4 square miles, or 979 acres, with 1.8 miles of coastline along Santa Monica Bay. Manhattan Beach borders Hermosa Beach to the north and northeast, and Redondo Beach is located to the south and east. Pacific Coast Highway (State Route 1) runs north/south through the entirety of Hermosa Beach.

Approximately half of the city, 43 percent, lies within the Coastal Zone. The Coastal Zone boundary is defined by the California Coastal Act. The Coastal Zone boundary spans the entire length of the city from north to south and extends from the mean high tide line inland to roughly Ardmore Avenue with two exclusions—the area from Hermosa Avenue to Valley Drive between Longfellow Avenue and 31st Place; and the area east of Park Avenue or Loma Drive between 25th Street and 16th Street. See **Figure 3.0-4 (Hermosa Beach Coastal Zone).**

EXISTING GENERAL PLAN DESIGNATIONS

The Land Use Element of the current Hermosa Beach General Plan establishes the distribution of land uses, intensity of commercial and other development, and provision of other public facilities. In addition to the land use designations and map, the Land Use Element establishes and describes the goals, policies, and programs necessary to provide sufficient land for community needs while preserving the environment and quality of life for Hermosa Beach residents. The General Plan Land Use designations are identified for each parcel in **Figure 3.0-4 (Hermosa Beach General Plan Designations).** Additionally, **Table 4.9-1 (Hermosa Beach General Plan Land Use Designations)** identifies the number of assessor's parcels and the area of land within each land use designation.

TABLE 4.9-1
HERMOSA BEACH GENERAL PLAN LAND USE DESIGNATIONS

General Plan Land Use Designation	Citywide		Inland (Excluding Coastal Zone)		Coastal Zone	
	Number of Parcels	Area (acres)	Number of Parcels	Area (acres)	Number of Parcels	Area (acres)
Residential Land Uses						
LD Low Density Residential	2,615	232.2	2,190	198.9	425	33.3
MD Medium Density Residential	1,381	118.3	500	63.5	881	54.8
HD High Density Residential	1,086	97.9	62	17.9	1,024	80.0
MHP Mobile Home Park	2	4.2	0	0.0	2	4.2
Commercial and Industrial Land Uses						
NC Neighborhood Commercial	38	2.9	0	0.0	38	2.9
GC General Commercial	278	48.2	144	31.4	134	16.8
CC Commercial Corridor	132	30.4	132	30.4	0	0.0
IND Industrial	38	6.8	0	0.0	38	6.8
Institutional and Other Uses						
OS Open Space	50	66.8	35	34.2	15	32.6
CR Commercial Recreation	10	0.9	0	0.0	10	0.9
SPA Specific Plan Area	10	1.1	10	1.1	0	0.0
Beach	11	63.1	0	0	11	63.1
Total	**5,651**	**672.8**	**3,073**	**377.4**	**2,578**	**295.4**

Source: City of Hermosa Beach 2014. Parcels = Assessor's Parcels.

The current development pattern in the city is one of single-family and multi-family residential, with commercial and industrial uses, as shown in **Table 4.9-2 (Hermosa Beach Existing Land Uses)** and described below.

- **Single-Family Residential:** Single-family land uses are found throughout the city, with some blocks and neighborhoods in the northeast, east, and southeast areas of Hermosa Beach exclusively or predominantly filled with single-family uses.
- **Multi-Family Residential:** Multi-family housing units are predominantly found in the southwest area of Hermosa Beach, with other multi-family housing found in the northwest and southeast portions of the city.
- **Mobile Homes:** There are two mobile home areas: one located north of Pier Avenue, between Loma Drive and Valley Drive, and the other along 10th Street between Ardmore Avenue and Pacific Coast Highway.
- **Mixed Residential and Commercial:** These uses are located primarily in commercial districts.
- **Commercial Uses:** Commercial uses include retail stores or shopping centers, lodging accommodations, restaurants, professional office space, auto-related uses, entertainment uses, and personal services (salons, art studios, dry cleaning, photocopying services, fitness studios, etc.). Commercial uses in Hermosa Beach are primarily focused

along the city's major street corridors: Pacific Coast Highway, Pier Avenue, Hermosa Avenue, Aviation Boulevard, and Artesia Boulevard or within neighborhood commercial areas along Hermosa Avenue and Manhattan Avenue and elsewhere throughout the city.

- **Industrial Uses:** Light industrial or manufacturing uses are generally located in a 4-acre industrial area near Cypress Avenue and include light manufacturing, warehouses, construction supply, a surfboard manufacturer, auto shops, and air conditioning and heating manufacturing uses. One other industrial use parcel is located on Valley Drive, adjacent to Hermosa Valley School, occupied by a telecommunications company.
- **Institutional and Other Uses:** Institutional land uses include schools, government-owned facilities, parks, the beach and open space, and essential operations areas such as parking, utility buildings, the City maintenance yard and other facilities, or utility easements.

TABLE 4.9-2
HERMOSA BEACH EXISTING LAND USES

Use	Number of Parcels	Total Acres	Percentage of Land Area
Residential Uses			
Single-Family	3,261	263.0	39.1%
Multi-Family	1,898	186.3	27.6%
Mobile Homes	3	4.6	0.7%
Mixed Residential and Commercial	17	1.5	0.2%
Residential Subtotal	5,179	455.4	67.6%
Commercial and Light Industrial Uses			
Commercial and Services	274	57.6	8.5%
General Office	40	7.9	1.1%
Industrial	26	4.1	0.6%
Mixed Commercial and Industrial	1	0.2	<0.1%
Commercial and Industrial Subtotal	341	69.8	10.2%
Institutional and Other Uses			
City Facilities	46	19.6	2.9%
Education	9	16.7	2.4%
Open Space and Recreation	52	104.5	15.5%
Transportation, Communication, and Utilities	8	4.2	0.6%
Vacant	33	2.6	0.4%
Institutional and Other Subtotal	148	147.6	21.8%
Total	**5,668**	**672.8**	**100%**

Source: City of Hermosa Beach 2014

4.9.3 REGULATORY FRAMEWORK

State, regional, and local laws, regulations, and policies pertain to land use and planning, including general plans, specific plans, and zoning ordinances. They provide the regulatory framework for addressing aspects of land use planning that would be affected by implementation

of PLAN Hermosa. The regulatory setting for land use is discussed in **Appendix C-12**. Key regulations used to reduce environmental impacts are summarized below.

STATE

- **Planning Law and Guidelines:** California planning law requires cities and counties to prepare and adopt a "comprehensive, long-range general plan" to guide development (Government Code Section 65300). State law also specifies the content of general plans. Current law requires seven mandated elements: land use, circulation, housing, conservation, open space, noise, and safety.
- **California Coastal Act of 1976:** The California Coastal Act of 1976 and the California Coastal Commission, the State's landmark coastal protection law and planning agency, were established by voter initiative in 1972 to plan for and regulate new development and to protect public access to and along the shoreline. The Coastal Act considers scenic and visual qualities of coastal areas as a protected resource of public importance.

REGIONAL

- **Southern California Association of Governments (SCAG):** On April 4, 2012, SCAG adopted the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future (RTP/SCS). SCAG has placed a greater emphasis than ever on sustainability and integrated planning in the 2012–2035 RTP/SCS, and its vision encompasses three principles that collectively work as the key to the region's future: mobility, economy, and sustainability. The 2012–2035 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill (SB) 375,[1] improve public health, and meet the national ambient air quality standards set by the federal Clean Air Act. The 2012–2035 RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play and how they will move around (SCAG 2012).
- **South Coast Air Quality Management District Air Quality Management Plan:** The purpose of the 2012 Air Quality Management Plan (AQMP) is to establish a comprehensive and integrated program that will bring the South Coast Air Basin into compliance with the federal 24-hour air quality standard for fine particulate matter ($PM_{2.5}$) and to provide an update to commitments toward meeting the federal 8-hour ozone standards. The plan also includes specific measures to further implement the ozone strategy in the 2007 AQMP to assist attaining the 8-hour ozone standard by 2023.
- **Beach Cities Livability Plan:** The Beach Cities Livability Plan focuses on how to improve livability and well-being in Hermosa Beach, Manhattan Beach, and Redondo Beach—the "beach cities"—through land use and transportation systems that better support active living. The plan aims to identify and prioritize efforts that will not only improve walking and biking in the beach cities, but when fully implemented will also improve air quality, reduce congestion, and reduce overall travel time by automobiles along corridors. Three strategies focused around adoption of policies, building staff for implementation, and education and outreach for community members (Walkable and Livable Communities Institute 2011).
- **Sustainable South Bay: An Integrated Land Use and Transportation Strategy:** The South Bay Cities Council of Governments (COG) with funding from regional agencies such as SCAG, developed the Sustainable South Bay Land Use and Transportation Strategy, to study how

[1] Sustainable Communities and Climate Protection Act of 2008 (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008).

the subregion uses are distributed, what its unique and not so unique characteristics are, and suggest possible land use strategies to promote communities and improve the quality of life. The studies have assessed the needs of the South Bay in terms of infrastructure to support certain land uses, the economics of the area, and how to address smart growth concepts without a robust transit system. The summary and policy document for what was learned is the Sustainable South Bay Land Use and Transportation Strategy (South Bay Cities COG 2009).

LOCAL

- **Hermosa Beach General Plan:** The Land Use Element of the adopted Hermosa Beach General Plan establishes the quality and character of the city's built environment by defining the distribution of land uses, the intensity of commercial and other development, and the provision of other public facilities. In addition to the land use designations and map, the Land Use Element establishes and describes the goals, policies, and programs necessary to provide sufficient land for community needs while preserving the environment and quality of life for Hermosa Beach residents.
- **Local Coastal Program:** The City does not have a certified Local Coastal Program, which is required to have both a Coastal Land Use Plan and a Local Implementation Program. The Hermosa Beach Coastal Land Use Plan (including a land use map) was adopted by the City and certified by the California Coastal Commission in 1981 and has been amended several times since that time. Primary goals are to (1) preserve parking and increase where feasible, residential, commercial, and general public parking in the Coastal Zone; (2) maintain diversified housing environment and provide policies dealing with the replacement and protection of existing housing; (3) maintain high level of recreational access and facilities; and (4) provide and protect the community of Hermosa Beach as a coastal resource for the people of California. The City has not adopted a Local Implementation Plan to date.
- **City of Hermosa Beach Municipal Code:** The Zoning Ordinance (Title 17) implements the General Plan, particularly the Land Use Element. While the General Plan designations are more generalized in nature, the Zoning Ordinance and the zoning districts provide specific controls on land use, density or intensity of development, and development standards to implement the City's goals and policies expressed in the General Plan. Other parts of the Municipal Code, including Title 10, Vehicles and Traffic, Title 12, Street, Sidewalks, and Public Places, Title 15, Buildings and Construction, and Title 16, Subdivisions, are also instrumental in carrying out policy or programs in the General Plan.
- **City of Hermosa Beach Sustainability Plan:** The Hermosa Beach Sustainability Plan aims to increase sustainability and reduce greenhouse gas emissions and addresses water conservation, waste reduction, energy use, transportation, the marine environment, and public involvement. The Sustainability Plan is also Hermosa Beach's response to the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32), SB 375, and the South Bay Cities Council of Governments' Cool Cities program.

4.9.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of the EIR, impacts on land use and planning are considered significant if adoption and implementation of PLAN Hermosa would:

1) Physically divide an established community.

2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

ANALYSIS APPROACH

The impact analysis of PLAN Hermosa implementation is based on the allowed 2040 development capacity for the planning area compared to current conditions. The analysis assumes that all future and existing development in the planning area complies with PLAN Hermosa and the Land Use Designation Map. An analysis of cumulative impacts uses qualitative information for the planning area.

The focus of this impact analysis is whether project implementation would result in significant physical environmental impacts associated with land use, or conflict with applicable land use plans, policies, or regulations adopted to avoid or mitigate such impacts.

As stated in CEQA Guidelines Section 15358(b), "effects analyzed under CEQA must be related to a physical change." CEQA Guidelines Section 15125(d) states that EIRs shall discuss any inconsistencies between the proposed project and applicable general plans in the setting section of the document.

Further, Appendix G of the CEQA Guidelines (Environmental Checklist Form) makes explicit the focus on environmental policies and plans, asking if the project would "conflict with any applicable land use plan, policy, or regulation…adopted for the purpose of avoiding or mitigating an environmental effect." Even a response in the affirmative, however, does not necessarily indicate the project would have a significant effect, unless a physical change would occur. To the extent that physical impacts may result from such conflicts, such physical impacts are analyzed elsewhere in this Draft EIR. As such, specific impacts and issues associated with population and housing, hazards, geology and soils, hydrology and water quality, aesthetics, recreation, cultural resources, biological resources, and public services and utilities are addressed in each technical section, and the reader is referred to other EIR sections for detailed analyses of other relevant environmental effects.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa policies and implementation actions that affect potential land use include the following:

Policies

Governance Element

- **4.1 Regional governance.** Play an active role in the South Bay Cities Council of Governments, the Southern California Association of Governments and other regional agencies to protect and promote the interests of the City.
- **4.3 Collaboration with adjacent jurisdictions.** Maintain strong collaborative relationships with adjacent jurisdictions and work together on projects of mutual interest and concern.
- **5.1 Residential and commercial compatibility.** Provide a balance between residential and commercial uses and strive to ensure their compatibility.
- **5.6 Revitalization incentives.** Develop and provide incentives to assist developers in revitalization and rehabilitation of existing structures, uses and properties.

- **5.7 Visitor and resident balance.** Recognize the desire and need to balance visitor-serving and local-serving uses as a key to preserving character and the economic vitality of the community.
- **6.4 Jobs-housing balance.** Strive to improve the jobs-housing balance in the city by actively pursuing employment uses that match the skill and educational levels of existing and future residents.

Land Use + Design Element

- **1.1 Diverse and distributed land use pattern.** Strive to maintain the fundamental pattern of existing land uses, preserving residential neighborhoods, while providing opportunities for enhancement or transformation of corridors and districts in order to improve community activity and identity.
- **1.2 Focused infill potential.** Proposals for new development should be directed toward the city's commercial areas with an emphasis on developing transit-supportive land use mixes.
- **1.3 Access to daily activities.** Strive to create sustainable development patterns such that the majority of residents are within one-half mile walking distance to a variety of neighborhood goods and services, such as supermarkets, restaurants, churches, cafes, dry cleaners, laundromats, farmers' markets, banks, personal services, pharmacies and similar uses.
- **1.5 Balance resident and visitor needs.** Ensure land uses and businesses provide for the needs of residents as well as visitors.
- **1.7 Compatibility of uses**. Ensure the placement of new uses does not create or exacerbate nuisances between different types of land uses.
- **1.8 Respond to unique characteristics**. Enhance the unique character and identity of the city's neighborhoods, districts and corridors through land use and design decisions. Allow policies and programs to be focused on each unique character area of the city.
- **1.9 Retain commercial land area**. Discourage the conversion of commercial land to exclusively residential uses.
- **1.10 Transition between uses.** Encourage new projects in non-residential areas to employ architectural transitions to adjoining residential properties to ensure compatibility of scale and a sense of privacy for existing residences. Such transitions could include setbacks, gradations and transitions in building height and appropriate landscaping.
- **2.2 Variety of types of neighborhoods.** Encourage preservation of existing single density neighborhoods within the city and ensure that neighborhood types are dispersed throughout the city.
- **2.3 Balanced neighborhoods**. Within the allowed densities and housing types, promote a range of housing to accommodate diverse ages and incomes.
- **3.1 Unique districts.** Encourage the development of local and city-wide districts and centers that address different community needs and market sectors and complement surrounding neighborhoods.
- **3.2 Compatibility of districts.** Require new development within the city's creative industrial district to be designed for compatibility with surrounding uses to minimize impact and cultivate connectivity with each district.

- **4.8 Neighborhood buffer.** Encourage all commercial property owners bordering residential areas to mitigate impacts and use appropriate landscaping and buffering of residential neighborhoods.
- **5.7 Design guidelines and development standards.** Seek to maintain and enhance neighborhood character through design guidelines and development standards that articulate building form, orientation, and scale, but allow for eclectic and diverse architectural styles.
- **8.1 Coastal-dependent uses.** Prioritize coastal-dependent uses over non-dependent developments near the shoreline, unless future demand for such facilities is already adequately provided for in the area.
- **8.2 Coastal-related uses.** Accommodate coastal-related uses within reasonable proximity to the coastal-dependent uses they support.
- **8.3 Land use regulations.** Encourage coastal-dependent and coastal-related commercial uses in the Recreational Commercial and Community Commercial land use designations. Prioritize such uses in the Recreational Commercial designation. Provide for and prioritize coastal-related industrial uses in the Creative Industrial land use designation.
- **8.7 Amenities.** Require new higher cost hotel and motel development projects to incorporate non-overnight facilities and amenities as a component of the development that are generally available for passive public use.
- **13.1 Restrict health-harming uses**. Prohibit new land uses that harm the physical health and well being of the community.
- **13.5 Improved livability.** Encourage and set aside funding for the provision of a high level of neighborhood and community amenities and design features as a way of balancing increased density, recognizing the desire for a very high quality, amenity-rich, livable community.

Mobility Element

- **1.1 Consider all modes.** Require the planning, design, and construction of all new and existing transportation projects to consider the needs of all modes of travel to create safe, livable and inviting environments for all users of the system.
- **2.1 Prioritize public right-of-ways.** Prioritize improvements of public right-of-ways that provide heightened levels of safe, comfortable and attractive public spaces for all non-motorized travelers while balancing the needs of efficient vehicular circulation.
- **3.1 Repurpose public right-of-ways.** Require repurposing public right-of-ways enhancing connectivity for pedestrians, bicyclists, and public transit.
- **4.2 Encourage coastal access.** Ensure parking facilities and costs of such facilities are not a barrier to beach access by the public.
- **5.5 Encourage smart growth.** Encourage smart growth land use features in development projects to ensure more compact, mixed, connected, and multimodal development supports reduced trip generation, trip lengths, and greater ability to utilize alternative modes.

Sustainability + Conservation Element

- **1.6 Demonstration and pilot projects.** Utilize demonstration and pilot projects as a means to evaluate the greenhouse gas reduction potential and cost effectiveness of projects.

- **2.4 Land use and transportation investments.** Promote land use and transportation investments that support greater transportation choice, greater local economic opportunity, and reduced number and length of automobile trips.
- **3.2 Mobile source reductions.** Support land use and transportation strategies to reduce vehicle miles traveled and emissions, including pollution from commercial and passenger vehicles.
- **3.7 Regional air quality.** When possible, collaborate with other agencies within the region to improve air quality and meet or exceed State and Federal air quality standards through regional efforts to reduce air pollution from mobile sources, including trucks and passenger vehicles.

Parks + Open Space Element

- **6.1 Visible access points**. Enhance visibility of existing public access points to and along beaches, coastal parks, and trails.
- **6.6 Universal access**. Provide resources that improve accessibility to the beach for all visitors.
- **6.7 Minimal impact to access**. Require new development and substantial redevelopment projects to minimize impacts to existing public access to and along the shoreline.
- **7.3 Recreational asset.** Consider and treat the beach as a recreational asset and never as a commercial enterprise.
- **8.7 Public access.** Ensure that special events do not impede public access to the beach, the Pier, and The Strand.

Implementation Actions

- LAND USE-1. Amend the Zoning Map to bring consistency between PLAN Hermosa Land Use Designations and Zoning Ordinance Zoning Districts.
- LAND USE-2. Establish development standards to correspond with any new land use designations with consideration of neighborhood character areas.
- LAND USE-11. Require new visitor-serving accommodations within the Coastal Zone to maintain or improve public access to the coast by establishing and applying the following development review requirements in the Zoning Code/Local Implementation Plan:
  - Where a new hotel or motel development project would consist entirely of high-cost overnight accommodations, the development shall be required to provide mitigation as a condition of approval of a Coastal Development Permit. Such mitigation may include, but is not limited to, a mitigation payment consistent with the City's visitor-serving accommodations fee program.
  - If a hotel or motel project proposes a certain number or percentage of on-site low or mid-range cost units, such units shall remain available as low or mid-range cost units for the life of the project.
- PARKS-18. Protect public access to the coast by establishing and applying the following development review requirements:
  - Require a direct dedication of an easement for access in all new development projects that cause or contribute to adverse public access impacts. Access ways shall

be a sufficient size to accommodate two-way pedestrian passage and landscape buffer.

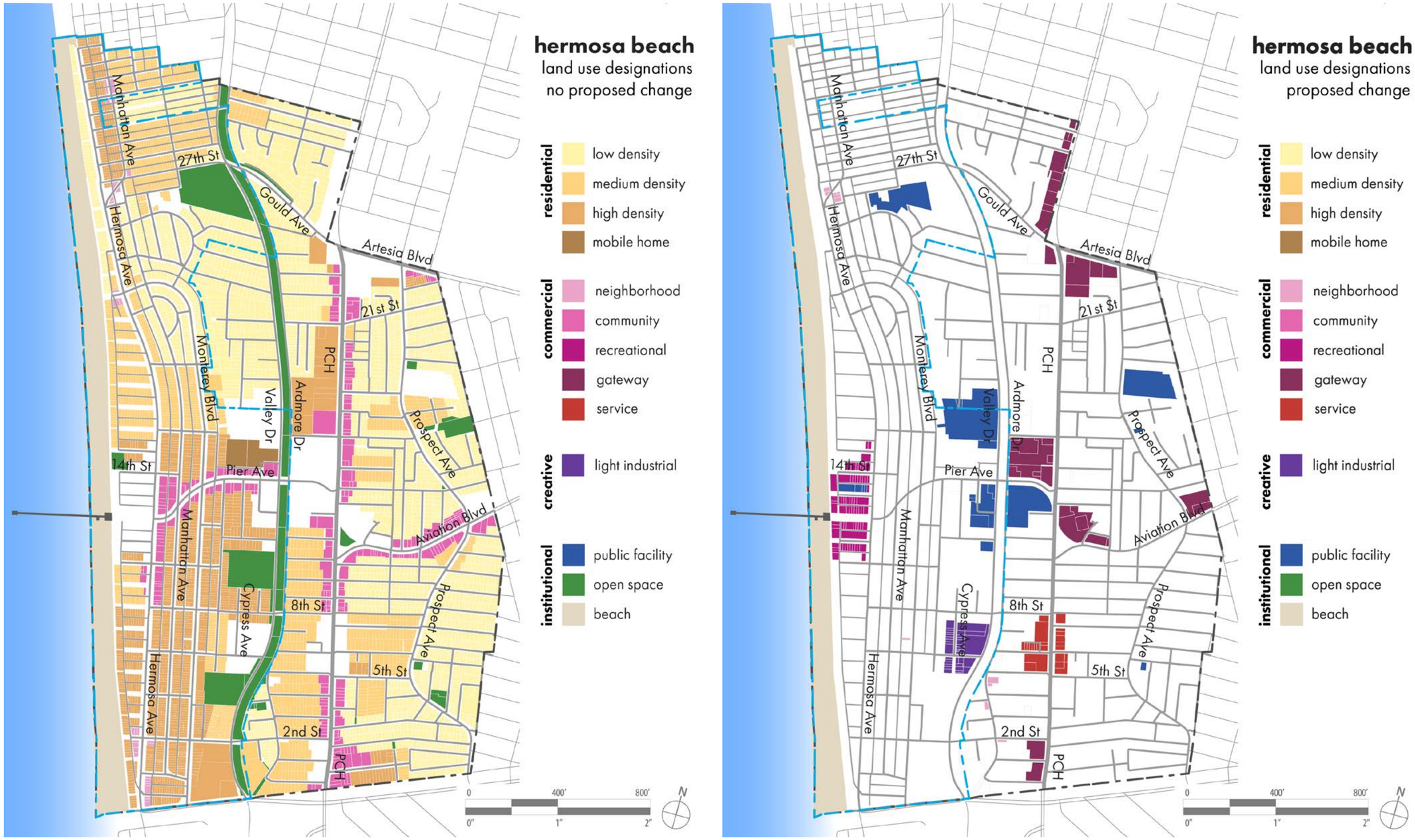
- Implement building design and siting regulations to protect public access through setbacks and other property development regulations that control building placement.
- New development and redevelopment projects shall protect public accessibility to walk streets and street ends that provide access to the shoreline, the beach, and The Strand.
- New or improved beach access facilities shall accommodate persons with physical disabilities.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.9-1 ***Would PLAN Hermosa Physically Divide an Established Community?*** *PLAN Hermosa includes limited land use changes and other improvements in the city that would allow for an increase in residential and nonresidential square footage. However, because the proposed changes follow established land use patterns, implementation of PLAN Hermosa would result in a* ***less than significant*** *impact.*

Hermosa Beach is primarily built out, with a limited inventory of vacant and underutilized land. Land use policies proposed in PLAN Hermosa are based on long-established land use patterns and would allow for incremental intensification through the redevelopment of existing uses (see **Table 3.0-2 (PLAN Hermosa Land Use Designations)** for existing and proposed land use designations). Such incremental growth would reinforce historical patterns while accommodating future economic and residential growth in the city. Under PLAN Hermosa, properties will gradually transition from one use to another, and land uses and intensities will gradually shift to align with the intent of PLAN Hermosa. **Figure 4.9-1 (PLAN Hermosa Proposed Changes to Land Use Designations)** shows the proposed changes in land use patterns.

FIGURE 4.9-1
PLAN HERMOSA PROPOSED CHANGES TO LAND USE DESIGNATIONS



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PLAN Hermosa establishes an overall development capacity for the city and represents the City's policy for determining appropriate physical development and character. **Table 3.0-3** (**PLAN Hermosa Residential Development Projections**) identifies anticipated residential land use changes compared to existing conditions that would occur between 2015 and 2040 with implementation of PLAN Hermosa, while **Table 3.0-4** (**PLAN Hermosa Nonresidential Development Projections**) identifies corresponding changes for nonresidential uses in the city. **Table 4.9-3 (Comparison of Land Use Densities and Floor Area Ratios)** shows the difference between the existing land use densities and floor area ratios (FAR) and the PLAN Hermosa densities and FARs.

TABLE 4.9-3
COMPARISON OF LAND USE DENSITIES AND FLOOR AREA RATIOS

Land Use Designation	Estimate of Current General Plan	Proposed PLAN Hermosa	
	Maximum	Minimum	Maximum
Low Density	13.0	2.0	13.0
Medium Density	25.0	13.1	25.0
High Density	33.0	25.1	33.0
Mobile Home	13.0	2.0	13.1
Neighborhood Commercial	1.0	0.5	1.0
Community Commercial	1.75	0.5	1.25
Recreational Commercial	2.5	1.0	1.75
Gateway Commercial	1.5	1.0	2.0
Service Commercial	1	0.25	0.5
Light Industrial Creative	0.75	0.25	1.0
Public Facilities	n/a	0.1	1.0
Open Space	n/a	0.0	0.1
City Beach	n/a	0.0	0.05

Source: City of Hermosa Beach 2015

Based on the allowed density/intensity for each designation, Hermosa Beach could accommodate an additional 300 dwelling units and 630,400 square feet of nonresidential development between 2015 and 2040.[2] As described in Chapter 3.0, Project Description, these projections were calculated based on specific trends in the city, including a loss of housing units between 2010 and 2015 and the growing size of households between 2008 and 2012, among other factors. These trends are further described in **Appendix A**.

Overall, this incremental redevelopment represents a relatively modest increase in the number of dwelling units and population for the planning area. Development projections from PLAN Hermosa implementation, as described in Chapter 3.0, Project Description, would result in an increase of approximately 300 dwelling units (3.0 percent growth), a net population increase of approximately 661 (3.3 percent growth), and an increase of 630,400 square feet of nonresidential development (29.9 percent growth) between 2015 and 2040.

[2] This information is based on growth forecasts provided in the City's letter Subject: Hermosa Beach Response to SCAG's Integrated Growth Forecast to the Southern California Association of Governments. See Appendix A.

Policies in both the Land Use + Design Element and the Mobility Element focus on increasing connectivity and maintaining the integrity of the community's character and existing land use designations. For example, Land Use + Design Element Policy 1.1 would maintain the fundamental pattern of existing land uses and preserve existing residential neighborhoods while providing opportunities for transformation of corridors and districts to improve community identity. Policy 1.8 would promote development that would enhance the unique character and identity of the city's neighborhoods, districts, and corridors through land use and design decisions. Policy 1.9 would discourage the conversion of commercial land into exclusively residential uses, while Policy 2.2 would encourage preservation of existing single-density neighborhoods within the city and ensure that neighborhood types are dispersed throughout Hermosa Beach. Policy 5.7 would maintain and enhance neighborhood character through design guidelines and development standards.

Additionally, implementation action LAND USE-1 requires that the City's Zoning Map be updated to make proposed land use designations and zoning districts consistent. LAND USE-2 establishes zoning districts and development standards to correspond with land use designations and character areas.

The Land Use + Design Element and Mobility Element policies and implementation actions listed above guide future development in Hermosa Beach; identify the character-defining features of each neighborhood, corridor, or district; and provide policy guidance that supports the intended character of each area. Therefore, implementation of PLAN Hermosa supports and enhances existing land use and circulation patterns and would not divide a community. This impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.9-2 ***Would PLAN Hermosa Conflict with an Applicable Plan, Policy, or Regulation?*** *PLAN Hermosa proposes limited land use changes and other improvements in the city and numerous land use policies to guide future development in Hermosa Beach. These changes would be consistent with existing local and regional planning documents. Therefore, the impact would be* ***less than significant****.*

PLAN Hermosa would establish new General Plan land use categories by refining existing categories and establishing new designations. The proposed land use designation and allowed density are shown in **Table 3.0-2 (PLAN Hermosa Land Use Designations).** In addition, PLAN Hermosa identifies numerous land use policies to guide development in the city for the next 25 years by balancing quality of life, economic prosperity, and environmental sustainability. The policy direction of PLAN Hermosa is generally described in Chapter 3.0, Project Description. Specific policies that affect land use planning are listed in the subsection titled "Draft PLAN Hermosa Policies and Implementation Actions" above.

Consistency with applicable regional and local plans is described below.

City of Hermosa Beach Zoning Ordinance (Municipal Code Title 17)

Title 17 of the City's Municipal Code will be the primary means of implementing PLAN Hermosa. PLAN Hermosa includes policies and programs to amend the Zoning Ordinance to establish zoning districts and development standards to correspond with land use designations and character areas, as well as to better accommodate coastal-dependent and coastal-related uses. With implementation of actions LAND USE-1 and LAND USE-2, the Zoning Ordinance and Zoning Map will be consistent with PLAN Hermosa land use goals and policies.

California Coastal Act

PLAN Hermosa has been prepared in accordance with the requirements and intent set forth in California Government Code Section 30603. The Hermosa Beach Coastal Land Use Plan (including a land use map) was adopted by the City and certified by the California Coastal Commission in 1981. PLAN Hermosa includes an update to the City's Land Use Plan and Local Implementation Plan, providing development standards and regulations applicable in the Coastal Zone, and outlining an administrative process for the issuance of coastal development permits. To implement the Coastal Land Use Plan components of PLAN Hermosa, the City has developed a series of implementing ordinances that articulate the intent of the California Coastal Act with consideration of local context and needs. **Table 4.9-4 (Coastal Act Consistency)** analyzes PLAN Hermosa's consistency with the California Coastal Act.

The policies and programs of PLAN Hermosa implement Coastal Act requirements; therefore, the proposed project is consistent with the California Coastal Act.

Southern California Association of Governments 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future

SCAG has placed a greater emphasis than ever before on sustainability and integrated planning in the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), The RTP/SCS vision encompasses three principles that collectively work as the key to the region's future: mobility, economy, and sustainability. The RTP/SCS contains a number of policies applicable to PLAN Hermosa. The City considered SCAG goals and policies in the formulation of PLAN Hermosa. SCAG policies and their consistency with PLAN Hermosa are evaluated in **Table 4.9-5 (Compatibility of PLAN Hermosa with the 2012–2035 RTP/SCS)**.

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TABLE 4.9-4
COASTAL ACT CONSISTENCY

Section	Policy	Project Compliance with Policy
Public Access		
30211	Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.	**Consistent:** Within the city, access to the beach is provided by 22 walk streets that run perpendicular to and connect with Hermosa Avenue. PLAN Hermosa includes a number of policies and implementation actions that focus on public beach access. Parks + Open Space Element Policy 6.6 directs the City to provide resources that improve accessibility to the beach for all visitors. Implementation action LAND USE-11 would require new visitor-serving accommodations in the Coastal Zone to maintain or improve public access to the coast. Implementation action PARKS-18 includes measures that would protect public access to the coast by requiring direct dedication of access easements, and site design to ensure that the coast remains accessible with implementation of PLAN Hermosa.
30212	Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected.	**Consistent:** PLAN Hermosa provides for public beach access. Parks + Open Space Element Policy 6.6 directs the City to provide resources that improve accessibility to the beach for all visitors. Implementation action LAND USE-11 would require new visitor-serving accommodations in the Coastal Zone to maintain or improve public access to the coast. Implementation action PARKS-18 includes measures that would protect public access to the coast by requiring direct dedication of access easements, and site design to ensure that the coast remains accessible with implementation of PLAN Hermosa.
30212.5	Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.	**Consistent:** PLAN Hermosa promotes adequate parking and a balance use of land adjacent to the shoreline. Mobility Element Policy 4.2 ensures that parking facilities and costs of such facilities are not a barrier to beach access by the public. Parks + Open Space Element Policy 7.3 requires that the City treat the beach as a recreational asset and never as a commercial enterprise. Land Use + Design Element Policy 1.1 strives to maintain the fundamental pattern of existing land uses, preserving residential neighborhoods, while providing opportunities for enhancement or transformation of corridors and districts to improve community activity and identity.
30213	Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.	**Consistent:** Implementation action LAND USE-11 requires that if a hotel or motel project proposes a certain number or percentage of on-site low or mid-range cost units, such units shall remain available as low or mid-range cost units for the life of the project.
Recreation		
30221	Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.	**Consistent:** PLAN Hermosa promotes public recreational use of oceanfront lands on the public beach. Parks + Open Space Policy 6.9 directs the City to create additional parkettes, open space, and pedestrian amenities. Policy 7.3 directs the City to consider and treat the beach as a recreational asset and never as a commercial enterprise. Policy 7.5 directs the City to consider devoting certain portions of the beach to different preferred recreational uses while providing access for all users and meeting the recreation needs of visitors and residents.
30222	The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.	**Consistent:** PLAN Hermosa land use designations provide for visitor-serving commercial recreational land uses on private property within the Coastal Zone. Land Use + Design Element Policy 8.1 prioritizes coastal-dependent uses over non-dependent developments near the shoreline, unless future demand for such facilities is already adequately provided for in the area. Policy 8.2 accommodates coastal-related uses within reasonable proximity to the coastal-dependent uses they support. Policy 8.3 encourages coastal-dependent and coastal-related commercial uses to be located in the Recreational Commercial and Community Commercial land use designations, and prioritizes such uses in the Recreational Commercial designation. The policy also provides for and prioritizes coastal-related industrial uses in the Creative Industrial land use designation. Policy 8.9 directs the City to prioritize use of private lands suitable for visitor-serving commercial recreational facilities that enhance public coastal access over private local-serving residential or commercial development or industrial development, but not over coastal-dependent uses within the commercial core.
30222.5	Oceanfront land that is suitable for coastal dependent aquaculture shall be protected for that use, and proposals for aquaculture facilities located on those sites shall be given priority, except over other coastal dependent developments or uses.	**Not applicable:** No vacant land suitable for aquaculture has been identified within the city.
30223	Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.	**Consistent:** PLAN Hermosa identifies existing coastal-related uses. Proposed land use designations would not limit those uses.
30224	Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.	**Not applicable**: Hermosa Beach does not have boat launching facilities, boat storage, or a harbor/protected area that would accommodate such facilities.
Marine Environment		
30230	Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.	**Consistent:** PLAN Hermosa includes policies that protect the existing marine environment. Parks + Open Space Element Policy 9.1 calls for the preservation, protection, and improvement of remaining open space areas to the greatest extent possible to improve on existing limited habitats and prevent further extirpation of species. Policy 9.2 requires the consideration of species and habitat impacts and potential improvements when implementing beach maintenance activities. Policy 9.3 was designed to ensure that beaches can function as a quality habitat for permanent and migratory species. Policy 9.4 promotes information sharing and research regarding habitat and wildlife with resource agencies and neighboring jurisdictions to ensure coordinated decision-making and management. Policy 9.5 requires the protection of coastal and marine habitats from impacts from maintenance, construction, recreation, and industrial activities.

Section	Policy	Project Compliance with Policy
30231	The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.	**Consistent:** PLAN Hermosa includes policies that protect the existing marine environment through the use of water use and water quality protection. Sustainability + Conservation Element Policy 5.1 calls for the availability of recycled water supply and distribution facilities are available throughout the city. Policy 5.3 requires the update of water conservation and efficiency programs, requirements, and incentives on a regular basis. Policy 7.1 requires the use of permeable pavement in parking lots, sidewalks, plazas, and other low-intensity paved areas. Policy 7.2 requires the minimization of soil erosion by ensuring best management practices are used in grading and construction.
30232	Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.	**Consistent:** The use and transportation of hazardous materials are governed by federal and state regulations. PLAN Hermosa further requires compliance with policies in the plan that reduce the potential for accidental hazardous materials spills. Public Safety Element Policy 3.2 directs the City to coordinate with allied agencies to prepare for and respond to hazardous materials incidents. Policy 3.3 requires businesses that use, store, or transport hazardous materials to ensure that adequate measures are taken to protect public health and safety. Policy 3.4 directs the City to restrict the siting of new uses involving hazardous materials in the Coastal Zone to coastal-related industrial uses in the Cypress District.
30233	The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to those identified in Section 30233 [added].	**Not applicable:** Implementation of PLAN Hermosa would not result in the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes.
30234	Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.	**Consistent:** PLAN Hermosa does not include any policies or implementation actions that would reduce existing facilities.
30235	Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.	**Not applicable:** PLAN Hermosa does not include any policies or implementation actions that would limit the use of revetments, breakwaters, groins, harbor channels, seawalls, or cliff retaining walls constructed to protect existing structures.
30236	Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (l) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.	**Not applicable.** PLAN Hermosa does not propose any channelizations, dams, or other substantial alterations of rivers or streams.
Land Resources		
30240	(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.	**Consistent:** PLAN Hermosa includes policies that protect the existing sensitive habitat areas. Parks + Open Space Element Policy 9.1 calls for the preservation, protection, and improvement of remaining open space areas to the greatest extent possible to improve on existing habitats and prevent further extirpation of species. Policy 9.2 requires the consideration of species and habitat impacts and potential improvements when implementing beach maintenance activities. Policy 9.3 is designed to ensure that beaches can function as a quality habitat for permanent and migratory species. Policy 9.4 promotes information sharing and research regarding habitat and wildlife with resource agencies and neighboring jurisdictions to ensure coordinated decision-making and management. Policy 9.5 requires the protection of coastal and marine habitats from impacts from maintenance, construction, recreation, and industrial activities.
30241	The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of those listed in Section 30241 [added].	**Not applicable:** Hermosa Beach is a fully developed urban area. No agricultural lands exist within the city.
30242	All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.	**Not applicable:** Hermosa Beach is a fully developed urban area. No agricultural lands exist within the city.
30243	The long-term productivity of soils and timberlands shall be protected, and conversions of coastal commercial timberlands in units of commercial size to other uses or their division into units of noncommercial size shall be limited to providing for necessary timber processing and related facilities.	**Not applicable:** Hermosa Beach is a fully developed urban area. No timber production lands exist within the city.
30244	Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.	**Consistent**: Certification of the EIR would require the adoption of mitigation measure MM 4.4.3, which is specifically designed to protect paleontological resources.

Section	Policy	Project Compliance with Policy
Development		
30250	(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels. (b) Where feasible, new hazardous industrial development shall be located away from existing developed areas. (c) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.	**Consistent:** All future development in the city would have availability of adequate public services.
30251	The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.	**Consistent:** Parks + Open Space Element Policy 6.1 calls for enhancing visibility of existing public access points to and along beaches and coastal parks and trails. Land Use + Design Element Policy 1.8 calls for the enhancement of the unique character of the city's neighborhoods, districts and corridors through land use and design decisions.
30252	The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.	**Consistent:** Land Use + Design Element Policy 8.1 prioritizes coastal-dependent uses over nondependent developments near the shoreline, while Policy 8.2 guides development that accommodates coastal-related uses in proximity to the coastal-dependent uses that are supportive of such uses. Mobility Element Policy 1.1 requires the planning, design, and construction of all new and existing transportation projects to consider the needs of all modes of travel to create safe, livable and inviting environments for all users of the system. Policy 2.1 prioritizes improvements of public rights-of-way that provide heightened levels of safe, comfortable and attractive public spaces for all non-motorized travelers while balancing the needs of efficient vehicular circulation. Policy 3.1 **r**equires the repurposing public rights-of-way enhancing connectivity for pedestrians, bicyclists, and public transit. Policy 4.2 ensures parking facilities and costs of such facilities are not a barrier to beach access by the public. Policy 5.5 **e**ncourages smart growth land use features in development projects to ensure more compact, mixed, connected, and multimodal development supports reduced trip generation, trip lengths, and greater ability to utilize alternative modes.
30253	New development shall do all of the following: (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.41 (c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development. (d) Minimize energy consumption and vehicle miles traveled. (e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.	**Consistent:** PLAN Hermosa includes policies designed to reduce risks to life and property, reduce air quality emissions and vehicle miles traveled, reduce energy consumption, and protect the individual neighborhoods in the city. Public Safety Element Policy 1.1 requires the evaluation of new buildings and infrastructure for potential for seismic, fire, flood, and coastal storm hazard risks and comply with California Building Code standards to minimize risk. Policy 1.2 requires the preparation of geotechnical reports for new development projects in areas with the potential for liquefaction or landslide. Conservation + Sustainability Element Policy 3.7 requires collaboration with other agencies within the region to improve air quality and meet or exceed state and federal air quality standards through regional efforts to reduce air pollution from mobile sources, including trucks and passenger vehicles. Land Use + Design Element Policy 1.8 directs the City to enhance the unique character and identity of the city's neighborhoods, districts and corridors through land use and design decisions. Sustainability + Conservation Element Policy 3.2 requires the support of land use and transportation strategies to reduce vehicle miles traveled and emissions, including pollution from commercial and passenger vehicles.
30254	New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.	**Consistent:** Implementation of PLAN Hermosa would not require the expansion of existing water, wastewater, or storm drainage facilities. In addition, Infrastructure Element Policy 1.6 requires that new infrastructure is sited in a manner to minimize negative impacts to the community and prioritize projects to address the greatest deficiencies.
30255	Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.	**Consistent:** Land Use + Design Element Policy 8.1 prioritizes coastal-dependent uses over nondependent developments near the shoreline, while Policy 8.2 guides development that accommodates coastal-related uses in proximity to the coastal-dependent uses that are supportive of such uses.

Section	Policy	Project Compliance with Policy
Industrial Development		
30260	Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division.	**Consistent:** Hermosa Beach does not have any vacant industrial sites within the Coastal Zone area. The existing light industrial sites are currently developed. Hermosa Beach does not have any uses identified as heavy industrial.
30261	Multicompany use of existing and new tanker facilities shall be encouraged to the maximum extent feasible and legally permissible, except where to do so would result in increased tanker operations and associated onshore development incompatible with the land use and environmental goals for the area.	**Not applicable:** Hermosa Beach does not have any facilities that would include tanker operations.
30262	Oil and gas development shall be permitted in accordance with Section 30260, if the conditions identified in Section 30262 [added] are met.	**Not Applicable:** Hermosa Beach does not have any areas identified for oil and gas development.
30263	New or expanded refineries or petrochemical facilities not otherwise consistent with the provisions of this division shall be permitted if the conditions are met as identified in Section 30263(a) [added].	**Not Applicable:** Hermosa Beach does not have any areas identified for refineries or petrochemical facilities development.
30264	Notwithstanding any other provision of this division, except subdivisions (b) and (c) of Section 30413, new or expanded thermal electric generating plants may be constructed in the coastal zone if the proposed coastal site has been determined by the State Energy Resources Conservation and Development Commission to have greater relative merit pursuant to the provisions of Section 25516.1 than available alternative sites and related facilities for an applicant's service area which have been determined to be acceptable pursuant to the provisions of Section 25516.	**Not Applicable:** PLAN Hermosa does not include any areas for thermal electric generating plants.

TABLE 4.9-5
COMPATIBILITY OF PLAN HERMOSA WITH THE 2012–2035 RTP/SCS

SCAG RTP/ SCS Goal	SCAG Goal	Project Compliance with Goal
Goal 1	Align the plan investments and policies with improving regional economic development and competitiveness.	**Not Applicable:** This goal is specific to SCAG's funding sources and investments and is therefore not applicable at the local level.
Goal 2	Maximize mobility and accessibility for all people and goods in the region.	**Consistent:** PLAN Hermosa maintains the existing roadway network and provides mechanisms to meet the needs of local and regional transportation and to ensure efficient mobility and accessibility. A number of regional and local programs have informed the policies and implementation actions that would ensure a balance of local and regional needs in the design and operation of the transportation corridors, including: • LA Metro First Last Mile Strategic Plan • Los Angeles County Congestion Management Program • Los Angeles County Long Range Transportation Plan • SCAG RTP/SCS • South Bay Bicycle Master Plan • Beach Cities Livability Plan • Aviation Boulevard Master Plan • Pacific Coast Highway Streetscape Master Plan The Mobility Element is a comprehensive transportation management strategy that addresses infrastructure capacity. The Land Use + Design Element and the Mobility Element of PLAN Hermosa both contain policies that provide specific guidance on how to improve mobility in the city. Refer to Section 4.14, Transportation, of this EIR, which addresses local and regional transportation, traffic, circulation, and mobility in more detail.
Goal 3	Ensure travel safety and reliability for all people and goods in the region.	**Consistent:** All modes (motorized and non-motorized) of public and commercial transit throughout the city would be required to follow safety standards established by corresponding state, regional, and local regulatory documents, standards, and regulations. For example, pedestrian walkways and bicycle routes must follow safety precautions and standards established by local (e.g., City of Hermosa Beach, County of Los Angeles) and regional (e.g., SCAG, Caltrans) agencies. Additionally, pedestrian circulation systems are required to be designed and constructed for the adaptation and use of people with disabilities, consistent with the Americans with Disabilities Act (ADA) and state requirements. With the city encompassing approximately 1.4 square miles, active and non-motorized transportation options for local mobility are becoming increasingly convenient and cost-effective travel choices among residents and visitors. As such, the PLAN Hermosa Mobility Element encourages design and construction plans that improve sidewalk infrastructure to safely accommodate high levels of pedestrian activity. Through implementation of the plan, the majority of arterials and local streets throughout the city will provide sidewalks to accommodate a moderate level of pedestrian activities. There

SCAG RTP/ SCS Goal	SCAG Goal	Project Compliance with Goal
		are 22 east–west walk streets that connect pedestrians between the beach and surrounding neighborhoods, while the Hermosa Valley Greenbelt and the Strand provide north–south pedestrian connections throughout the length of the city. Mobility Element Policy 3.2 prioritizes investment in the development of a complete network of sidewalks and pedestrian-friendly amenities. As a means of prioritizing pedestrian safety, Mobility Element policies prioritize the development of safe, comfortable, and attractive public spaces and encourage traffic calming strategies that will reduce vehicle speeds and reduce cut-through traffic on residential streets. Thus, PLAN Hermosa policies would reduce design hazards and conflicts between incompatible land uses and between all transportation network users.
Goal 4	Preserve and ensure a sustainable regional transportation system.	**Consistent:** All roadway improvements to the existing transportation networks would be assessed to determine how new development would impact traffic conditions. PLAN Hermosa seeks to concentrate new and infill development in areas that would reduce vehicle miles traveled. This will be done by focusing on corridors that provide commercial, service, and office uses in a cohesive and organized manner. This land use network is supported by a connected walkable environment to easily serve local and regional retail needs while providing efficient travel pathways and circulation. These land use policies would serve to enhance the regional transportation system by providing land uses in a format that supports transit thereby alleviating roadway traffic on a regional basis. The Mobility Element seeks to implement a multimodal system consistent with SB 375, SB 743, and the 2012–2035 RTP/SCS. Additionally, the regional plans mentioned in the analysis for RTP/SCS Goal G2 would be applicable to the design and development of the regional roadway network in and around the city. PLAN Hermosa encourages regional coordination of transportation issues and incorporates guidance and policies that help preserve and ensure a sustainable regional transportation system.
Goal 5	Maximize the productivity of our transportation system.	**Consistent:** The local and regional transportation system would be improved and maintained to maximize efficiency and productivity through implementation of PLAN Hermosa. The City's Public Works Department oversees the improvement and maintenance of the city's public rights-of-way on a routine basis. Future development in Hermosa Beach under PLAN Hermosa would occur through infill and redevelopment activities primarily in the Downtown core, the Cypress Avenue District, the Coastal Zone including The Strand, and along Pacific Coast Highway and Aviation Boulevard. Such infill and redevelopment would increase overall demand for transit, bicycle, and pedestrian facilities. The City strives to maximize productivity of the region's public transportation system (i.e., bus and bicycle) for residents, visitors, and workers coming into and going out of Hermosa Beach. Existing transit facilities in Hermosa Beach are supported by local and regional transportation authorities, providing local mobility and access to major regional transit facilities in nearby municipalities. PLAN Hermosa Mobility Element policies promote transit opportunities in the city and provide opportunities to connect to regional infrastructure. PLAN Hermosa Mobility Element policies support and reinforce the policies of the South Bay Bicycle Master Plan by promoting bicycle facilities and parking throughout the city to facilitate a higher level of connectivity and access for bicycles. The City provides ample opportunities for bicycling via a network of bikeways, bicycle parking, links to transit, and other accommodations. PLAN Hermosa policies directly support the expansion of pedestrian, bicycle, and transit facilities and support the City's goal of being a multimodal community. Mobility Element and Land Use + Design Element policies also support the goals and policies of the Los Angeles County Long Range Transportation Plan and the South Bay Bicycle Master Plan.

SCAG RTP/ SCS Goal	SCAG Goal	Project Compliance with Goal
Goal 6	Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	**Consistent:** Goals, policies, and implementation actions are proposed in the PLAN Hermosa Mobility Element to require that all development or redevelopment projects accommodate active transportation by providing connections to existing and planned pedestrian and bicycle networks and incorporating pedestrian-oriented design practices and that developments provide facilities for non-motorized transportation; improve transit, bicycle, pedestrian, and equestrian connections; and preserve opportunities to maintain or expand bicycle, pedestrian, and transit systems. The Mobility Element requires expanding the bicycle network, integrating bicycle and transit facilities and connections, and requiring new development to accommodate bicycle and pedestrian infrastructure.
Goal 7	Actively encourage and create incentives for energy efficiency, where possible.	**Consistent:** Policies and implementation actions are proposed in PLAN Hermosa's Sustainability + Conservation Element that encourage the reduction of energy usage and conservation. Policies would require and facilitate the installation of renewable energy projects on homes and businesses and provide a retrofit program to assist home and building owners to make efficiency improvements. PLAN Hermosa would require that large buildings regularly report their energy use and create a sustainable building checklist to minimize waste and maximize energy efficiency.
Goal 8	Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consistent:** PLAN Hermosa Mobility Element goals, policies, and implementation actions ensure that future land uses can be adequately served by the planned transportation system. The Mobility Element contains a policy to improve Hermosa Beach's alternative transportation access to local and regional destinations through land use decisions that support multimodal transportation. In addition, PLAN Hermosa Land Use + Design Element contains policies to accommodate a mix of residential and commercial land uses that enable residents to walk to work, shopping, and transit, reduce auto use, and promote transit-oriented development and increased density near transit opportunities.
Goal 9	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Consistent:** PLAN Hermosa Mobility Element goals, policies, and implementation actions strive to provide local transit service is reliable and safe for all users. PLAN Hermosa Public Safety Element goals, policies, and implementation actions prioritize disaster preparedness, coordination of services with other cities, and technology improvements for managing safety information and response, and reducing hazards by reviewing the needs of critical facilities, which includes roads.

PLAN Hermosa encourages development in a more compact way with an emphasis on redevelopment and reuse. The project would allow additional housing and jobs to accommodate the projected population and employment growth in the area and in the city. Further, the project would guide growth in a sustainable manner that would emphasize a multimodal transportation system to serve city needs. As such, PLAN Hermosa is considered to be consistent with the basic principles identified in the RTP/SCS.

South Coast Air Quality Management District Basin Air Quality Plan

The South Coast Air Quality Management District (SCAQMD) is responsible for clean air planning in the South Coast Air Basin. The SCAQMD adopted its latest Air Quality Management Plan (AQMP) in 2012. The 2012 AQMP mandates a variety of measures to reduce traffic congestion and improve air quality. Local governments are responsible for developing and implementing the AQMP's transportation and control measures. For informational purposes, the SCAQMD is in the process of developing its 2016 AQMP, which will develop integrated strategies and measures to meet 8-hour ozone (75 ppb) by 2032 and annual $PM_{2.5}$ (12 µg/m^3) by 2021–2025 national ambient air quality standards goals, among other goals.

As discussed in Section 4.14, Transportation, PLAN Hermosa goals and policies are aimed at reducing vehicle miles traveled (VMT). The California Air Pollution Control Officers Association's (CAPCOA) report Quantifying Greenhouse Gas Mitigation Measures was used as a set of guidelines for quantifying the environmental benefits of mitigation measures. The CAPCOA guidelines were developed by conducting a comprehensive literature review of studies documenting the effects of land use planning and transportation demand management (TDM) strategies on reducing VMT. Using the results of this study, Fehr & Peers, the City's transportation consultant, developed TDM+, a quick response tool that demonstrates trip reductions from commonly used TDM strategies. The tool also accounts for the interaction among different measures in various categories to avoid double counting. The TDM+ model was used to quantify potential reductions in trip generation and VMT that could occur by 2040 with full buildout and implementation of PLAN Hermosa. As described in Section 4.14, numerous PLAN Hermosa land use and mobility strategies were modeled to demonstrate reductions in VMT, including but not limited to land use strategies such as development of urban infill sites with transit proximity and a density, scale, and design that can facilitate walking, biking, and other alternative travel options.

PLAN Hermosa policies include numerous measures that support transportation demand and accessibility management. Specifically, Sustainability + Conservation Element Policy 3.2 directs the City to support land use and transportation strategies to reduce vehicle miles traveled and emissions, including pollution from commercial and passenger vehicles. Policy 3.7 directs the City to consult with local, regional, and state agencies to improve air quality and limit greenhouse gas emissions through regional efforts to reduce air pollution from mobile sources. PLAN Hermosa would promote land use and transportation investments that support greater transportation choice and greater local economic opportunity, and reduce the number and length of auto trips.

These and other policies support region-wide traffic and air quality management strategies that support achievement of AQMP goals. As such, PLAN Hermosa is considered consistent with the Air Quality Management Plan. Additional consistency analysis with the AQMP is addressed in Section 4.2, Air Quality.

Existing General Plan

PLAN Hermosa would replace the City's existing General Plan. Nonetheless, PLAN Hermosa policies build on existing land use patterns and policies currently encouraged by the existing General Plan.

Beach Cities Livability Plan

The Beach Cities Livability Plan was developed to improve livability and well-being in Los Angeles County beach cities. It includes a section that provides specific recommendations for Hermosa Beach. The plan strives to support active living by enhancing both land use and transportation systems throughout the beach cities. In order to achieve this goal, the plan highlights ways to encourage community members to become more active in their communities. This includes a complete network of streets and public spaces to support active living; safe, natural, and enjoyable walking and biking conditions; and sustainable transportation choices. Strategies to achieve this goal of healthier, happier people in the city include adopting Complete Streets policies and incorporating Complete Streets policy language into all beach cities' planning documents, creating and adopting street design guidelines, developing a regional pedestrian master plan, increasing enforcement for pedestrian safety, and increasing enforcement for pedestrian safety.

PLAN Hermosa policies are intended to improve mobility in the city and promote programs to enhance livability and the health of the community. PLAN Hermosa policies are aimed at reducing vehicle miles traveled and thus reducing congestion and improving travel times. Specifically, Land Use + Design Element Policy 13.5 directs the City to encourage and set aside funding for the provision of a high level of neighborhood and community amenities and design features as a way of balancing increased density, recognizing the desire for a very high quality, amenity-rich, livable community. Furthermore, PLAN Hermosa Mobility Element policies set forth Complete Streets policies and numerous strategies to support pedestrian safety. As such, PLAN Hermosa is consistent with the Beach Cities Livability Plan.

As described above, adoption and implementation of PLAN Hermosa would be consistent with applicable regional and local plans, resulting in a **less than significant** impact.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative setting for land use includes existing, approved, proposed, and reasonably foreseeable development in Hermosa Beach and the South Bay Cities COG planning area. Land use impacts are typically isolated to a jurisdiction, except where land uses may interact or conflict with adjacent jurisdictions.

IMPACT 4.9-3 ***Would PLAN Hermosa Contribute to a Cumulative Impact on Dividing a Community or Conflicting with an Applicable Plan, Policy, or Regulation?*** *PLAN Hermosa, in addition to anticipated regional growth within the South Bay Cities Council of Governments planning area, would not contribute to cumulative land use impacts associated with the division of an established community or conflicts with land use plans and regulations that provide environmental protection. This impact would be* ***less than cumulatively considerable****.*

Expected population and employment growth in the South Bay Cities COG planning area would result in land use changes at the subregional level. However, new development that would occur in Hermosa Beach as a result of PLAN Hermosa would be generally consistent with the RTP/SCS, in that growth would be focused in areas that are already urbanized, are located in close proximity to transit, and can accommodate additional residential and employee populations without adversely affecting sensitive natural resources. As described in Impact 4.9-1 above, implementation of PLAN Hermosa would not result in the division of any communities within Hermosa Beach or in adjacent cities. As identified in Governance Element Policy 4.1, the City

would play an active role in the South Bay Cities COG, SCAG, and other regional agencies to protect and promote the interests of the City; and as identified in Policy 4.3, the City would maintain strong collaborative relationships with adjacent jurisdictions and work together on projects of mutual interest and concern.

As identified in the discussion of Impact 4.9-2 above, PLAN Hermosa would not conflict with land use plans, policies, or regulations adopted to reduce environmental impacts. PLAN Hermosa is consistent with the SCAG Regional Transportation Plan/Sustainable Communities Strategy, the California Coastal Act, and the 2012 South Coast Air Quality Management Plan. PLAN Hermosa would complement the general plans of surrounding jurisdictions, as the proposed plan strives for a regional approach to land use and transportation planning in the city and to the improvement of regional connections. Thus, PLAN Hermosa would have a **less than cumulatively considerable** contribution to regional land use impacts.

Mitigation Measures

None required.

4.9.5 REFERENCES

City of Hermosa Beach. 1981. *Hermosa Beach Local Coastal Program, Coastal Land Use Plan.* http://www.hermosabch.org/index.aspx?page=501.

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4.10 Mineral Resources

4.10.1 INTRODUCTION

This resource section evaluates the potential environmental effects related to mineral resources associated with implementation of PLAN Hermosa. There are no applicable PLAN Hermosa policies or implementation actions that address mineral resources. Further, non-fuel mineral resources are protected in California by the Surface Mining and Reclamation Act (SMARA), and no known non-fuel mineral resources exist in the city.

NOP Comments: No comments were received in response to the Notice of Preparation (NOP) addressing mineral resource concerns. Comments included written letters and oral comments provided at the NOP scoping meeting.

Reference Information: Information for this section is based on numerous sources, including the PLAN Hermosa Technical Background Report and other publicly available documents. The Technical Background Report prepared for the project is attached to this Draft EIR as **Appendix C-13**.

4.10.2 ENVIRONMENTAL SETTING

The State Mining and Geology Board (SMGB) last updated the Southern California Mineral Resource Zone (MRZ) maps in 1994. As mapped by the SMGB, the majority of Hermosa Beach is in the San Fernando Valley Production-Consumption Region in Los Angeles County. A small portion of Hermosa Beach south of 2nd Street is in the San Gabriel Valley Production-Consumption Region. A review of the Generalized Mineral Land Classification Map of Los Angeles County – South Half (DOC 1994) shows that the entire planning area is designated as MRZ-3 land. The MRZ-3 classification indicates areas of undetermined mineral resource significance. Although mineral resources may be present, the presence or absence of resources is considered speculative because of a lack of available data.

Although mineral resources may be present, the classification of this MRZ-3 area was not broken down to the more detailed MRZ-3a or MRZ-3b categories because no mining has occurred in the area. Additionally, the urbanized nature of Hermosa Beach effectively precludes mining activities in the planning area.

4.10.3 REGULATORY SETTING

State regulations and policies provide a regulatory framework to protect mineral resources that would be affected by implementation of a local government's general plan. Because mining is effectively precluded in the planning area, PLAN Hermosa would not affect state mineral resources. Therefore, this section includes the federal, state, and local mineral resources regulatory framework for informational purposes.

FEDERAL

No federal plans, policies, regulations, or laws related to mineral resources apply to Hermosa Beach.

STATE

- **Surface Mining and Reclamation Act:** The Surface Mining and Reclamation Act (SMARA) of 1975 (Public Resources Code, Division 2, Chapter 9, Section 2710 et seq.) mandated the classification of mineral lands throughout the state to help identify and protect mineral resources in areas subject to urban expansion or other irreversible land uses that would preclude mineral extraction. Since 1975, the SMGB has mapped areas in California that contain regionally significant mineral resources. Deposits of construction aggregate

resources (sand, gravel, or crushed stone) were the initial commodity targeted for classification by the SMGB because of their importance to the state. Once areas are mapped, the SMGB is required to designate for future use those areas that contain aggregate deposits which are of prime importance to meeting the region's future need for construction quality aggregates.

The key objective of mineral lands classification under SMARA is for each jurisdiction to develop policies that will conserve important mineral resources, if feasible, when such resources are needed. SMARA requires that once policies are adopted, land use decisions by the local agency must be in accordance with that local agency's management policies for mineral resources. These decisions must also balance the mineral value of the resource to the market region as a whole, not just their importance to the local jurisdiction.

The State Geologist developed the California Mineral Land Classification System to assist in the implementation of SMARA. The system identifies the following types of MRZs for mapping and reporting purposes (DOC 2010):

- **MRZ-1:** Areas where adequate geologic information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.
- **MRZ-2a:** Areas underlain by mineral deposits where geologic data show that significant measured or indicated resources are present. Areas classified MRZ-2a contain discovered mineral deposits that are either measured or indicated reserves as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information. Land included in the MRZ-2a category is of prime importance because it contains known economic mineral deposits.
- **MRZ-2b:** Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered deposits that are either inferred reserves or deposits that are presently sub-economic as determined by limited sample analysis, exposure, and past mining history.
- **MRZ-3a:** Areas containing known mineral deposits that may qualify as mineral resources, which could be considered hypothetical resources. MRZ-3a areas are considered to have a moderate potential for the discovery of economic mineral deposits.
- **MRZ-3b:** Areas containing inferred mineral deposits that may qualify as mineral resources, which could be considered speculative resources. Land classified MRZ-3b represents areas in geologic settings which appear to be favorable environments for the occurrence of specific mineral deposits.
- **MRZ-4:** Areas where geologic information does not rule out either the presence or absence of mineral resources. The distinction between the MRZ-1 and MRZ-4 categories is important for land use considerations. It must be emphasized that the MRZ-4 classification does not imply that there is little likelihood for the presence of mineral resources, but rather that there is a lack of knowledge regarding mineral occurrence.

LOCAL

- **Measure O:** Oil drilling is currently banned in Hermosa Beach. A vote of the people would be required to lift the existing ban. A recent ballot measure, Measure O, proposed to lift the existing ban, but failed at a ratio of four to one. Thus, the likelihood of new oil extractions taking place in the city is low.

4.10.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of this Draft EIR, impacts on mineral resources are considered significant if adoption and implementation of PLAN Hermosa would:

1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

2) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of PLAN Hermosa compared to existing conditions.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa does not include policies or implementation actions addressing mineral resources.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.10-1 ***Would PLAN Hermosa Result in the Loss of Availability of Mineral Resources?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not result in the loss of availability of a known mineral resource or of a locally important mineral resource recovery site. Therefore, the project would have* ***no impact****.*

The entirety of Hermosa Beach is classified as Mineral Resource Zone 3 (MRZ-3) under the California Mineral Land Classification System. In MRZ-3 areas, mineral resources are present, but the significance of the resource is considered speculative because no mining has historically occurred in the area. Additionally, since most of the area has been developed with residential and commercial uses, and the development pattern is relatively compact with limited areas appropriate for industrial uses, mining activities would not likely be feasible in the city. Subsurface oil deposits are also present in Hermosa Beach; nonetheless, oil drilling is not allowed within the city and PLAN Hermosa would not impact such deposits.

Mining activities are classified as an industrial use, and the Light Industrial land use designation in PLAN Hermosa identifies the range of allowable light industrial uses as follows: "production uses for light manufacturing, creative art, or design services with professional office as an allowed accessory use." Mining and oil extraction, due to the associated equipment and potential nuisances, would not be considered a light industrial use. Therefore, there would be virtually no locations under PLAN Hermosa in which mining activities would be allowed. Implementation of PLAN Hermosa would not result in the direct or indirect loss of availability of a known or locally important mineral resource, because of the urbanization in the MRZ-3 area and limited areas in which industrial activities would be allowed. Therefore, implementation of PLAN Hermosa would have **no impact** on mineral resources.

Mitigation Measures

None required.

4.10.5 REFERENCES

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4.11 Noise and Vibration

4.11.1 INTRODUCTION

This section discusses existing noise conditions in Hermosa Beach, noise standards relevant to PLAN Hermosa, and potential noise impacts associated with buildout of the city in accordance with the proposed Land Use Map.

NOP Comments: No comments were received in response to the Notice of Preparation (NOP) addressing noise and vibration concerns. Comments included written letters and oral comments provided at the NOP scoping meeting.

Reference Information: Information for this resource section is based on numerous sources, including the PLAN Hermosa Technical Background Report (TBR) and other publicly available documents. The TBR is attached to this document as **Appendix C**. **Appendix F** to this EIR provides the noise modeling data used to complete this analysis.

4.11.2 ENVIRONMENTAL SETTING

Appendix C-15 describes the basic science of acoustics and specific acoustic practices related to environmental noise and vibration, summarizes how noise affects humans in the built environment, and includes information on noise levels and descriptions of the existing noise sources and sensitive receptors in the city.

FUNDAMENTALS OF SOUND AND ENVIRONMENTAL NOISE

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations which make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel (dBA) scale compensates by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound because of its potential to disrupt sleep, to interfere with speech communication, and to damage hearing. A typical noise environment consists of a base of steady "background" noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources, which can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway.

AMPLITUDE

Amplitude is the difference between ambient air pressure and the peak pressure of the sound wave. Amplitude is measured in decibels on a logarithmic scale. Laboratory measurements correlate a 10 dB increase in amplitude with a perceived doubling of loudness and establish a 3 dB change in amplitude as the minimum audible difference perceptible to the average person.

FREQUENCY

Frequency is the number of fluctuations of the pressure wave per second. The unit of frequency is the Hertz. One Hertz equals one cycle per second. To approximate this sensitivity, environmental sound is usually measured in A-weighted decibels. On this scale, the normal range of human hearing extends from about 10 dBA to about 140 dBA. Common community noise sources and associated noise levels, in dBA, are shown in **Appendix C-15**.

ADDITION OF DECIBELS

Because decibels are logarithmic units, sound levels cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. Under the decibel scale, three sources of equal loudness together would produce an increase of 5 dB.

SOUND PROPAGATION AND ATTENUATION

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics. No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of 3 dB per doubling of distance is assumed.

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more.

NOISE DESCRIPTORS

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined below.

- L_{eq}, the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- L_{dn}, the Day-Night Average Level, is a 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 PM to 7:00 AM to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 5 dBA "weighting" during the hours of 7:00 PM to 10:00 PM and a 10 dBA "weighting" added to noise during the hours of 10:00 PM to 7:00 AM to account for noise sensitivity in the

evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.

- L_{min} is the minimum instantaneous noise level experienced during a given period of time.
- L_{max} is the maximum instantaneous noise level experienced during a given period of time.
- Percentile Noise Level (L_n) is the noise level exceeded for a given percentage of the measurement time. For example, L_{10} is the noise level exceeded for 10 percent of the measurement duration, and L_{50} is the noise level exceeded for 50 percent of the measurement duration.

HUMAN RESPONSE TO NOISE

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings that can provide noise levels as low as 20 dBA and quiet, suburban, residential streets that can provide noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in A-weighted noise levels (dBA), the following relationships should be noted for understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived by humans.
- Outside of the laboratory, a 3 dB change is considered a just-perceivable difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected. An increase of 5 dB is typically considered substantial.
- A 10 dB change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

EXISTING CONDITIONS

Noise-Sensitive Receptors

Noise-sensitive land uses are those that may be subject to stress and/or interference from excessive noise. Noise-sensitive land uses include schools, hospitals, churches, and museums. Typically, residential uses are also considered noise-sensitive receptors. Industrial and commercial land uses are generally not considered sensitive to noise. In Hermosa Beach, noise-sensitive residential uses, schools, and other institutional uses are located throughout the city, occupying approximately 67 percent of the city's total land area.

The city has a number of noise sources that are common to urbanized communities, including traffic on local streets, commercial/industrial activities, construction/demolition activities, refuse collection, bars and restaurants, and public and private events and parties. Construction and demolition operations are the only significant sources of groundborne vibration in the city, although heavy trucks traveling over potholes or other discontinuities in the pavement can cause vibration at sufficient levels to generate complaints from nearby residents.

A community noise survey was conducted in August 2014 to document the existing noise environment at noise-sensitive receptors in the city. During the survey, average ambient hourly noise levels ranged from 56.2 dBA to 72.3 dBA (L_{eq}), 24-hour ambient noise levels ranged from 68.7 dB to 71.3 dB CNEL, and maximum noise levels ranged from 65.0 dBA to 93.5 dBA maximum noise level (L_{max}). Maximum noise levels were attributable to backup alarms, car horns, large trucks, and motorcycles.

Traffic Noise

Traffic noise is the dominant noise source in the city, originating from major roads such as Aviation Boulevard and Pacific Coast Highway. To document the existing traffic noise conditions, measurements were obtained at 10 locations in the city, including along Hermosa Avenue, Pacific Coast Highway, and Pier Avenue, to obtain a representative sample of existing noise conditions in the city. The measurements were taken during the summer months to account for increased visitor traffic over a continuous 24-hour period. The results of the noise measurements are summarized in **Table 4.11-1 (Summary of Noise Measurement Results)**.

TABLE 4.11-1
SUMMARY OF NOISE MEASUREMENT RESULTS

Location #	Location Description	Measurement Period	Average Noise Level, dBA	CNEL, dB
1	2703 El Oeste Dr.	12:21 PM to 12:46 PM	67.1	Not measured
2	2491 Valley Dr.	11:36 AM to 12:00 PM	63.5	Not measured
3	1838 Hermosa Ave.	4:27 PM to 4:47 PM	63.6	Not measured
4	1901 Pacific Coast Hwy.	24 hours	56.2–72.3	71.3
5	237 Pier Ave.	10:59 AM to 11:21 AM	56.3	Not measured
6	1021 Bonnie Brae St.	10:18 AM to 10:40 AM	66.0	Not measured
7	420 Ardmore Ave.	1:07 PM to 1:38 PM	56.2	Not measured
8	104 Hermosa Ave.	3:52 PM to 4:14 PM	63.2	Not measured
9	540 1st St.	3:00 PM to 3:25 PM	62.7	Not measured
10	117 Prospect Ave.	24 hours	58.2–65.7	68.7

Source: City of Hermosa Beach 2014

As shown in **Table 4.11-2 (Comparison of Noise Measurement Results with City's Policies),** the measured ambient noise levels are well above the City's existing policy for maximum traffic noise levels.

TABLE 4.11-2
COMPARISON OF NOISE MEASUREMENT RESULTS WITH CITY'S POLICIES

Location #	Location Description	Zone	Measured Noise Level, dBA	City's Policy for Maximum Traffic Noise Level, dBA[1]
1	2703 El Oeste Dr.	R-1	67.1	50 or below
2	2491 Valley Dr.	R-1A	63.5	50 or below
3	1838 Hermosa Ave.	R-2	63.6	55 or below
4	1901 Pacific Coast Hwy.	R-3	56.2–72.3	60 or below
5	237 Pier Ave.	SPA-11 (used as R-1)	56.3	50 or below
6	1021 Bonnie Brae St.	C-3 (used as R-1)	66.0	50 or below
7	420 Ardmore Ave.	M-1(used as R-1)	56.2	50 or below
8	104 Hermosa Ave.	R-3	63.2	60 or below
9	540 1st St.	SPA-4 (used as R-2 or R-3)	62.7	55-60 or below
10	117 Prospect Ave.	R-1	58.2–65.7	50 or below

Source: City of Hermosa Beach 2014

Note: The City's current General Plan states that maximum traffic noise levels should be restricted in residential areas to no more than 5 dBA above ambient standard levels. The ambient standard levels are 45 dBA or below for R-1 zones, 50 dBA or below for R-2 zones, and 55 dBA or below for R-3 zones.

The results of the noise measurements, together with data provided by the City's traffic consultant on observed traffic counts modeled on peak traffic volumes, were used to analyze the existing traffic noise environment in Hermosa Beach. **Table 4.11-3 (Distance to Existing Unmitigated CNEL Contour Lines)** summarizes the results of the analysis. The results are presented in terms of an unmitigated CNEL at the distance of the nearest existing receptor from the centerline of the roadway. Also provided in the table are the distances from the roadway centerlines to the unmitigated 60 dB, 65 dB, and 70 dB noise contour lines.

The California Building Code standards require that all multi-family residential dwellings be designed to achieve a CNEL of 45 dB within the interior of all habitable spaces. The City of Hermosa Beach extends this requirement to include all single-family residential dwellings. Typically, residential construction in California provides about 20 dB of noise reduction with all windows and doors closed. Therefore, it may be reasonably assumed that all residential dwellings located in an area where the exterior CNEL is 65 dB or less will be exposed to an interior CNEL of 45 dB or less, complying with both the State's standard and the City's policies. The existing CNEL is estimated to be 65 dB or less at the exterior of all residential dwellings adjacent to the analyzed street segments, with the following exceptions: adjacent to Aviation Boulevard between Pacific Coast Highway and Prospect Avenue, and adjacent to Pacific Coast Highway between Artesia Boulevard and 2nd Street. At these locations, ambient noise levels are above established City noise standards.

In compliance with California Government Code Section 65302(f), **Figure 4.11-1 (Existing Noise Contours in Hermosa Beach)** shows the CNEL contours for the existing traffic noise environment in Hermosa Beach. The CNEL contours on the map range from 60 dB to 70 dB in 5 dB increments. The CNEL contours were developed utilizing SoundPLAN version 7.3 software, which uses the prediction algorithms developed by the Federal Highway Administration (FHWA) for its Traffic Noise Model.

TABLE 4.11-3
DISTANCE TO EXISTING UNMITIGATED CNEL CONTOUR LINES

Arterial/Segment	CNEL at Nearest Sensitive Receptor	Distance to Unmitigated CNEL Contours from Roadway Centerline		
		60 dB	65 dB	70 dB
8th Street Hermosa to Valley PCH to Prospect	57 dB 47 dB	R/W R/W	R/W R/W	R/W R/W
Ardmore Avenue 16th to 11th 8th to 2nd	58 dB 57 dB	R/W R/W	R/W R/W	R/W R/W
Artesia Boulevard PCH to Prospect	65 dB	429′	157′	52′
Aviation Boulevard PCH to Prospect	70 dB	358′	126′	40′
Gould Avenue Ardmore to PCH	64 dB	79′	R/W	R/W
Hermosa Avenue 27th to 22nd 22nd to 16th 16th to 8th 8th to Herondo	62 dB 62 dB 62 dB 62 dB	71′ 65′ 76′ 76′	R/W R/W R/W R/W	R/W R/W R/W R/W
Herondo Street Hermosa to Valley	65 dB	156′	50′	R/W
Pacific Coast Highway Artesia to 16th 16th to Aviation Aviation to 2nd	72 dB 67 dB 68 dB	557′ 419′ 484′	214′ 152′ 180′	67′ 48′ 57′
Pier Avenue Hermosa to Valley Ardmore to PCH	62 dB 65 dB	91′ 147′	R/W 46′	R/W R/W
Prospect Avenue Artesia to Aviation Aviation to 2nd	59 dB 63 dB	R/W 62′	R/W R/W	R/W R/W
Valley Drive Gould to Pier Pier to 8th	59 dB 60 dB	R/W R/W	R/W R/W	R/W R/W

Note: R/W signifies that the noise contour falls within the right-of-way of the street.

Source: City of Hermosa Beach 2014

FIGURE 4.11-1
EXISTING NOISE CONTOURS IN HERMOSA BEACH

Source: City of Hermosa Beach 2014

Bar and Restaurant Noise

Noise from bars and restaurants is a frequent source of complaints in Hermosa Beach. The noise level produced by a bar or restaurant varies widely, depending on a number of factors. Measurements indicate that average noise levels within the building can range from 75 A-weighted decibels (dBA) (with low background music or no music at all) to over 95 dBA (with entertainment). Maximum noise levels can be up to 20 dBA higher than these average levels. Typical building construction will reduce these noise levels by about 10 dB with windows and doors open, or by about 20 dB with windows and doors closed. Outdoor dining areas can produce average noise levels of 65 dBA to 70 dBA and maximum noise levels of 85 dBA to 90 dBA at a distance of 20 feet from the center of the dining area. The City of Hermosa Beach does not have quantitative standards by which to assess the impact of noise from bars and restaurants.

Public and Private Event and Party Noise

Hermosa Beach plays host to a number of public and private events throughout the year, as many as 75 days of events during the summer in recent years. For the most part, the public events take place at the beach or around the pier, with occasional events held Downtown or in a park. Some of these public events (for example, the summer concerts at the beach) can generate significant levels of noise that can be heard throughout much of the city. To identify typical noise levels that can be generated by a summer concert, a measurement was obtained on The Strand in front of the closest residence to the pier. The results of the measurement indicated an average noise level of 73.6 dBA and a maximum noise level of 81.8 dBA.

Commercial/Industrial Activity Noise

In Hermosa Beach, industrial uses are generally concentrated along Cypress Avenue between 8th Street and South Park. These sites are occupied by various light manufacturing facilities, warehouses, construction supply sites, a surfboard manufacturing use, auto shops, air conditioning and heating manufacturing uses, and the City's maintenance yard. Surrounding these industrial properties are various residential properties, commercial properties, and South Park.

Another industrial site is located on Valley Drive adjacent to a mobile home park and Hermosa Valley School. Commercial properties are generally concentrated along Pacific Coast Highway, Pier Avenue, Hermosa Avenue, Aviation Boulevard, and Artesia Boulevard. Noise-sensitive residential properties are typically located adjacent to these commercial properties.

The primary complaints associated with commercial/industrial properties relate to noise generated by trucks and heavy equipment, loading dock operations, trucks entering and leaving the area, and mechanical equipment located both inside and outside the buildings. Commercial/industrial noise impacts primarily result when activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours) or the activities occur in areas immediately adjoining noise-sensitive land uses. The City identifies "noise tolerance standards" for various types of land uses in the city, ranging from 45 dBA or below for R-1 zones (including schools, hospitals, nurseries, and rest homes) to 65 dBA or below for M zones. It is likely that the City's General Plan noise tolerance standards are currently being exceeded at many residential properties.

Construction/Demolition Activity Noise

Construction activities generate considerable amounts of noise, especially during the demolition phase and during the construction of project infrastructure when heavy equipment is used. Noise levels resulting from construction depend on the number and types of construction equipment being used and the timing and duration of noise-generating activities. The highest maximum noise levels generated by project construction would typically range from about 90 to 105 dBA at a distance of 50 feet from the noise source. Typical hourly average construction-generated noise levels are about 81 to 89 dBA measured at a distance of 50 feet from the center of the site during busy construction periods, such as when earth-moving equipment and impact tools are being used.

Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (early morning, evening, or nighttime hours), when construction occurs in areas immediately adjoining noise-sensitive land uses, or when construction durations last over extended periods of time. The City of Hermosa Beach regulates noise by limiting the hours when construction can occur. Municipal Code Section 8.24.050 limits construction activity to between 8:00 AM and 6:00 PM, Monday through Friday (except national holidays), and between 9:00 AM and 5:00 PM on Saturdays. Construction activity is prohibited at all other hours and on Sundays and national holidays.

Refuse Collection Noise

Trash pickup and compacting vehicles typically use hydraulic equipment to raise and lower the trash bins and to compact their contents. Typical noise levels range from 80 to 85 dBA at 50 feet during raising, lowering, and compacting operations. A typical trash pickup takes approximately 3 minutes, with the higher noise levels occurring during about half of the operation. While noise associated with refuse collection is not explicitly regulated by the City of Hermosa Beach, the City's Municipal Code regulates the times in which refuse may be collected. Refuse may not be collected between the hours of 6:00 PM and 7:00 AM, and may not be collected in residential areas on Saturdays or Sundays.

Construction/Demolition Vibration

The only significant vibration source in Hermosa Beach is construction equipment. Construction activities may include demolition of existing structures, site preparation work, excavation of below-grade levels, foundation work, pile driving, and framing. Depending on the proximity of existing structures to each construction site, the structural soundness of the existing buildings, and the methods of construction used, vibration levels caused by pile driving or other impact work may be high enough to damage existing structures. Other construction activities, such as caisson drilling, the use of jackhammers, rock drills, and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.), may also generate substantial vibration in the immediate vicinity of the site.

Table 4.11-4 (Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels) displays reactions of people and the effects on buildings that continuous vibration levels produce.

TABLE 4.11-4
DAMAGE TO BUILDINGS FOR CONTINUOUS OR FREQUENT INTERMITTENT VIBRATION LEVELS

Velocity Level, PPV (in/sec)	Human Reaction	Effects on Buildings
0.01	Barely perceptible	No effect
0.04	Distinctly perceptible	Vibration unlikely to cause damage of any type to any structure
0.08	Distinctly perceptible to strongly perceptible	Recommended upper level of the vibration to which runs and ancient monuments should be subjected
0.01	Strongly perceptible	Virtually no risk of damage to normal buildings
0.3	Strongly perceptible to severe	Threshold at which there is a risk of damage to older residential dwellings such as plastered walls or ceilings
0.5	Severe – Vibrations considered unpleasant	Threshold at which there is a risk of damage to newer residential structures

Source: Caltrans 2004

4.11.3 REGULATORY SETTING

Federal, state, and local laws, regulations, and policies regulate noise in the planning area. They provide the regulatory framework for addressing all aspects of noise that would be affected by implementation of PLAN Hermosa. The regulatory setting for noise is discussed in detail in **Appendix C-15**. While federal and state guidelines outline noise requirements, specific noise policies are enacted at the local level.

LOCAL

- **City of Hermosa Beach General Plan Noise Element:** The current Noise Element of the City's General Plan was adopted in October 1979 and has the following stated goals:
  - Reduce transportation noise to a level that does not jeopardize health and welfare.
  - Minimize noise levels of future transportation facilities.
  - Establish compatible land use adjacent to transportation facilities.
  - Allocate noise mitigation costs among those who produce the noise.
  - Alert the public regarding the potential impact of transportation noise.
  - Protect areas that are presently quiet from future noise impact.

To achieve these goals, the existing Noise Element identifies a number of policies and implementation programs to guide the City's actions. The existing Noise Element further states that "City policy should be geared to the following maximum ambient noise levels."

TABLE 4-11-5
HERMOSA BEACH MAXIMUM AMBIENT NOISE LEVELS

Zoning	Maximum Ambient Noise Levels
R-1	45 or below (also schools, hospitals, nurseries and rest homes)
R-2	50 or below (also parks and playgrounds)
R-3	55 or below
C-1	55 or below
C-2/C-3	60 or below
M	65 or below

Source: City of Hermosa Beach 1979

Maximum traffic noise should be restricted to no more than 5dBA above the ambient standard levels in residential areas, and to no more than 10 dBA above the ambient standard levels in commercial and manufacturing areas.

The Noise Element also includes a program that extends the acoustical requirements of the California Building Code (Title 24, Part 2, of the California Code of Regulations) to include single-family dwellings. This extension requires all single-family residential dwellings exposed to a CNEL of 60 dB or greater to have an acoustical study performed that shows how an interior CNEL of 45 dB or less will be achieved in habitable rooms.

- **City of Hermosa Beach Municipal Code:** The City's Municipal Code does not provide any quantitative noise standards. However, Municipal Code Chapter 8.24 establishes the City's policy toward noise. The chapter's stated purpose is "to strike a balance between normal, everyday noises that are unavoidable in an urban environment and those noises that are so excessive and annoying that they must be curtailed in order to protect the comfort and tranquility of all persons who live and work in the city." Chapter 8.24 uses the following methods to achieve its purpose: (1) establishing general standards by which to determine whether a noise is annoying and unreasonable; (2) placing limits on the audibility of certain noise sources or on the hours during which certain noise sources may be audible; (3) restricting the hours during which certain activities can produce noise; (4) prohibiting the use of leaf blowers; and (5) requiring that doors and windows at businesses on Pier Plaza be closed when amplified music is being played.

  Municipal Code Chapter 9.28 establishes the City's policies regarding parties, events, and gatherings on private property. With regard to noise, an event may not produce a noise level that exceeds 95 dBA at the property line at any time. Such events may only take place on weekends (from 5:00 PM on Fridays through 10:00 PM on Sundays).

  Municipal Code Section 17.42.150(D)(5) states that amplified entertainment at temporary minor special events shall be limited to the hours of 10:00 AM to 9:00 PM and may not last more than four hours in any day. Noise levels may not exceed 80 dBA at the property line and may not constitute a nuisance or violate the requirements of Chapter 8.24. Additionally, the chapter states that amplified music and live entertainment shall be permitted notwithstanding the provisions of Chapter 8.24 for a maximum duration of four hours (start to finish) and shall cease no later than 11:45 PM on Friday and Saturday nights, and 9:45 PM on Sundays. The event shall conclude not later than 12:00 midnight on Friday and Saturday nights, and 10:00 PM on Sundays.

4.11.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, a significant impact would occur if implementation of PLAN Hermosa would:

1) Expose persons to or generate noise levels in excess of the standards established in the City's General Plan, Zoning Ordinance, or Noise Ordinance, or applicable standards of other agencies.

2) Expose persons or structures to or generate excessive groundborne vibration or groundborne noise levels.

3) Create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

4) Create a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

5) Expose people residing or working in the project vicinity to excessive noise levels associated with public and private aircraft operations.

There are no airports located within 5 miles of the city; therefore, impacts associated with exposure of persons to excessive aircraft noise will not be evaluated.

ANALYSIS APPROACH

This analysis of the existing and future noise environments is based on noise prediction modeling and empirical observations. The residential uses in the project vicinity are considered noise-sensitive receptors, while the commercial land uses are not.

Short-Term Construction Noise

Predicted noise levels at nearby noise-sensitive land uses were calculated using typical noise levels and usage rates associated with construction equipment, derived from representative data obtained from similar projects. Construction noise levels were predicted assuming an average noise attenuation rate of 6 dB per doubling of distance from the source.

Groundborne Vibration

Groundborne vibration levels associated with potential construction-related activities as well as operations were evaluated using typical groundborne vibration levels associated with construction equipment and heavy-duty trucks, obtained from the Caltrans 2004 guidelines (Caltrans 2004). Potential groundborne vibration impacts were evaluated taking into account the distance from construction activities to nearby structures and typically applied criteria for structural damage.

Long-Term Traffic Noise

The project's potential to permanently increase traffic noise is addressed under the following scenarios: the existing plus project and the cumulative plus project. The analysis of future traffic noise levels in Hermosa Beach was conducted using data developed by Fehr & Peers for PLAN Hermosa. Two future (Year 2040) traffic scenarios were analyzed. The first scenario assumes that the city continues to develop based on the policies identified in the current General Plan (October 1979), while the second scenario assumes that the city develops in the future based on the objectives, goals, and policies outlined in PLAN Hermosa. The analysis used SoundPLAN

version 7.3 software, which uses the traffic noise prediction algorithms developed by the Federal Highway Administration for its Traffic Noise Model.

Long-Term Operational Stationary-Source Noise

Predicted noise levels associated with on-site stationary noise sources were calculated based on representative data obtained from existing literature and noise assessments prepared for development projects with land uses similar to those that could be development under PLAN Hermosa. Operational noise levels were predicted assuming an average noise attenuation rate of 6 dB per doubling of distance from the source. Expected operational were used for comparison to the City's noise standards.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa policies and implementation actions, all from the Public Safety Element, that address noise and vibration impacts include the following:

Policies

Public Safety Element

- **7.1 Noise standards.** Adopt, maintain, and enforce planning guidelines that establish the acceptable noise standards identified in Table 6.3 [shown in **Table 4.11-6** below].
- **7.2 Noise compatibility.** Utilize the Land Use/Noise Compatibility Matrix shown in Table 6.4 [shown in **Table 4.11-7** below] as a guide for future planning and development decisions.
- **7.3 Noise analysis and mitigation.** Require all proposed development projects and modifications to existing developments are compatible with the existing and future noise levels by using the Land Use/Noise Compatibility matrix shown in Table 6.4. Where proposed projects are not located in an area that is "clearly compatible," the City will require that an acoustical study be prepared as a condition of building permit approval demonstrating compliance with the noise standards shown in Table 6.3.
- **7.4 Condominium conversions.** Require conversion projects from existing apartments into condominiums submit an acoustical analysis demonstrating compliance with the State of California Noise Insulation Standards.
- **7.4 Transportation facility compatibility.** The City will periodically review County, regional, and local plans for transportation facilities and new developments to minimize or avoid land use/noise conflicts prior to project approval.
- **7.5 Noise ordinance.** Establish a quantitative noise ordinance based on Chapter 12.08 of the Los Angeles County Code.
- **8.1 Alternative modes of transportation.** Reduce noise impacts by encouraging the use of walking, biking, carpooling, use of public transit, and other alternative modes of transportation.
- **8.2 Traffic calming.** Where roadway noise levels exceed the "normally compatible" range shown in the Land Use/Noise Compatibility Matrix (Figure 3), consider the implementation of traffic calming measures such as reduced speed limits or roadway design features to reduce noise levels through reduced vehicle speeds and/or diversion of vehicular traffic.
- **8.3 Enforcement.** Enforce the posted speed limit and the noise standards included in the State's Motor Vehicle Code to reduce noise impacts from vehicles, particularly in residential areas.

- **8.4 Public transit.** Work with Beach Cities Transit and MTA to establish bus routes that meet public transportation needs and minimize noise impacts in residential areas.

PLAN Hermosa additionally includes noise standards for interior and exterior levels, as depicted in **Table 4.11-6 (Interior and Exterior Noise Standards)** and **Table 4.11-7 (Land Use/Noise Compatibility Matrix).**

TABLE 4.11-6
INTERIOR AND EXTERIOR NOISE STANDARDS
[TABLE 6.3 IN PLAN HERMOSA]

Land Use	CNEL	
	Exterior[1]	Interior[2]
Residential	65 dB	45 dB
Hotels/Motels	65 dB	45 dB
Schools, Libraries, Churches, Hospitals, Nursing Homes	65 dB	45 dB
Auditoriums, Concert Halls, Amphitheaters	65 dB	45 dB
Sports Arena, Outdoor Spectator Sports	65 dB	N/A
Playgrounds, Neighborhood Parks	70 dB	N/A
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75 dB	N/A
Office Buildings, Business Commercial and Professional	70 dB	50 dB
Industrial, Manufacturing, Utilities, Agriculture	75 dB	65 dB

1. *Outdoor environment limited to private yard of single-family residences; private patios of multi-family residences that are accessed by a means of exit from inside the unit; mobile home park; hospital patio; park picnic area; school playground; and hotel and motel recreation areas.*
2. *Interior environment excludes bathrooms, toilets, closets, and corridors. Noise level requirement is with windows closed. Mechanical ventilation system or other means of natural ventilation shall be provided pursuant to the requirements of the Uniform Building Code (UBC).*

TABLE 4.11-7
LAND USE/NOISE COMPATIBILITY MATRIX
[TABLE 6.4 IN PLAN HERMOSA]

Uses	Community Noise Equivalent Level (CNEL)						
	<55 dB	55 dB	60 dB	65 dB	70 dB	75 dB	80+ dB
Single-, multi-family	A	A	B	B	C	D	D
Mobile home	A	A	B	C	C	D	D
Hotel, motel, transient lodging	A	A	B	B	C	C	D
Retail, bank, restaurant, movie theater	A	A	A	A	B	B	C
Office building, research & development, professional office	A	A	A	B	B	C	D
Amphitheater, concert hall, auditorium, meeting hall	B	B	C	C	D	D	D
Children's amusement park, miniature golf, go-cart track, health club, equestrian center	A	A	A	B	B	D	D
Service station, auto dealer, manufacturing, warehousing, wholesale, utilities	A	A	A	A	B	B	B
Hospital, church, library, school classrooms	A	A	B	C	C	D	D
Parks	A	A	A	B	C	D	D
Golf course, nature center, cemetery, wildlife reserve, wildlife habitat	A	A	A	A	B	C	C
Agriculture	A	A	A	A	A	A	A

Zone A, Clearly Compatible. The specified land use is satisfactory, based upon the assumption that buildings are of normal conventional construction without any special noise insulation requirements.

Zone B, Normally Compatible. New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Zone C, Normally Incompatible. New construction or development should normally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features must be included in the design.

Zone D, Clearly Incompatible. New construction or development should generally not be undertaken.

Implementation Actions

- NOISE-1. Incorporate or request the inclusion of soundwalls, earthen berms, or other acoustical barriers as part of any roadway improvement project adjacent to a residential area, school, or other sensitive land use, where necessary to mitigate identified adverse significant noise impacts.
- NOISE-2. Enforce and periodically evaluate truck and bus movements and routes to reduce impacts on sensitive areas, and promote coordination between the Police Department and the California Highway Patrol to enforce the State Motor Vehicle noise standards, to minimize or reduce noise impacts on residential and other sensitive land uses.
- NOISE-3. Apply the Noise Element standards of compatibility described in PLAN Hermosa to new development proposals. Require the mitigation of anticipated impacts through design features such as building orientation and acoustical barriers, to ensure compatibility.

- NOISE-4. Require new multi-family development, single-family development, and condominium conversion projects to meet the California Noise Insulation Standards (Title 24 of the California Administrative Code) for interior and exterior noise levels.
- NOISE-5. Acoustical analysis reports prepared by a qualified acoustical consultant shall be required for new sensitive land uses within noise impact areas (i.e., those areas where the existing or future CNEL exceeds 60 dB).
- NOISE-6. Adopt and enforce a quantitative Noise and Vibration Ordinance to reduce excessive noise and vibration from site-specific sources such as construction activity, mechanical equipment, landscaping maintenance, loud music, truck traffic, loading and unloading activities, and other sources.
- NOISE-7. Periodically review adopted noise standards, policies and regulations affecting noise in order to conform to changes in legislation and/or technologies.
- NOISE-8. Comply with all state and federal OSHA noise standards, and all new equipment purchases shall comply with state and federal noise standards.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.11-1 ***Would PLAN Hermosa Expose Persons to or Generate Noise Levels in Excess of Standards?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that may expose persons to or generate noise levels in excess of the standards established in the General Plan, Zoning Ordinance, or Noise Ordinance or in applicable standards of other agencies. However, PLAN Hermosa policies and implementation actions would reduce this impact to* ***less than significant.***

For the purpose of this analysis, a significant noise impact would be assessed if implementation of PLAN Hermosa would expose people to construction, operational and traffic noise levels in excess of the proposed standards listed in **Table 4.11-6 (Interior and Exterior Noise Standards)**.

PLAN Hermosa Proposed Standards

As described above, PLAN Hermosa would include several policies proposing new noise standards to be implemented by the City. Policy 7.1 states that the City shall adopt, maintain, and enforce planning guidelines that establish the acceptable noise standards identified in Table 6.3 [included as **Table 4.11-6** above]. Policy 7.2 states that the City will utilize the Land Use/Noise Compatibility Matrix shown in Table 6.4 [included as **Table 4.11-7** above] as a guide for future planning and development decisions.

The existing Noise Element defines the maximum ambient noise standards as shown above in **Table 4.11-5**: 45 dB for family residential (R-1); maximum 50 dB for two-family residences (R-2); maximum 55 dB for multi-family residential and neighborhood commercial (R-3 and C-1); maximum 60 dB for general commercial (C-2 and C-3); and maximum 65 for light manufacturing (M). The existing Noise Element also states that maximum traffic noise should be restricted to no more than 5 dBA above the ambient standard levels in residential areas and to no more than 10 dBA above the ambient standard levels in commercial and manufacturing areas. The existing Noise Element was established in 1979; thus, it is not a clear reflection of the existing ambient noise levels in the city and does not reflect city's development.

By comparing the proposed ambient (exterior) noise standards of existing and proposed regulations, PLAN Hermosa's new noise standards would exceed current established standards. As described above, documentation of the existing noise environment at noise-sensitive receptors in the city showed average ambient hourly noise levels ranged from 56.2 dBA to 72.3

dBA (L_{eq}), 24-hour ambient noise levels ranged from 68.7 dB to 71.3 dB CNEL, and maximum noise levels ranged from 65.0 dBA to 93.5 dBA maximum noise level (L_{max}). Because existing ambient noises in the city are above existing guidelines, PLAN Hermosa would align City policies with existing ambient noise levels and better reflect the existing ambient noise setting in the city. Nonetheless, with implementation of Policy 7.2, uses would be placed in areas with compatible noise sources, thus minimizing potential exposure of sensitive users in areas with excessive noise standards. Policy 7.2 would minimize siting conflicts and potential noise impacts that would arise from improper siting of land uses. Policy 7.3 requires proper siting of uses and the preparation of an acoustic study when such siting is not apparent.

Additionally, PLAN Hermosa includes Policy 7.5, which directs the City to establish a quantitative noise ordinance modeled on Chapter 12.08 of the Los Angeles County Code. The City does not currently have a quantitative noise ordinance, as described above in the Regulatory Setting subsection. Los Angeles County Code Chapter 12.08 establishes noise zones based on user sensitivity, interior and exterior noise standards, and corrections for certain types of sounds. For example, the Los Angeles County Code establishes an interior noise standard from 7 AM to 10 PM for residential land uses of 45 dB. Enacting a quantitative noise measurement would further protect sensitive noise users from exposure to excessive noise levels.

Although PLAN Hermosa proposes policies that would allow for increases in acceptable ambient noise levels, it also includes policies that would ensure proper siting of noise-generating uses and noise-sensitive uses through the implementation of quantitative policies. Therefore, because the City would establish quantitative noise regulations that would protect sensitive users, PLAN Hermosa would have a **less than significant** impact due to noise in excess of regulations.

Traffic Noise

As discussed in Section 4.14, Transportation, future (Year 2040) traffic scenarios were analyzed for Hermosa Beach. The first scenario assumes that the city continues to develop based on the policies identified in the current General Plan (October 1979), while the second scenario assumes that the city develops in the future based on the objectives, goals, and policies outlined in PLAN Hermosa. **Figure 4.11-2 (Future (2040) Noise Contours with Implementation of PLAN Hermosa)** is a noise contour map for the PLAN Hermosa scenario.

Table 4.11-8 (Existing and Future Traffic Noise Levels at the Nearest Sensitive Receptors) summarizes the results of the analyses for the existing and future traffic scenarios. The results are presented in terms of unmitigated exterior CNEL at the distance to the nearest existing receptor from the centerline of the roadway segment. Referring to the table, implementation of PLAN Hermosa would not generate an exterior CNEL in excess of the existing General Plan noise standards identified in **Table 4.11-5** at most of the existing sensitive receptors adjacent to the roadway segments considered in the noise study. Therefore, the impact is **less than significant** at these locations.

While the future exterior CNEL at existing sensitive receptors adjacent to Pacific Coast Highway appears to exceed the standards, the impact is considered to be **less than significant** for the following reasons: (1) the existing CNEL at these receptors already exceeds the standards, and (2) the future CNEL at these receptors will be the same as or lower than the existing CNEL. Additionally, none of the projected increases are over 3 dB (a 3 dB change is perceptible to the human ear), which would be a significant impact.

Construction Noise

Typical residential construction in California provides about 20 dB of noise reduction with all windows and doors closed. Therefore, it may be reasonably assumed that the interior CNEL at the existing sensitive receptors would be about 20 dB lower than the values identified in **Table**

4.11-8. Referring to the table, implementation of PLAN Hermosa would not generate an interior CNEL in excess of the standards identified in **Table 4.11-5** at most of the existing sensitive receptors adjacent to the roadway segments considered in the noise study. Therefore, the impact is **less than significant** at these locations.

TABLE 4.11-8
EXISTING AND FUTURE TRAFFIC NOISE LEVELS AT THE NEAREST SENSITIVE RECEPTORS

Roadway/Segment	Unmitigated Exterior CNEL	
	Existing Year	Year 2040 with PLAN Hermosa
8th Street		
Hermosa to Valley	57 dB	57 dB
PCH to Prospect	47 dB	45 dB
Ardmore Avenue		
16th to 11th	58 dB	58 dB
8th to 2nd	57 dB	56 dB
Artesia Boulevard		
PCH to Prospect	65 dB	65 dB
Aviation Boulevard		
PCH to Prospect	70 dB	69 dB
Gould Avenue		
Ardmore to PCH	64 dB	63 dB
Hermosa Avenue		
27th to 22nd	62 dB	63 dB
22nd to 16th	62 dB	62 dB
16th to 8th	62 dB	62 dB
8th to Herondo	62 dB	63 dB
Herondo Street		
Hermosa to Valley	65 dB	65 dB
Pacific Coast Highway		
Artesia to 16th	72 dB	71 dB
16th to Aviation	67 dB	67 dB
Aviation to 2nd	68 dB	67 dB
Pier Avenue		
Hermosa to Valley	62 dB	62 dB
Ardmore to PCH	65 dB	64 dB
Prospect Avenue		
Artesia to Aviation	59 dB	60 dB
Aviation to 2nd	63 dB	63 dB
Valley Drive		
Gould to Pier	59 dB	58 dB
Pier to 8th	60 dB	59 dB

While the future interior CNEL at sensitive receptors adjacent to Pacific Coast Highway appears to exceed the standards, the impact is considered to be **less than significant** for the following reasons: (1) the existing CNEL at these receptors already exceeds the standards, and (2) the future CNEL at these receptors will be the same as or lower than the existing CNEL.

Operational Noise and Sensitive Receptors

Under PLAN Hermosa, new developments would be located adjacent to roadways. Depending on how close these developments are to roadways, they might be exposed to excessive future noise levels. **Table 4.11-9 (Future Noise Impact Zones Adjacent to Roadways)** identifies the distances from the roadway centerlines within which various types of new development could be exposed to noise levels exceeding the noise standards identified in **Table 4.11-5**. If a new development were to occur within the distances shown in **Table 4.11-9**, the impact of the roadway noise exposure could be potentially significant.

TABLE 4.11-9
FUTURE NOISE IMPACT ZONES ADJACENT TO ROADWAYS

Roadway/Segment	Distance from Roadway Centerline Within Which Development May Be Exposed to a Significant Impact				
	Residential, School, Library, Church, Hospital, Nursing Home	Hotel, Motel, Auditorium, Concert Hall, Amphitheater, Sports Arena, Outdoor Sports	Auditorium, Concert Hall, Amphitheater	Office Building, Business Commercial & Professional, Playground, Park	Industrial, Manufacturing, Utility, Agriculture
8th Street					
Hermosa to Valley	—	—	—	—	—
PCH to Prospect	—	—	—	—	—
Ardmore Avenue					
16th to 11th	—	—	—	—	—
8th to 2nd	—	—	—	—	—
Artesia Boulevard					
PCH to Prospect	159 feet	159 feet	159 feet	52 feet	—
Aviation Boulevard					
PCH to Prospect	100 feet	-—	—	—	—
Gould Avenue					
Ardmore to PCH	—	—	—	—	—
Hermosa Avenue					
27th to Herondo	—	—	—	—	—
Herondo Street					
Hermosa to Valley	45 feet	45 feet	45 feet	—	—
Pacific Coast Highway					
Artesia to 16th	186 feet	59 feet	—	—	—
16th to Aviation	130 feet	41 feet	—	—	—
Aviation to 2nd	142 feet	45 feet	—	—	—

Roadway/Segment	Distance from Roadway Centerline Within Which Development May Be Exposed to a Significant Impact				
	Residential, School, Library, Church, Hospital, Nursing Home	Hotel, Motel, Auditorium, Concert Hall, Amphitheater, Sports Arena, Outdoor Sports	Auditorium, Concert Hall, Amphitheater	Office Building, Business Commercial & Professional, Playground, Park	Industrial, Manufacturing, Utility, Agriculture
Pier Avenue					
Hermosa to Valley	—	—	—	—	—
Ardmore to PCH	44 feet	—	—	—	—
Prospect Avenue					
Artesia to 2nd	—	—	—	—	—
Valley Drive					
Gould to 8th	—	—	—	—	—

"—" indicates that there is no distance within which a proposed development will experience a significant impact.

Nonetheless, the PLAN Hermosa Public Safety Element includes actions to reduce noise-related conflicts for new sensitive land uses located adjacent to roadways or commercial/industrial properties. Policy 7.2 requires the Land Use/Noise Compatibility Matrix (Table 6.4 in PLAN Hermosa [Table 4.11-7, above]) be used as a guide for future planning and redevelopment decisions. Policy 7.3 requires all proposed development projects and modifications to existing developments to be compatible with the existing and future noise levels by using the Land Use/Noise Compatibility Matrix. If proposed projects are not located in an area that is "clearly compatible" in Table 6.4 in PLAN Hermosa, the City will require that an acoustical study be prepared as a condition of building permit approval demonstrating compliance with the noise standards shown in Table 6.3 (Interior and Exterior Noise Standards [Table 4.11-6, above]) in PLAN Hermosa.

FIGURE 4.11-2
FUTURE (2040) NOISE CONTOURS WITH IMPLEMENTATION OF PLAN HERMOSA

To reduce noise levels to meet the adopted standards and criteria, projects may be required to include berms, walls, and sound-attenuating architectural design and construction methods, and the City would only permit development if noise standards and regulations would be met. Such decisions would be made on a case-by-case basis through project design review as required by the City to address potential aesthetic impacts. Policy 7.3 requires all proposed development projects and modifications to existing developments to be compatible with the existing and future noise levels by using the Land Use/Noise Compatibility Matrix. If proposed projects are not located in an area that is "clearly compatible" in Table 6.4 in PLAN Hermosa,

the City will require that an acoustical study be prepared as a condition of building permit approval demonstrating compliance with the noise standards shown in Table 6.3 (Interior and Exterior Noise Standards [Table 4.11-6, above]) in PLAN Hermosa. Policy 7.5 would establish a quantitative noise ordinance to regulate noise impacts from stationary sources.

With adherence to and implementation of these PLAN Hermosa policies and implementation actions, program-level stationary noise source and land use conflict noise impacts would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.11-2 ***Would PLAN Hermosa Expose Persons to or Generate Excessive Groundborne Vibration or Groundborne Noise Levels?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that may expose persons to or generate excessive groundborne vibration or groundborne noise levels. This is a* ***potentially significant*** *impact.*

PLAN Hermosa would guide development, the construction of which could generate significant groundborne vibration that could expose building occupants to vibration levels in excess of 0.01 inches per second. **Table 4.11-10 (Typical Vibration Source Levels for Construction Equipment)** identifies the distance within which typical construction equipment generates a vibration velocity level exceeding 0.01 inches per second. If equipment operates within these distances from an occupied building, a significant impact would result.

TABLE 4.11-10
TYPICAL VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	Vibration Velocity Level at 25 Feet, in/sec	Distance from Equipment Within Which the Standard is Exceeded
Pile driver (impact)	0.158	158 feet
Pile driver (sonic)	0.045	68 feet
Clam shovel drop (slurry wall)	0.050	74 feet
Hydro mill (slurry wall)	0.002–0.006	9–17 feet
Vibratory roller	0.050	74 feet
Hoe ram	0.022	43 feet
Large bulldozer	0.022	43 feet
Caisson drilling	0.022	43 feet
Loaded trucks	0.020	40 feet
Jackhammer	0.009	24 feet
Small bulldozer	0.001	5 feet

Source: FTA 2006

Nonetheless, as described in PLAN Hermosa implementation action NOISE-6, the City would adopt and enforce a quantitative Noise and Vibration Ordinance to reduce excessive noise and vibration from site-specific sources such as construction activity, mechanical equipment, landscaping maintenance, loud music, truck traffic, loading and unloading activities, and other sources. Additionally, mitigation measure **MM 4.11-2** would be required to further reduce the potential impact from groundborne vibration.

Mitigation Measures

MM 4.11-2 For development located at a distance within which acceptable vibration standards would be exceeded, the City shall require the applicant to have a structural engineer prepare a report demonstrating the following:

- Vibration level limits based on building conditions, soil conditions, and planned demolition and construction methods to ensure vibration levels would not exceed acceptable levels where damage to structures using vibration levels in Draft EIR Table 4.11-4 as standards.
- Specific measures to be taken during construction to ensure the specified vibration level limits are not exceeded.
- A monitoring plan to be implemented during demolition and construction that includes post-construction and post-demolition surveys of existing structures that would be impacted.

Examples of measures that may be specified for implementation during demolition or construction include but are not limited to:

- Prohibition of certain types of impact equipment.
- Requirement for lighter tracked or wheeled equipment.
- Specifying demolition by non-impact methods, such as sawing concrete.
- Phasing operations to avoid simultaneous vibration sources.
- Installation of vibration measuring devices to guide decision-making for subsequent activities.

Significance After Mitigation

Implementation of mitigation measure **MM 4.11-2** would minimize impacts on sensitive structures from groundborne vibration to acceptable levels. Therefore, this impact would be reduced to **less than significant**.

IMPACT 4.11-3 ***Would PLAN Hermosa Generate Substantial Permanent Increases in Ambient Noise Levels?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not create a substantial permanent increase in ambient noise levels above existing levels. The impact would be* ***less than significant.***

There are two types of noise that can lead to an increase in ambient noise levels: traffic noise from new development and operational noise.

Traffic Noise

Implementation of PLAN Hermosa would lead to an increase of vehicular traffic on local roadways, resulting in increased traffic noise. Traffic noise levels throughout Hermosa Beach were modeled to determine how changes in vehicular traffic volumes would affect traffic noise levels. Traffic noise levels were projected for the buildout year of 2040.

Noise impacts resulting from PLAN Hermosa buildout were assessed by comparing future noise levels to the existing condition, as well as to the future condition that would result assuming that the city continues to develop based on the policies identified in the current General Plan (October 1979). **Table 4.11-11 (Estimated Changes in Traffic Noise Levels Compared to Existing Conditions)** and **Table 4.11-12 (Estimated Changes in Traffic Noise Levels Compared to Future**

Without Project Conditions) compare PLAN Hermosa buildout to the existing and future without project conditions, and provide the estimated increases in traffic noise levels that would occur throughout the city.

TABLE 4.11-11
ESTIMATED CHANGES IN TRAFFIC NOISE LEVELS COMPARED TO EXISTING CONDITIONS

Roadway/Segment	Estimated CNEL at Nearest Sensitive Receptor		Estimated Increase or Decrease in CNEL
	2014	Year 2040 with PLAN Hermosa	
8th Street			
Hermosa to Valley	57 dB	57 dB	0 dB
PCH to Prospect	47 dB	45 dB	-2 dB
Ardmore Avenue			
16th to 11th	58 dB	58 dB	0 dB
8th to 2nd	57 dB	56 dB	-1 dB
Artesia Boulevard			
PCH to Prospect	65 dB	65 dB	0 dB
Aviation Boulevard			
PCH to Prospect	70 dB	69 dB	-1 dB
Gould Avenue			
Ardmore to PCH	64 dB	63 dB	-1 dB
Hermosa Avenue			
27th to 22nd	62 dB	63 dB	1 dB
22nd to 16th	62 dB	62 dB	0 dB
16th to 8th	62 dB	62 dB	0 dB
8th to Herondo	62 dB	63 dB	1 dB
Herondo Street			
Hermosa to Valley	65 dB	65 dB	0 dB
Pacific Coast Highway			
Artesia to 16th	72 dB	71 dB	-1 dB
16th to Aviation	67 dB	67 dB	0 dB
Aviation to 2nd	68 dB	67 dB	-1 dB
Pier Avenue			
Hermosa to Valley	62 dB	62 dB	0 dB
Ardmore to PCH	65 dB	64 dB	-1 dB
Prospect Avenue			
Artesia to Aviation	59 dB	60 dB	1 dB
Aviation to 2nd	63 dB	63 dB	0 dB
Valley Drive			
Gould to Pier	59 dB	58 dB	-1 dB
Pier to 8th	60 dB	59 dB	-1 dB

TABLE 4.11-12
ESTIMATED CHANGES IN TRAFFIC NOISE LEVELS COMPARED TO FUTURE WITHOUT PROJECT CONDITIONS

Roadway/Segment	Estimated CNEL at Nearest Sensitive Receptor		Estimated Increase or Decrease in CNEL
	Year 2040 without PLAN Hermosa	Year 2040 with PLAN Hermosa	
8th Street			
Hermosa to Valley	57 dB	57 dB	0 dB
PCH to Prospect	45 dB	45 dB	0 dB
Ardmore Avenue			
16th to 11th	58 dB	58 dB	0 dB
8th to 2nd	57 dB	56 dB	-1 dB
Artesia Boulevard			
PCH to Prospect	65 dB	65 dB	0 dB
Aviation Boulevard			
PCH to Prospect	69 dB	69 dB	0 dB
Gould Avenue			
Ardmore to PCH	64 dB	63 dB	-1 dB
Hermosa Avenue			
27th to 22nd	63 dB	63 dB	0 dB
22nd to 16th	63 dB	62 dB	-1 dB
16th to 8th	63 dB	62 dB	-1 dB
8th to Herondo	63 dB	63 dB	0 dB
Herondo Street			
Hermosa to Valley	65 dB	65 dB	0 dB
Pacific Coast Highway			
Artesia to 16th	72 dB	71 dB	-1 dB
16th to Aviation	67 dB	67 dB	0 dB
Aviation to 2nd	67 dB	67 dB	0 dB
Pier Avenue			
Hermosa to Valley	62 dB	62 dB	0 dB
Ardmore to PCH	65 dB	64 dB	-1 dB
Prospect Avenue			
Artesia to Aviation	61 dB	60 dB	-1 dB
Aviation to 2nd	64 dB	63 dB	-1 dB
Valley Drive			
Gould to Pier	59 dB	58 dB	-1 dB
Pier to 8th	60 dB	59 dB	-1 dB

Referring to **Table 4.11-11**, PLAN Hermosa would increase the CNEL by at most 1 dB and only at existing residential properties adjacent to Hermosa Avenue between 27th and 22nd streets, between 8th and Herondo streets, and at existing residences adjacent to Prospect Avenue between Artesia and Aviation boulevards. However, the increase in CNEL would not be a significant impact using established noise criteria of 3 dB over existing noise levels (a 3 dB change in noise level is perceptible to the human ear).

Additionally, PLAN Hermosa Public Safety Element policies include actions to ensure that traffic noise levels do not increase significantly in the future. Policy 8.1 directs the City to reduce noise impacts by encouraging the use of alternative transportation, including walking, biking, and public transit, to help reduce roadway noise levels. Policy 8.2 directs the City to consider implementing traffic calming measures where roadway noise levels exceed the normally compatible noise limits. Policy 8.4 requires working with Beach Cities Transit and MTA to establish bus routes that minimize impacts to residential areas.

Operational Noise

Implementation of PLAN Hermosa would result in the construction of new residential and commercial uses throughout the city. These types of uses would also be affected by stationary noise sources. Large-scale heating, ventilating, and air conditioning (HVAC) systems would be installed on the new residential and commercial buildings located in the city. Large HVAC systems associated with new buildings can result in noise levels that average between 50 and 65 dBA L_{eq} at 50 feet from the equipment. However, these HVAC units are usually mounted within HVAC wells on the rooftops of the proposed buildings and would therefore provide a buffer around the HVAC systems. According to the Federal Transit Administration (2006), such screening buffers can reduce noise levels by an average of 5–10 dBA depending on the distance to the receiver; therefore, noise levels would not impact sensitive receptors on or off the project site. Additionally, noise from mechanical equipment associated with operation of the project would be required to comply with California Building Code requirements pertaining to noise attenuation and with City regulations requiring adequate buffering of such equipment.

Operation of new commercial uses that would be developed with PLAN Hermosa implementation within the city would also involve the delivery of goods, as well as refuse pickup. Two noise sources would be identified with delivery operations: the noise of the diesel engines of the semi-trailer trucks and the backup beeper alarm that sounds when a truck is put in reverse, as required and regulated by the California Department of Occupational Safety and Health (Cal/OSHA). The noise generated by idling diesel engines typically ranges between 64 and 66 dBA L_{eq} at 75 feet. This noise would be temporary in nature, typically lasting no more than 5 minutes. Further, backup beepers are required by Cal/OSHA to be at least 5 dBA above ambient noise levels. These devices are highly directional in nature, and when in reverse, the trucks and the beeper alarms would be directed toward the loading area and adjacent commercial structures. Backup beepers are, of course, intended to warn people who are behind the vehicle when it is backing up. These noises associated with commercial operations would be temporary and short in duration. Therefore, there would not have a lasting impact on ambient noise levels.

As such, PLAN Hermosa implementation would have a **less than significant** impact on ambient noise levels.

Mitigation Measures

None required.

IMPACT 4.11-4 ***Would PLAN Hermosa Generate a Substantial Temporary or Periodic Increase in Ambient Noise Levels?*** *PLAN Hermosa would guide future development and reuse projects, as well as temporary events on public property, in a manner that could create a substantial temporary or periodic increase in ambient noise levels above levels existing without the project. However, implementation of PLAN Hermosa policies and implementation actions would reduce this impact to* ***less than significant.***

Temporary increases in noise levels are generally associated with construction activities and with public or private parties and events.

Construction Noise

For the purpose of this analysis, construction noise impacts were evaluated as they relate to compliance with Hermosa Beach Municipal Code Section 8.24.050, which limits construction activity to a period between 8:00 AM and 6:00 PM Monday through Friday (except national holidays), and a period between 9:00 AM and 5:00 PM on Saturdays. Construction activity is prohibited during all other hours and on Sundays and national holidays.

Development allowed under PLAN Hermosa may result in new construction activity, which could temporarily elevate noise levels at adjacent noise-sensitive uses. As discussed above, Hermosa Beach Municipal Code Section 8.24.050 regulates construction noise by limiting the days and times during which construction is permitted to occur. The City considers any construction noise that occurs during these permitted days and times to be generally acceptable. Exceptions occur depending on the extent of project construction activity and the impact on adjoining sensitive receptors and may require mitigation for project-specific construction noise irrespective of the Municipal Code. The City of Hermosa Beach will apply this section of the Municipal Code to all new developments under PLAN Hermosa and enforce its compliance. Additionally, construction impacts with prolonged noise covering more than six months will be evaluated on a case-by-case basis under CEQA. Therefore, the impact is **less than significant**.

Public and Private Event Noise

The City of Hermosa Beach does not regulate the noise levels generated by public and private events held on public property other than to require that a permit be obtained prior to the use of sound amplification equipment. The permit application does not require the applicant to identify the noise levels that would be generated by the equipment. In general, the Chief of Police must approve the application and has the power to revoke such a permit if, among other things, he or she determines that issuance of the permit would substantially interfere with the peace and quiet of the neighborhood or community.

Implementation of PLAN Hermosa is not expected to increase the number of public and private events or parties that occur in the city. However, some of these events and parties are generating sufficiently high noise levels to cause some residents to complain to the City and to call the Hermosa Beach Police Department. Municipal Code Sections 9.28 and 17.42 establishes the City's limitations on noise from parties, events, and gatherings on private property by regulating noise levels, permitted times, and a limit on the number of hours amplified sound may be used per day. In addition, Policy 7.5 requires the adoption of a quantitative noise ordinance that regulates the intrusion of noise from parties and events onto sensitive land uses. It is expected that the ordinance would establish noise standards consistent with the PLAN Hermosa noise standards and provide further direction on acceptable noise levels for noise-sensitive hours (e.g., nighttime hours) as well as notification and enforcement measures such as fines and/revocation of use permits for nonresidential uses that are the noise source. With adherence

to existing Municipal Code regulations pertaining to noise and implementation of PLAN Hermosa policies and implementation actions, program-level noise impacts would be **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

Noise is by definition a localized phenomenon and significantly reduces in magnitude as distance from the source increases. Consequently, only projects and growth due to occur in the Hermosa Beach area would be likely to contribute to cumulative noise impacts. The geographic extent of the cumulative setting for noise consists of Hermosa Beach and neighboring cities.

IMPACT 4.11-5 *Would PLAN Hermosa Contribute to Cumulative Effects of Noise Sources? PLAN Hermosa implementation, in addition to anticipated growth in the region, would result in additional construction activity, as well as stationary and mobile noise sources throughout the city and in adjacent jurisdictions, thereby increasing overall ambient noise levels. Adoption and implementation of PLAN Hermosa policies and implementation actions would reduce the effects of increased noise levels on nearby sensitive receptors. This impact would be* ***less than cumulatively considerable****.*

Implementation of PLAN Hermosa would not generate new stationary noise sources outside of the city and would not therefore result in cumulatively considerable noise impacts involving stationary sources. Additionally, groundborne vibration impacts are localized and would not result in a cumulatively considerable impact.

PLAN Hermosa implementation would generate additional traffic in Hermosa Beach and neighboring cities. Additional traffic volumes associated with future growth in the city would combine with regional traffic on major interjurisdictional roads and highways leading to Hermosa Beach that would contribute to cumulative effects involving roadway noise. The level of traffic noise attributable to Hermosa Beach–based trips that will occur outside of the city will increase gradually over a long period of time and would not result in cumulatively considerable changes in roadway noise levels in the context of regional traffic growth. Therefore, implementation of PLAN Hermosa would have a **less than cumulatively considerable** impact on regional traffic noise.

Mitigation Measures

None required.

4.11.5 REFERENCES

California Department of Transportation. 2004. Department of Transportation, Noise, Vibration, and Hazardous Waste Management Office. *Transportation- and Construction-Induced Vibration Guidance Manual*.

City of Hermosa Beach. 1979. *City of Hermosa Beach General Plan.*

———. 2014. *Hermosa Beach General Plan Update Technical Background Report.*

FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment*.

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4.12 Population and Housing

4.12.1 INTRODUCTION

This resource section evaluates the potential environmental effects related to population, employment, and housing associated with implementation of PLAN Hermosa. The analysis includes a review of the potential to induce population growth and for the displacement of people or housing. PLAN Hermosa Land Use + Design Element policies and implementation actions describe development and infrastructure practices that permit orderly growth while protecting existing residential neighborhoods.

NOP Responses: In response to the Notice of Preparation (NOP), one comment relevant to population, employment, and housing was received from the Southern California Association of Governments (SCAG) (see **Appendix B**). The comment was focused on consistency with the 2012 Regional Transportation Plan (RTP) and forecast. However, it should be noted that the 2012 RTP applies only to the existing General Plan and that the development assumptions in PLAN Hermosa are assumed in the 2016 draft RTP forecast for 2040, so PLAN Hermosa would be consistent in terms of regional planning. SCAG has incorporated the City of Hermosa Beach's local forecasts for the 2016 RTP as discussed below.

Reference Information: Information for this resource section is based on numerous sources, including the PLAN Hermosa Technical Background Report, US Census Bureau data (2010), California Department of Finance data (2015), SCAG's (2015b) Profile of the City of Hermosa Beach and SCAG's (2015a) draft RTP projections, Hermosa Beach's (2014) annual financial report, and other publicly available documents. The Technical Background Report prepared for the project is attached to this document as **Appendix C**.

4.12.2 ENVIRONMENTAL SETTING

This subsection presents existing conditions in 2015 for population, housing units, and employment in Hermosa Beach. It also summarizes 2040 estimates for growth based on regional estimates prepared by SCAG, as well as the expected buildout of PLAN Hermosa and the resulting effects on population, housing, and employment in the city. Key findings are summarized below.

POPULATION

The 2015 population of Hermosa Beach is 19,772. The city is a relatively small urban community in Los Angeles County. From 2000 to 2015, Hermosa Beach's population increased 6.5 percent overall from 18,566 to 19,772 (DOF 2015). The rate of growth slowed during the last five years to 1.5 percent. This rate was less than the growth rate of Los Angeles County during the same five-year period (3.2 percent) (DOF 2015). **Table 4.12-1 (Existing Population and Housing Conditions)** summarizes trends in population and housing since 2010, with a 2000 baseline for comparison.

TABLE 4.12-1
EXISTING POPULATION AND HOUSING CONDITIONS

	2000	2010	2011	2012	2013	2014	2015
Population	18,566	19,506	19,536	19,617	19,689	19,758	19,772
Households	9,476	9,550	9,548	9,548	9,539	9,534	9,501
Housing Units	9,840	10,162	10,160	10,160	10,150	10,145	10,110
Persons per Household	1.99	2.04	2.05	2.05	2.06	2.07	2.08

Source: SCAG 2015b; DOF 2015

HOUSING

There are approximately 10,110 housing units in the planning area. These units are in residential neighborhoods spread throughout much of Hermosa Beach, with the exception of areas directly adjacent to major corridors, in the Downtown core, and in the Cypress Area. Detached single-family dwellings are the predominant type of residence. Some multi-family units and condominiums are dispersed throughout residential neighborhoods, but with greater prominence in areas closer to the Downtown core. Several larger multi-family units are located on Pacific Coast Highway north of Pier Avenue, with several in the southeast corner of the city. Below are additional facts about the condition and price of housing in the city.

- The number of housing units in Hermosa Beach decreased between 2010 and 2015 by 52 units or 0.5 percent (DOF 2015).
- Approximately 6.0 percent of housing units in Hermosa Beach were vacant in 2015 (DOF 2015), compared to 5.8 percent countywide. According to the California Department of Housing and Community Development (2000), a housing vacancy rate of 5.0 percent is considered normal. Vacancy rates below 5.0 percent indicate a housing shortage in a community. Hermosa Beach's slightly higher than normal vacancy rate seems to indicate an oversupply of housing, the presence of second/vacation homes, or housing costs that may be higher than the surrounding region's market supply.
- In 2015, the city had 9,501 households (SCAG 2015b) with an average household size of 2.08 persons (DOF 2015). Household size was smaller than in Los Angeles County as a whole (3.03 persons) (DOF 2015).

EMPLOYMENT

Detailed employment data by industry was last collected by the US Census Bureau in 2011. As of 2011, there were 16,783 persons in Hermosa Beach 16 years old and over, with 13,188 (79 percent) of those in the labor force (eligible for employment), as shown in **Table 4.12-2 (Hermosa Beach Resident Employment by Industry, 2011)**. Of those in the labor force, 94 percent were employed. The largest employment industry for Hermosa Beach residents was mainly professional, such as financial, insurance, information, professional, scientific, and technology services. These are jobs typically associated with higher education levels and with higher incomes. Lower-wage industries, such as accommodation and food services, entertainment, and production, were less represented in the Hermosa Beach labor force, each at 4 percent.

TABLE 4.12-2
HERMOSA BEACH RESIDENT EMPLOYMENT BY INDUSTRY, 2011

	2011	Percentage
Employed Population, 16 and over	**12,394**	**100**
Finance, Insurance, Real Estate, Information, Prof./Tech., Exec. Mgmt.	4,729	38
Manufacturing	1,384	11
Educational Services	1,051	8
Retail Trade	982	8
Health Care and Social Assistance	904	7
Wholesale Trade, Transport, Warehousing	835	7
Accommodation and Food Services	553	4
Arts, Entertainment, and Recreation	462	4

	2011	Percentage
Production (Agriculture, Forestry, Resource Extraction, Utilities, and Construction)	448	4
Admin. & Support, Waste Mgmt./Remediation	394	3
Other Services (excluding Public Admin.)	327	3
Public Administration	325	3

Source: US Census Bureau 2011

The largest employment sector measured by number of jobs in Hermosa Beach is the accommodation and food service industry, accounting for 31 percent of all jobs in 2011 as summarized in **Table 4.12–3 (Jobs by Industry, 2002–2011)**. There were 1,026 financial, information, and professional jobs in the city; however, over 4,700 Hermosa Beach residents are employed in this sector. This shows that residents are traveling outside of the city to work. Only 462 residents employed in this sector live and work in Hermosa Beach.

TABLE 4.12-3
JOBS BY INDUSTRY, 2002–2011

	2011	Percentage	2002–2011 Change
All Jobs	**5,862**	**100%**	**628**
Accommodation and Food Services	1,801	31%	445
Finance, Insurance, Real Estate, Information, Prof./Tech., Exec. Mgmt.	1,026	18%	82
Retail Trade	847	14%	8
Health Care and Social Assistance	394	7%	130
Other Services (excluding Public Admin.)	390	7%	(7)
Admin. & Support, Waste Mgmt./Remediation	364	6%	(182)
Arts, Entertainment, and Recreation	289	5%	137
Educational Services	216	4%	17
Wholesale Trade, Transport, Warehousing	206	4%	32
Public Administration	173	3%	37
Production (Agriculture, Forestry, Resource Extraction, Utilities, and Construction)	156	3%	(71)

Source: Economic & Planning Systems, Inc., 2014
( ) Denotes decrease

As of 2013, there were 7,622 jobs in the city. The largest sector was the leisure sector, with 30.4 percent of the jobs. Other large sectors included professional (14.1 percent), retail (12.6 percent), and education (11 percent) (SCAG 2015b). As shown in **Table 4.12-4 (Percentage of Jobs by Sector, 2007–2013),** from 2007 to 2013, the share of leisure jobs increased from 25.5 to 30.4 percent, while the share of most other sectors shrank, including finance, professional, and retail.

TABLE 4.12-4
PERCENTAGE OF JOBS BY SECTOR, 2007–2013

Sector	2007	2013
Leisure	25.5%	30.4%
Professional & Management	17.0%	14.1%
Retail	11.5%	12.6%
Finance	10.8%	6.7%
Public	10.7%	10.5%
Education	8.5%	11.0%
Other	5.7%	5.4%
Construction	2.6%	2.3%
Wholesale Trade	1.5%	2.1%
Information	2.3%	1.9%
Manufacturing	2.2%	1.4%
Transportation	1.6%	1.3%
Agriculture	0.2%	0.1%
All Jobs	**100%**	**100%**

Source: SCAG 2015b

JOBS TO HOUSING RATIO

The jobs to housing ratio is a measure that can reveal whether a community is primarily an employment center or a residential center, often referred to as a bedroom community. Jobs-rich areas are net importers of employees from other areas because they have more jobs than resident workers. Areas with fewer businesses, like Hermosa Beach, are exporters of employees. When a jobs to housing ratio is especially low, it typically indicates that much of the community is commuting longer distances than may be true in communities with a more equal balance. This can result in the need for additional road infrastructure and many more vehicle miles traveled, not only for work trips but other trips to services, amenities, and entertainment.

In 2015, Hermosa Beach had a jobs to housing ratio of 0.75 (7,622 jobs/10,110 housing units) (SCAG 2015b), meaning there were roughly three-fourths of a job for every housing unit in the city. A jobs to housing ratio of 1.0 means one job exists for every housing unit in an area. However, a jobs to housing ratio does not compare the type of jobs and salary to the cost of housing. So, although a city may have an equal number of jobs and housing units, this does not mean that the persons employed in a city can afford to live in that city.

PROJECTED POPULATION, EMPLOYMENT, AND HOUSING CONDITIONS

SCAG's 2016 Draft Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) provides population, households, and employment estimates for individual cities and unincorporated areas in the region. These forecasts are based on regional trends and market pressures as well as jurisdictions' adopted plans and policies and additional input from the individual jurisdictions during the planning process. The 2040 draft forecasts were published in December 2015.

SCAG's 2016 forecasts for Hermosa Beach for 2040 are presented in **Table 4.12-5 (SCAG 2016 Draft RTP Forecasts for 2040)**.

TABLE 4.12-5
SCAG 2016 DRAFT RTP FORECASTS FOR 2040

	2040
Population	20,400
Households	9,800
Jobs	10,000

Source: SCAG 2015a

As discussed in Chapter 3.0, Project Description, PLAN Hermosa's residential unit growth forecast estimates that approximately 300 residential units may be added in Hermosa Beach over the next 25 years based on an analysis of vacant and underutilized parcels in the low-, medium-, and high-density residential designations (City of Hermosa Beach 2015).

4.12.3 REGULATORY SETTING

State and local laws, regulations, and policies pertain to population, employment, and housing in Hermosa Beach. They provide the regulatory framework for addressing all aspects of population, employment, and housing that would be affected by implementation of PLAN Hermosa.

STATE

- **Regional Housing Needs Allocation (RHNA):** The RHNA is developed by SCAG and allocates to cities and counties their "fair share" of the region's projected housing needs based on household income groupings over the planning period for the housing elements of each specific jurisdiction. In October 2012, SCAG adopted a Final Regional Housing Needs Assessment Allocation Plan that covers the 2013 through 2021 planning period. Cities and counties must develop a housing element to address how they will meet their RHNA.
- **Housing Element Requirements:** Under California law, housing elements must analyze existing and projected housing needs, examine special housing needs within the population, evaluate the effectiveness of current goals and policies, identify governmental and other constraints, determine compliance with other housing laws, and identify opportunities to incorporate energy conservation into the housing stock. The element must also establish goals, policies, and programs to maintain, enhance, and develop housing.
- **California Relocation Law:** California Public Resources Code Section 7260(b) requires the fair and equitable treatment of persons displaced as a direct result of programs or projects undertaken by a public entity. The law requires agencies to prepare a relocation plan, provide relocation payments, and identify substitute housing opportunities for any resident who is to be displaced by a public project.

LOCAL

- **City of Hermosa Beach 2013–2021 Housing Element:** Hermosa Beach adopted its 2013–2021 Housing Element in September 2013. The Housing Element noted the continuing need to develop affordable workforce housing, as well as housing for seniors, disabled residents, and other residents with special needs. Hermosa Beach was able to accommodate its RHNA within its existing zoning and land use designations through the replacement of existing units and redevelopment of underutilized parcels. This demonstrates that Hermosa Beach has sufficient sites at appropriate densities to meet legal requirements for addressing the city's fair share of the regional housing need.

4.12.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The EIR evaluates the potential environmental effects of implementation of PLAN Hermosa related to population, employment, and housing, including a review of the potential to induce population growth and to displace people or housing. The analysis is based on the likely consequences of adoption and implementation of PLAN Hermosa, compared to existing conditions.

Population and Housing Thresholds

For the purposes of the EIR, impacts on population, employment, and housing are considered significant if adoption and implementation of PLAN Hermosa would:

1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).
2) Displace substantial numbers of existing homes, necessitating the construction of replacement housing elsewhere.
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of implementation of PLAN Hermosa compared to existing conditions. The following analysis of population, employment, and housing impacts is qualitative and based on available demographic and economic data for Hermosa Beach, along with a review of regional information. The analysis assumes that all future and existing development in the city complies with applicable laws, regulations, design standards, and plans. An analysis of cumulative impacts uses qualitative information for Hermosa Beach and the region.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa policies and implementation actions that address population, employment, and housing include the following:

Policies

Land Use + Design Element

- **1.1 Diverse and distributed land use pattern.** Strive to maintain the fundamental pattern of existing land uses, preserving residential neighborhoods, while providing opportunities for enhancement or transformation of corridors and districts in order to improve community activity and identity.
- **1.2 Focused infill potential.** Proposals for new development should be directed toward the city's commercial areas with an emphasis on developing transit-supportive land use mixes.
- **2.2 Variety of types of neighborhoods.** Encourage preservation of existing single-density neighborhoods within the city and ensure that neighborhood types are dispersed throughout the city.
- **2.4 Single-density neighborhoods.** Preserve and maintain the Hermosa Hills, Eastside, Valley, North End, and Hermosa View neighborhoods as predominantly single-family residential neighborhoods.

- **5.6 Revitalization incentives.** Design and provide incentives to assist developers in revitalization and rehabilitation of existing structures, uses, and properties.

Mobility Element

- **5.5 Encourage smart growth.** Encourage smart growth land use features in development projects to ensure more compact, mixed, connected, and multimodal development supports reduced trip generation, trip lengths, and greater ability to utilize alternative modes.

Infrastructure Element

- **1.4 Fair share assessments.** Require new development and redevelopment projects to pay their fair share of the cost of infrastructure improvements needed to serve the project, and ensure that needed infrastructure is available prior to or at the time of project completion.

Implementation Actions

- LAND USE-1. Amend the Zoning Map to bring consistency between PLAN Hermosa land use designations and Zoning Ordinance zoning districts.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.12-1 ***Would PLAN Hermosa Induce Substantial Population Growth?*** *Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not substantially increase population in Hermosa Beach. Since land use designations and allowable residential densities are only altered to bring consistency between the zoning and land use maps, the total allowable development potential in the city would not be changed with implementation of PLAN Hermosa. Providing for the orderly growth of Hermosa Beach is a basic purpose of PLAN Hermosa, which would direct expected growth. This impact would be* ***less than significant.***

PLAN Hermosa's proposed land use plan includes the introduction and expansion of new land commercial use designations (Recreational Commercial and Gateway Commercial) and adjusts the allowed land use intensities—some higher, some lower—across most nonresidential land use designations.

Compared to the adopted General Plan, PLAN Hermosa alters land use designations and zoning to focus redevelopment in certain areas and provides accommodation for a limited increase in population and employment in Hermosa Beach.

Table 4.12-6 (PLAN Hermosa Residential Development Capacity) and **Table 4.12-7 (PLAN Hermosa Nonresidential Development Capacity)** present the anticipated residential and nonresidential land use changes and resulting increases in living units and nonresidential square footage, respectively, with implementation of PLAN Hermosa.

TABLE 4.12-6
PLAN HERMOSA RESIDENTIAL DEVELOPMENT CAPACITY

Land Use Designation	Acres	Existing Units (2015)	New Unit Potential (2015–2040)	Total Units (2040)
Total	621	10,109	300	10,409

Source: City of Hermosa Beach 2015

TABLE 4.12-7
PLAN HERMOSA NONRESIDENTIAL DEVELOPMENT CAPACITY

Land Use Designation	Acres	Existing Building Sq. Ft. (2015)	New Building Sq. Ft. Potential (2015–2040)	Total Building Sq. Ft. (2040)
Total	83	2,106,400	630,400	2,736,800

Source: City of Hermosa Beach 2015

As shown in **Table 4.12-8 (PLAN Hermosa Forecast for 2040),** the resulting increase in accommodated population, households, and employment is consistent with SCAG forecasts for 2040 (**Table 4.12-5**).[1]

TABLE 4.12-8
PLAN HERMOSA FORECAST FOR 2040

	2015	Change (2015–2040)	City Forecast 2040
Population	19,772	661	20,433
Households	9,501	321	9,822
Jobs	7,622	2,378	10,000

Source: City of Hermosa Beach 2015

The land use plan would focus and encourage reinvestment on key underutilized properties, as well as on access and circulation improvements. However, these investments are intended to accommodate growth in population and jobs that would occur in Hermosa Beach through 2040. PLAN Hermosa includes policies to manage this anticipated growth and focus it in certain infill areas while maintaining existing density in established residential neighborhoods. The threshold of significance for indirect growth is the development of new roads or other infrastructure. PLAN Hermosa Land Use + Design Element Policies 1.1 and 1.2 are specifically crafted to ensure that the fundamental pattern of existing land uses remains the same and that limited growth only occurs in areas appropriate for infill. These infill areas can utilize existing infrastructure in the city. Therefore, the shift of population and business growth to be concentrated in certain areas is not substantial when compared to the expected growth anticipated without the proposed project and the availability of infrastructure and the necessary public services to serve these concentrated areas of growth.

Adoption and implementation of PLAN Hermosa would not result in a substantial increase in population growth since the overall development potential of land uses would not be dramatically changed from the existing General Plan. The jobs to housing ratio would improve to 0.96 (10,000 jobs/10,409 housing units), as compared to 0.75 in 2015. The physical environmental impact that is associated with the jobs to housing balance consists of traffic (commuting for jobs) and the related impacts of traffic noise, air quality, and greenhouse gas emissions. These environmental issues are addressed elsewhere in this EIR. The development potential provided by PLAN Hermosa would be consistent with the SCAG 2040 forecast for population and employment growth. Additional housing and commercial square footage may occur in specific infill locations in the city, concentrating anticipated natural growth. PLAN Hermosa's Land Use + Design Element includes Policies 1.1 and 2.2, which ensure that areas of growth are balanced with areas of preservation. Additionally, Infrastructure Element Policy 1.4 addresses the cost and availability of

[1] The published SCAG data (**Table 4.12-5**) are rounded to the nearest 100. As such, the slight difference in forecasts (33 people and 22 households) is negligible and is accounted for in the rounded forecast.

infrastructure, thus avoiding indirect inducement of population growth. This impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.12-2 ***Would PLAN Hermosa Displace People or Housing?*** *Implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that would allow the construction of new residential, commercial, and industrial uses, as well as infrastructure, public service, and recreation improvements. However, there would be no substantial changes to the residential designated land use areas in the city that would result in a large displacement of existing residences or housing. This is a* ***less than significant*** *impact.*

PLAN Hermosa's proposed Land Use Map includes modest changes to land use designations that would allow additional nonresidential development, generally focused in existing commercial and industrial areas and in areas with access to transit, including in the Civic Center District, Cypress District, and Aviation Corridor. The intent of PLAN Hermosa is to direct anticipated growth to be orderly and meet community needs and desires. Land Use + Design Element, Mobility Element, and Infrastructure Element policies would protect existing residential neighborhoods from encroachment of incompatible uses (Land Use + Design Element Policy 2.4), ensure smart growth in development project (Mobility Element Policy 5.5), and ensure growth does not result in undue burden on infrastructure that could increase costs for the community (Infrastructure Element Policy 1.4).

The Land Use Map and Land Use + Design Element Policy 5.6 encourage revitalization, land use changes, and increases in density. Envisioned changes in land use would be indirect and incremental, and would primarily affect existing commercial and industrial parcels. Land Use + Design Element Policies 1.1 and 2.2 are intended to preserve existing residential neighborhoods and a variety of housing options. Because PLAN Hermosa policies would protect existing residential neighborhoods and do not propose substantial changes to existing residential designated areas, impacts related to the displacement of people or housing would be **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative context for population, employment, and housing impacts is the South Bay Cities Council of Governments (COG) planning area, given that its demographics are influenced by employment and housing opportunities and constraints in this region.

IMPACT 4.12-3 ***Would PLAN Hermosa Contribute to a Cumulative Inducement of Population Growth?*** *Implementation of PLAN Hermosa's policies, in addition to anticipated land use changes throughout the South Bay Cities COG planning area, would increase population, both directly and indirectly (through increased employment). However, PLAN Hermosa's contribution to this impact would be* ***less than cumulatively considerable****.*

The 2040 population projection for the South Bay Cities COG planning area (excluding the Harbor Bay/San Pedro communities in the City of Los Angeles and County of Los Angeles Districts 2 and 4) is 823,500 people, and the 2040 employment projection is 373,400 jobs (SCAG 2015a). The PLAN

Hermosa increase in population (661) and jobs (2,378) by 2040 is less than 0.1 percent of the growth forecast for the South Bay Cities COG planning area. In addition, as described in Impact 4.12-1, PLAN Hermosa's population and employment would be consistent with the SCAG forecast for 2040. Therefore, PLAN Hermosa's contribution to the potential for cumulative inducement of population growth would not be cumulatively considerable. In addition, PLAN Hermosa's policies and programs are designed to best manage and accommodate the city's growth. The physical environmental effects of the city's growth on the region is evaluated in the technical sections of this EIR. Therefore, the impact is **less than cumulatively considerable**.

Mitigation Measures

None required.

IMPACT 4.12-4 ***Would PLAN Hermosa Contribute to Cumulative Impacts on Displacing People or Housing?*** *Adoption and implementation of PLAN Hermosa, in addition to anticipated changes throughout the South Bay Cities COG planning area, could directly or indirectly displace people or housing. However, PLAN Hermosa's contribution to this impact would be* ***less than cumulatively considerable.***

Changes in the South Bay Cities COG planning area through 2040 may result in some displacement of people or housing through expansion of nonresidential land uses, infrastructure improvements such as roadway, utility, or transit expansion, or other changes. However, as described in Impact 4.12-2, implementation of PLAN Hermosa would not substantially alter the residential designated land areas of the city and thus would not displace a large number of people or housing in Hermosa Beach; therefore, the plan would not result in a considerable contribution. This impact would be **less than cumulatively considerable**.

Mitigation Measures

None required.

4.12.5 REFERENCES

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4.13 Public Services, Community Facilities, and Utilities

4.13.1 INTRODUCTION

This resource section describes the public services, community facilities, and utilities that may be impacted from implementation of PLAN Hermosa. Specifically, this section includes an examination of fire protection and emergency medical services, law enforcement services, public schools, parks and recreation, library facilities, water supply and service, wastewater services, solid waste services, and energy. Each subsection includes a description of existing facilities and infrastructure, applicable service goals, potential physical environmental impacts resulting from anticipated changes in public service provision from implementation of PLAN Hermosa, and cumulative impacts.

NOP Comments: In response to the Notice of Preparation (NOP), a comment was received from the Sanitation Districts of Los Angeles County, stating that the district's regional wastewater conveyance system should be able to accommodate PLAN Hermosa (see **Appendix B-2**). In addition, a comment was received from the Los Angeles County Fire Department, stating that "the Hermosa Beach Fire Department has jurisdiction concerning the project and will be setting conditions" (see **Appendix B-2**). No comments regarding police protection, schools, libraries, or other public services were received in response to the NOP.

Reference Information: Information for this resource section is based on numerous sources, including the Hermosa Beach Fire Department, the Hermosa Beach City School District, publicly available documents, personal and written communication with service providers, and service agency websites. The Technical Background Report (TBR) prepared for PLAN Hermosa is attached to this document as **Appendix C**.

CITY FACILITIES STRATEGIC PLAN

Currently, the City is in the process of preparing the Civic Facilities Strategic Plan, which will address the current and future facility needs for police, fire, the public library, the public works yard, and City Hall functions. The current condition of each facility is described briefly below.

City Hall

The existing City Hall was under construction beginning in 1960 and underwent renovations in 2000. City Hall is located at 1315 Valley Drive and currently includes space for the City Management, Finance, Public Works, and Community Development departments. City Hall has been previously identified as constrained for space and has been the subject of numerous space studies. Due to space constraints, some services are administered from other locations and facilities.

Fire Station

The City of Hermosa Beach has one fire station, which houses three fire engines and two ambulances. This fire station, located at 540 Pier Avenue, was originally built at its current location in 1959. However, the facility has been found to be structurally and operationally deficient such that it will most likely not be able to continue operating in the event of a major earthquake. Given the identified structural deficiency, the Fire Department dormitories were moved into temporary facilities in 2015, and the fire tower associated with the facility was demolished. The Fire Department dormitories will continue to be housed in temporary facilities until a facility that meets current seismic standards for a critical facility is developed.

Police Station

The existing police station, located at 540 Pier Avenue, was initially built in conjunction with the Fire Station in 1959 and was renovated in 2000. The Police Department also occupies space on the basement level of City Hall, and the Community Services Division is located at a City-owned building adjacent to Clark Field.

Since the facility was originally built, there have been major changes in the operational requirements of a police department, which the current facility does not efficiently support. Some of the many changes include the needs for specific areas for evidence processing and storage, increased record keeping storage, increases in the amount and types of protection equipment, increased staffing, specific legal requirements for holding and processing areas, and increased numbers of female police officers. The renovation or rebuilding of the police station into a modernized facility is one of the elements to be considered in the City's Civic Facilities Strategic Plan.

Public Works Yard

The Public Works Yard facility comprises various operational areas and several buildings. The most urgent upgrade item identified is the installation of a stormwater system and wash-down area with clarifiers which is required by the State Water Resources Control Board.

The Public Works Yard is located at 555 6th Street and comprises various buildings and operational areas. The yard provides space and equipment to maintain all of the City's buildings and facilities. The main building (modular building) was installed circa 1976 and is in fair condition. The shop building was constructed in the early part of the last century, is seismically unsafe, and has passed its expected useful life. While not immediately impacting the safety and protection of the citizens of Hermosa Beach, the replacement of this facility on the existing site is included as a part of the long-term vision for facility planning.

City Library

The ground was broken for the library, facing Pier Avenue, on November 17, 1961, and the library was dedicated on August 10, 1962. The Civic Facilities Strategic Plan will include recommendations and options for library facilities in Hermosa Beach that include replacing the library at its existing site or relocating the library to the Community Center site. The City has also received funding from Los Angeles County to prepare a Library Needs Assessment.

Civic Facilities Strategic Plan Scenarios

The Civic Facilities Strategic Plan presents various scenarios for renovation and/or redevelopment of City facilities. Scenarios under consideration are described below.

Scenario 1

- Replace library at existing site.
- Create 2-Company Fire Station to remain on Pier Avenue.
- Close Bard Street. Create new parking structure.
- Replace City Hall (include space for Fire Administration).
- Build a modern police building at the adjacent storage site with basement parking.
- Replace the City Yard facilities at existing site with surface parking.

Scenario 2

- Relocate library to Community Center site.

- Replace fire station as a headquarters fire station at Pier Avenue.
- Build a modern police building at the adjacent storage site with basement parking.
- Renovate and expand City Hall.
- Replace the City Yard facilities at existing site with surface parking.

Scenario 3

- Relocate library to Community Center site.
- Build a modern Public Safety Center at the adjacent storage site with basement parking.
- Replace City Hall and locate it on Pier Avenue.
- Develop a new parking structure.
- Replace the City Yard facilities at existing site with surface parking.

Scenario 4

- Relocate library to Community Center site.
- Build a modern Public Safety Center at the adjacent storage site with basement parking.
- Renovate and expand City Hall without Fire Administration.
- Replace the City Yard facilities at existing site with surface parking.
- Sell Pier Avenue frontage.

Scenario 5

- Relocate library to Community Center site.
- Build a modern Public Safety Center at the adjacent storage site with basement parking.
- Relocate the City Hall functions to a leased or purchased existing office building on Pacific Coast Highway.
- Replace the City Yard facilities at existing site with surface parking.
- Sell Pier Avenue and Valley Drive corner property.

Scenario 6

- Replace library at existing site.
- Build a modern Public Safety Center at the adjacent storage site with basement parking.
- Renovate and expand City Hall.
- Replace the City Yard facilities at existing site with surface parking.

The Civic Facilities Strategic Plan is meant to help prioritize and inform the capital improvement decisions and potential funding alternatives that the City will need to make regarding the future of the identified facilities. The improvement priorities are to focus on:

- Furthering the City's Net Zero goals through the replacement and/or improvements of each of the identified facilities so that they are seismically, operationally, and functionally improved to continue to meet the needs of the City in the future.
- Addressing the immediate need of replacing the City's Fire Station so that it is seismically improved to remain operational in the event of major disaster while improving the

operational capability of the Fire Department to serve the expanding calls for service within the community.

- Providing a resilient building which will be operational in the case of a major disaster and increase the operational efficiencies of the Police Department. Achieve this goal by providing a single seismically and operationally improved facility from which the department can deliver modern law enforcement services to the citizens of Hermosa Beach.
- Increasing operational efficiencies of the Public Works Field Operations by providing replacement facilities, additional parking, and storage yard areas at the existing Yard Operations site.
- Replacing or expanding City Hall to better accommodate the existing and future staff (scenarios presented at this time do not include growth assumptions).
- Developing the facilities in a manner that maximizes the use of the funds available through phasing options or changes in operations and also considers revenue generation sources.

As noted above, several options/scenarios have been identified to improve existing City facilities. At the time this EIR was prepared, specific recommendations or project designs have not been determined, meaning that specific physical impacts to the environment cannot currently be identified. However, construction activities could result in impacts related to air quality (construction pollutant emissions), cultural resources (undiscovered resources), greenhouse gas emissions from construction, soil stability and erosion, construction water quality, accidental release of hazardous materials during construction, construction noise, and construction traffic impacts. Subsequent review of project-specific facility improvements would be completed to determine the extent of site-specific environmental review that will be required. These issues will be programmatically evaluated in the CEQA documentation for the Civic Facilities Strategic Plan.

4.13.2 FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

4.13.2.1 ENVIRONMENTAL SETTING

Fire protection, first response emergency medical services, and natural disaster preparedness services in Hermosa Beach are provided by the Hermosa Beach Fire Department (HBFD). The HBFD also administers the City's Hazardous Material Plan and Emergency Preparedness Program and maintains the City's Emergency Operations Center. Key findings from the TBR (**Appendix C-16**) are summarized below.

- The HBFD consists of one fire station with a total of 18 fire suppression personnel, one assistant fire chief, and one fire chief. Of the 18 fire suppression personnel, 16 have paramedic status. Three platoons rotate on a 48-hour schedule. The HBFD station, located on Pier Avenue, houses three fire engines (two front-line and one reserve) and two ambulances.
- The HBFD has set an emergency medical services (EMS) response time standard of 5 minutes or less for 90 percent of incidents and a fire response time standard of 5 minutes 20 seconds or less for 90 percent of fire incidents. Excluding mutual aid calls, the average response time for EMS calls was 5.0 minutes, and the average response time for fire calls was 7.3 minutes. Ninety percent of EMS calls were responded to within 6.8 minutes, and 90 percent of fire calls were responded to within 10.8 minutes.
- Regional communications and dispatch services are provided for the HBFD by the South Bay Regional Public Communications Authority, referred to locally as South Bay 911 or the Regional Call Center (RCC). The HBFD received 775 calls for mutual aid requests in other

jurisdictions, of which 314 calls were cancelled (Center for Public Safety Management 2013a).

- The City has automatic aid agreements with the Manhattan Beach Fire Department and the Redondo Beach Fire Department. This means that the dispatch of units to an incident is handled automatically by the dispatch center; the dispatch of additional units does not require the input of a commander on the scene. Manhattan Beach and Hermosa Beach have the same dispatch center, while Redondo Beach has its own dispatch center. The City of Hermosa Beach also has mutual aid agreements with the Los Angeles County Fire Department and the Torrance and El Segundo fire departments. Under the mutual aid agreement, units from the County, Torrance, and El Segundo could be dispatched to Hermosa Beach under the request of the commander on the scene. Likewise, units from Hermosa Beach could be requested to assist in those jurisdictions.

4.13.2.2 REGULATORY SETTING

Local laws, regulations, and policies pertain to fire protection and emergency medical services in the planning area. The regulatory framework for public services is discussed in detail in **Appendix C-16**. The following summarizes key regulations used to reduce the potential environmental impacts of implementing PLAN Hermosa.

STATE

- **California Fire Code.** The 2013 California Fire Code (Title 24, Part 9 of the California Code of Regulations) establishes regulations to safeguard against hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The provisions of the Fire Code apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems, fire services features such as fire apparatus access roads, means of egress, and fire safety during construction and demolition,
- **California Health and Safety Code.** Additional state fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, which include regulations for building standards, fire protection and notification systems, fire protection devices such as extinguishers, smoke alarms, high-rise building and child-care facility standards, and fire suppression training.
- **California Occupational Safety and Health Administration.** In accordance with the California Code of Regulations, Title 8, Sections 1270, Fire Prevention, and 6773, Fire Protection and Fire Fighting Equipment, the California Occupational Safety and Health Administration (Cal/OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include but are not limited to guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all firefighting and emergency medical equipment.

LOCAL

- **Hermosa Beach Municipal Code:** The City's Municipal Code includes regulations and standards related to development and operations. Title 2, Administration and Personnel, contains bylaws and administration procedures for City advisory committees (including Parks, Recreation and Community Resources, Emergency Preparedness), commissions (including Planning Commission, Public Works Commission), and City departments or

divisions (Police Department Traffic Division, Emergency Services, Police Reserve Corps). Title 15, Buildings and Construction, establishes building and construction standards to protect the public health, safety, and welfare through fire prevention, abatement of dangerous buildings, seismic strengthening, and enforcement of mechanical, plumbing, and electrical codes. Chapter 15.20 is the City's Fire Prevention Code, which prescribes regulations to ensure compliance with applicable state regulations.

4.13.2.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G standard of significance. For the purposes of this EIR, impacts on fire protection services and utilities are considered significant if adoption and implementation of PLAN Hermosa would:

1) Create substantial adverse physical impacts associated with the provision of new or physically altered fire-related facilities or services, the construction and/or provision of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection and emergency services.

ANALYSIS APPROACH

Evaluation of potential fire protection and emergency medical service impacts was based on information provided by the Hermosa Beach Fire Department, as well as a review of the applicable fire codes and regulations, the Hermosa Beach Municipal Code, and other relevant literature. The focus of the analysis is whether implementation of PLAN Hermosa would require alteration of services that necessitates the development of facilities which could result in an impact to the physical environment.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

The following proposed PLAN Hermosa policies and implementation actions address fire protection and emergency medical services:

Policies

Public Safety Element

- **5.1 High level of response.** Achieve optimal utilization of allocated public safety resources and provide desired levels of response and protection within the community.
- **5.4 Adequate emergency access.** Require new development to be designed to provide adequate emergency access and to maintain current levels of emergency services.
- **5.5 Collaborate with neighboring jurisdictions.** Cooperate and collaborate with neighboring jurisdictions and social services to maximize public safety and emergency services.
- **6.1 Regularly update plans.** Regularly update disaster preparedness and emergency response plans.

Implementation Actions

- SAFETY-1. Continue to adopt and enforce the most up-to-date California Building Standards Code and California Fire Code, with appropriate local amendments.

- SAFETY-8. Support community safety and fire protection standards by establishing and applying the following development review requirements to be reviewed by HBFD and HBPD as appropriate:
  - New development and significant redevelopment projects shall coordinate with HBFD and Cal Water to provide and maintain adequate peak flow rates for firefighting.
  - New development, significant redevelopment, and public improvement projects shall ensure that building designs provide for adequate emergency access and that changes to the right-of-way do not impede access for emergency responder's apparatus or personnel.
- SAFETY-20. Establish and meet EMS and Fire response time standard of 7 minutes or less for 90% of incidents.
- SAFETY-22. Continue to support existing mutual and automatic aid agreements providing additional fire and police resources needed during an emergency, as feasible.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.13.2-1 ***Would PLAN Hermosa Increase Demand for Fire Protection Services?*** *Subsequent development associated with implementation of PLAN Hermosa could increase demand for fire protection services. PLAN Hermosa policies and implementation actions would require that the City regularly update fire protection standards and new development to provide adequate fire flow and emergency access. Therefore, this impact would be* ***less than significant****.*

PLAN Hermosa would guide future development and reuse projects that could result in 300 additional residential units and 660 new residents from 2015 to 2040 in the planning area, or an approximately 3 percent increase over existing conditions. The plan could also result in an additional 630,400 square feet of nonresidential uses. The additional structures and population would lead to increased demand for fire protection and emergency medical response services. Future development would be served by the Hermosa Beach Fire Department, or could be served by Redondo Beach Fire Department or Manhattan Beach Fire Department through the existing automatic aid agreement, if needed.

As stated previously, the City has automatic aid agreements with the Manhattan Beach and Redondo Beach fire departments. This means that dispatching units to an incident is handled automatically by the dispatch center, and dispatching additional units does not require the input of a commander on the scene. Manhattan Beach and Hermosa Beach have the same dispatch center, while Redondo Beach has its own dispatch center.

The City of Hermosa Beach also has mutual aid agreements with the Los Angeles County Fire Department and the Torrance and El Segundo fire departments. Under the mutual aid agreement, units from the County, Torrance, and El Segundo could be dispatched to Hermosa Beach under the request of the commander on the scene. Likewise, units from Hermosa Beach could be requested to assist in those jurisdictions.

PLAN Hermosa is designed for incremental changes in population through redevelopment that would allow for the adequate provision of services and community facilities. PLAN Hermosa policies and implementation actions would direct the provision of adequate facilities, staffing, equipment, and technology to meet existing and projected fire protection service demands and response times as demands grow with the increase in population.

PLAN Hermosa addresses public service provision through Public Safety Element Policy 5.1, which would achieve optimal utilization of allocated public safety resources and provide desired levels of response and protection in the community. Policy 5.4 would require new development to be designed to provide adequate emergency access and to maintain current levels of emergency services. Policy 5.5 would ensure cooperation and collaboration with neighboring jurisdictions and social services to maximize public safety and emergency services. Policy 6.1 would require the City to regularly update disaster preparedness and emergency response plans. Implementation action SAFETY-1 would serve to reduce potential impacts by continuing to adopt and enforce the most up-to-date California Building Standards Code and California Fire Code, with appropriate local amendments. SAFETY-22 would continue to support existing mutual and automatic aid agreements providing additional fire and police resources needed during an emergency, as feasible. SAFETY-8 would support community safety and fire protection standards by establishing and applying development review requirements.

No additional facility needs that would trigger a physical impact to the environment are currently anticipated. Thus, this impact is **less than significant**. Additionally, subsequent projects that are consistent with the population, housing, and employment projections for PLAN Hermosa, and do not propose General Plan amendments, would not increase demand for fire protection services beyond those projected in the Civic Facilities Strategic Plan.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative context for impacts discussed below includes projected regional growth in the South Bay Cities Council of Governments (COG) planning area, as fire protection and emergency medical services may be required from beyond the City of Hermosa Beach planning area.

IMPACT 4.13.2-2 ***Would PLAN Hermosa Increase Cumulative Demand for Fire Protection Services?***

PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the South Bay Cities COG planning area, could increase the demand for fire protection and emergency medical services and could require additional staffing, equipment, and related facilities under cumulative conditions. PLAN Hermosa's contribution to the need for expanded fire protection and emergency medical services, the construction and operation of which could result in significant environmental impacts, would be ***less than cumulatively considerable****.*

Development in Hermosa Beach that may result with the implementation of PLAN Hermosa, in addition to other cumulative development in the South Bay Cities COG planning area, could cause significant cumulative impacts on fire and emergency medical services. However, impacts related to fire protection and emergency medical services are generally specific to the planning area rather than regional. As indicated in Impact 4.13.2-1, implementation of PLAN Hermosa would not result in the need for additional fire protection and emergency medical facilities. The City is in the process of determining fire facility improvements to maintain and improve its ability to provide services. The potential physical environmental effects of these improvements are identified in Impact 4.13.2-1. Further, PLAN Hermosa policies and implementation actions, along with compliance with the California Fire Code, would maintain adequate response times and staffing ratios within the city. Therefore, the City's contribution to cumulative environmental impacts associated with the continued provision of fire protection and emergency medical response services would be **less than cumulatively considerable**.

Mitigation Measures

None required.

4.13.3 LAW ENFORCEMENT SERVICES

4.13.3.1 ENVIRONMENTAL SETTING

The Hermosa Beach Police Department (HBPD) provides police protection services to preserve peace and prevent crime and disorder by enforcing state laws and city ordinances in the planning area. Key findings from the TBR (**Appendix C-16**) are summarized below.

STATIONS AND STAFFING

The HBPD has one police station, located at 540 Pier Avenue. The department has 51 staff assigned to the station, consisting of 39 sworn personnel and 12 civilian staff. The HBPD consists of several distinct units to which officers are assigned. These units include detectives, traffic, patrol, backgrounds and training, internal affairs, Community Lead Program, and Narcotics K-9. The HBPD has 12 marked vehicles, 5 motorcycles, 10 unmarked vehicles, and 2 speed trailers (City of Hermosa Beach 2013b). According to the HBPD's Police Operations Report, which provided data on service level benchmarks, the City provides 178 officers per 100,000 residents (Center for Public Safety Management 2013b).[1]

General patrol operations for the HBPD are staffed using 12-hour shifts. Police are assigned to beach-related events including beach volleyball, concerts on the beach, the Surf Festival, the Hermosa Arts Fair, and the Hermosa Triathlon. The entire department is deployed on the two days of the year which draw the largest crowds—the Fourth of July and New Year's Eve.

CALLS FOR SERVICE

Regional communications and dispatch services are provided for the HBPD by the South Bay 911/RCC, which processes approximately 312,000 police and fire incidents annually in El Segundo, Gardena, Hawthorne, Hermosa Beach, and Manhattan Beach. Between July 1, 2014, and June 30, 2015, HBPD officers handled 25,266 calls, which included officer-initiated calls. This averages approximately 69 calls per day. Of those calls, approximately 27 percent (6,784 calls) were initiated by the police and 73 percent (18,482 calls) were direct calls from the public. Approximately 19 percent of total calls for service (5,015) were for traffic enforcement.

RESPONSE TIMES

For HBPD response, the dispatch center assigns a priority code of 1 to 4 to each call, with 1 being the highest priority. For the one-year period between July 2014 and June 2015, the highest priority calls were responded to within 5.48 minutes (if calculated from call initiation to on scene) or 3.67 minutes from time of dispatch to on scene.

CRIME RATES

In 2014, Hermosa Beach reported 186 Part I violent crimes per 100,000 residents, or 37 crimes, and 2,732 Part I property crimes per 100,000 residents, or 543 crimes. The reported number of violent

[1] The number of officers per 100,000 reflects a normalized calculation for purposes of the operations report; it is not intended to represent the actual population in Hermosa Beach. The number of officers per 1,000 residents (1.78) is not a required service level or nationally recognized standard, and the existing ratio provides a reasonable baseline against which to estimate PLAN Hermosa impacts.

crimes was 53.04 percent lower than the statewide rate (396) and 49.06 percent lower than the national rate (366). Property crime rates were 11.92 percent higher than the state average (244) and 5.23 percent higher than the national average (2,596).

4.13.3.2 REGULATORY SETTING

LOCAL

Local laws, regulations, and policies pertain to public safety and law enforcement services in the planning area. The regulatory framework for public services is discussed in detail in **Appendix C-16**.

- **Hermosa Beach Municipal Code:** The City's Municipal Code includes regulations and standards related to Health and Safety (Title 8), Public Peace, Morals and Welfare (Title 9), and Vehicle and Traffic (Title 10).

4.13.3.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G standard of significance. A law enforcement services impact is considered significant if implementation of the proposed project would:

1) Create substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for law enforcement services.

ANALYSIS APPROACH

Evaluation of potential law enforcement impacts was based on information provided by the Hermosa Beach Police Department. The impact analysis focuses on whether those impacts would have a significant effect on the physical environment.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

The following proposed PLAN Hermosa policies and implementation actions address law enforcement services:

Policies

Public Safety Element

- **5.1 High level of response.** Achieve optimal utilization of allocated public safety resources and provide desired levels of response and protection within the community.
- **5.2 Use of technology.** Provide and use up-to-date technology to improve crime prevention and inform the community regarding actions to take in case of emergency.
- **5.3 Physical design standards.** Reduce opportunities for criminal activity through physical design standards, youth programs, recreation opportunities, educational programs, and counseling services.
- **5.4 Adequate emergency access.** Require new development to be designed to provide adequate emergency access and to maintain current levels of emergency services.

- **5.5 Collaborate with neighboring jurisdictions.** Cooperate and collaborate with neighboring jurisdictions and social services to maximize public safety and emergency services.
- **5.6 Nuisance abatement.** Encourage Police Department review of uses which may be characterized historically by high levels of nuisance (noise, nighttime patronage, and/or rates of criminal activity); providing for conditions of control of use to prevent adverse impacts on adjacent residences, schools, religious facilities, and similar "sensitive" uses.
- **6.1 Regularly update plans.** Regularly update disaster preparedness and emergency response plans.

Implementation Actions

- SAFETY-21. Enhance and maintain Police Department staffing and facilities to meet established proactive time targets and clearance rates that exceed national averages.
- SAFETY-22. Continue to support existing mutual and automatic aid agreements providing additional fire and police resources needed during an emergency, as feasible.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.13.3-1 ***Would PLAN Hermosa Increase Demand for Law Enforcement Services?*** *Subsequent development associated with implementation of PLAN Hermosa would guide future development and reuse projects in the city in a manner that would result in an increase in population in the planning area, but it would not result in the need for additional and/or expanded police protection facilities. PLAN Hermosa policies and implementation actions would require the City to continue to provide adequate staffing, facilities, equipment, and technology to meet existing and projected service demands and response times. Therefore, this impact would be* ***less than significant****.*

PLAN Hermosa would guide future development and reuse projects that would result in an increase in the city's population from 19,772 to 20,433 (a 3 percent increase). Assuming a ratio of 1.78 sworn officers per 1,000 residents, the HBPD would need approximately 36 sworn officers. The department currently has 39 sworn personnel; therefore, the increase in population with PLAN Hermosa would not require an increase in staffing beyond authorized levels that would require additional facility space, the construction or operation of which could result in significant environmental impacts.

As previously noted, the City is currently considering improvements to police department facilities to address current needs and improve operations. No specific recommendations or designs have been established so that physical impacts to the environment can be identified. However, construction activities could result in impacts related to air quality (construction pollutant emissions), cultural resources (undiscovered resources), greenhouse gas emissions from construction, soil stability and erosion, construction water quality, accidental release of hazardous materials during construction, construction noise, and construction traffic impacts. These issues have been programmatically evaluated in this EIR. Subsequent review of project-specific facility improvements would be completed to determine the extent of site-specific environmental review that will be required.

PLAN Hermosa is designed to allow incremental changes in population through redevelopment that would allow for the adequate provision of services and community facilities. PLAN Hermosa policies and implementation actions would direct the provision of adequate facilities, staffing, equipment, and technology to meet existing and projected police protection service demands and response times as demands grow with the increase in population.

PLAN Hermosa Public Safety Element policies would ensure adequate police protection is provided to accommodate a potential increase in the number of residents. Policy 5.1 would achieve optimal utilization of allocated public safety resources and provide desired levels of response and protection within the community. Policy 5.2 would provide and use up-to-date technology to improve crime prevention and inform the community regarding actions to take in case of emergency. Policy 5.3 would reduce opportunities for criminal activity through physical design standards, youth programs, recreation opportunities, educational programs, and counseling services. Policy 5.4 would require new development to be designed to provide adequate emergency access and to maintain current levels of emergency services. Policy 5.5 would ensure cooperation and collaboration with neighboring jurisdictions and social services to maximize public safety and emergency services. Policy 5.6 would encourage Police Department review of uses which may be characterized historically by high levels of nuisance (noise, nighttime patronage, and/or rates of criminal activity), providing for conditions of control of use to prevent adverse impacts on adjacent residences, schools, religious facilities, and similar sensitive uses. Policy 6.1 would require the City to regularly update disaster preparedness and emergency response plans.

Implementation action SAFETY-22 would continue to support existing mutual and automatic aid agreements providing additional fire and police resources needed during an emergency, as feasible. SAFETY-21 would serve to reduce potential impacts by maintaining police department staffing and facilities to meet established proactive time targets and clearance rates that exceed national averages.

Therefore, PLAN Hermosa policies and implementation actions would require the City to continue to provide funding and adequate equipment, technology, and funding for the HBPD to meet existing and projected service demands and response times. PLAN Hermosa policies and programs would ensure that the City would meet increased demands for police protection associated with an increase in population. Additionally, an increase in population would not require an increase in staffing beyond authorized levels that would require additional facility space. Thus, this impact is **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative context for impacts discussed below includes projected regional growth in surrounding cities and in Los Angeles County, as law enforcement may be required from beyond the planning area.

IMPACT 4.13.3-2 ***Would PLAN Hermosa Increase Cumulative Demand for Law Enforcement Services?*** *PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the South Bay Cities COG service area, could increase the demand for law enforcement services and could require additional staffing, equipment, and facilities under cumulative conditions. PLAN Hermosa's contribution to the need for expanded law enforcement services facilities, the construction and operation of which could result in significant environmental impacts, would be* ***less than cumulatively considerable****.*

As discussed in Impact 4.13.3-1, PLAN Hermosa would not result in the need for additional law enforcement facilities. PLAN Hermosa policies and implementation actions would require the City to continue to provide funding and adequate staffing, facilities, equipment, and technology to

meet existing and projected service demands and response times. Therefore, PLAN Hermosa would not contribute to a cumulative demand for law enforcement services facilities outside of the planning area. PLAN Hermosa's contribution to the continued provision of law enforcement services in the cumulative setting would be **less than cumulatively considerable.**

Mitigation Measures

None required.

4.13.4 PUBLIC SCHOOLS

4.13.4.1 ENVIRONMENTAL SETTING

The Hermosa Beach City School District (HBCSD) provides elementary school (K–8) public education to students living in the planning area. **Table 4.13-1 (Hermosa Beach School Enrollment, 2014–2015)** identifies schools located in the planning area and their enrollments for the 2014–2015 school year. In addition, there are two private schools: Our Lady of Guadalupe School is a private elementary school for grades preschool through 8, and Fusion Academy is an accredited, nontraditional private school for grades 6–12.

TABLE 4.13-1
HERMOSA BEACH CITY SCHOOL DISTRICT ENROLLMENT, 2014–2015

School	Grades	Total Enrollment
Hermosa View	K–2	485
Hermosa Valley	3–8	991
Total		**1,476**

Source: CDE 2016

The current enrollment at Hermosa Valley and Hermosa View exceeds the permanent capacity at each school and will continue to exceed the permanent capacity over the next 10 years. The HBCSD has added portable classroom buildings and is using multipurpose rooms for temporary classrooms. The school district estimates an enrollment projection of over 1,600 students for 2022, which would result in additional capacity shortages. Senate Bill 837, if approved, would add Universal Transitional Kindergarten as a new grade, open to all 4-year-olds throughout California's public school system. The district has indicated that Universal Transitional Kindergarten will have a serious impact on enrollment on an already overcrowded two-school district and could not be accommodated at the district's two schools alone.

The HBCSD has prepared a Long Range Facilities Master Plan, which examines four options for providing additional classroom and recreational facility space. Option A would shift third-graders to Hermosa View. Options B, C, and D would involve the use of a third school (North School, which the district currently leases to a private preschool and the Redondo Beach Unified School District) in addition to the two existing schools (HBCSD 2014). During the June 2016 elections, voters approved School Bond Measure S that provides $59 million for funding improvements that include the construction of a new school on the site of North School, as well as renovations at Hermosa Valley School and Hermosa View School. As of the date of the release of this EIR, the district has not released an environmental review document related to these improvements.

Assuming improvements would be implemented at the existing schools or in combination with the third school, the district would be responsible for preparing the necessary environmental review documents to identify environmental impacts that may occur as a result of improvements (e.g., new construction or remodeling/renovation) or operation (e.g., new vehicle trips to a third school).

High school age residents attend either Mira Costa High School in Manhattan Beach (Manhattan Beach Unified School District) or Redondo Union High School in Redondo Beach (Redondo Beach Unified School District) (HBCSD 2009). In 2014–15, the enrollment at Mira Costa High School was 2,517 students (CDE 2016). Mira Costa High School has capacity for 3,477 students and projects enrollment in 2024 to be only slightly higher than current enrollment. In developing its facilities master plan, the Manhattan Beach Unified School District (MBUSD) included forecasts for enrollment based on HBCSD enrollment trends and other forecasting parameters, and the total (2,740) would not exceed capacity (MBUSD 2015).

The Redondo Beach Unified School District (RBUSD) has two high schools, Redondo Union High School and Redondo Shores (a continuation school with less than 100 students). The combined enrollment for 2015–16 is 2,767, and the existing high school capacity is 3,088 students. The number of high school students is expected to exceed capacity by 2017-18. The RBUSD has also projected enrollment through 2035 and has determined the amount of facility space that will be necessary to accommodate future enrollments. The cost for facility improvements (currently projected to be five new classrooms [Redella 2016]) would be funded through developer fees in accordance with Senate Bill 50, as described below (RBUSD 2016).

4.13.4.2 REGULATORY SETTING

The following state and local plans, policies, regulations, and laws pertain to public schools in the planning area:

STATE

- **California Education Code:** The California Education Code contains various provisions governing the siting, design, and construction of new public schools (e.g., Education Code Sections 17211, 17212, and 17212.5). In addition, to help focus and manage the site selection process, the California Department of Education School Facilities and Planning Division has developed screening and ranking procedures based on criteria commonly affecting school selection (Education Code Section 17251[b], Title 5 of the California Code of Regulations, Section 14001[c]). The foremost consideration in the selection of school sites is safety. Certain health and safety requirements are governed by state statute and Education Code regulations. In selecting a school site, a school district should consider factors such as proximity to airports and railroads, proximity to high-voltage power transmission lines, presence of toxic and hazardous substances, and hazardous air emissions within one-quarter mile.
- **School Facility Fees:** Education Code Section 17620 authorizes school districts to levy a fee, charge, dedication, or other requirement against any development project for the construction or reconstruction of school facilities, provided that the district can show justification for levying of fees. Government Code 65995 limits the fee to be collected to the statutory fee (Level I) unless a school district conducts a Facility Needs Assessment (Government Code Section 65995.6) and meets certain conditions. These fees are adjusted every two years in accordance with the statewide cost index for Class B construction, as determined by the State Allocation Board.
- **Senate Bill (SB) 50** (1998) instituted a new school facility program by which school districts can apply for state construction and modernization funds. This legislation imposed limitations on the power of cities and counties to require mitigation for school facility impacts as a condition of approving new development. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property" (Government Code Section

65996[b]). Additionally, a local agency cannot require participation in a Mello-Roos district for school facilities; however, the statutory fee is reduced by the amount of any voluntary participation in a Mello-Roos district. Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation."

- State Service Standards Affecting All Districts
  - The California Education Code Section 41402 states that unified school districts are required to have 8 administrative employees per 100 teachers.
  - State standards for the number of students per classroom pursuant to Chapter 407, Statutes of 1998 (loading standards), require a maximum of 25 students per classroom in elementary schools and 27 students per classroom in middle and high schools.

4.13.4.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G standard of significance. A public schools impact is considered significant if implementation of the proposed project would:

1) Result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools.

ANALYSIS APPROACH

Information for the analysis was obtained through a review of facilities master plans prepared by the school districts, which contain information about current and projected enrollment and school capacity and consultation with district staff. District planning documents project enrollments to the 2022–23 time frame, but they do not provide forecasts to 2040. The HBCSD does not use a student generation rate factor (HBCSD 2015). School enrollment data were obtained from the California Department of Education, Educational Demographics Unit (CDE 2016).

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

The following proposed PLAN Hermosa policies address public schools:

Policies

Land Use + Design Element

- **7.3 School modernization upgrades.** Support HBCSD plans to renovate and modernize school facilities to meet growing capacity needs in a manner that minimizes burdens to adjacent neighborhoods.
- **7.6 Education impact fees.** Coordinate with school districts in assessment of the impact of new development on existing public educational facilities.

Implementation Actions

- LAND USE-6. Develop an inventory of underutilized or surplus property that may be appropriate for City or School District use or purchase to serve community education and recreational needs in the future.

- MOBILITY-17. In conjunction with the Hermosa Beach City School District, the City will identify school access points, a proposed network, education and enforcement programs to provide a comprehensive Safe Routes to School Program.
- PARKS-6. Continue, renew, and expand as needed, joint use agreements with the School District to allow community use of school fields and facilities.
- PARKS-7. Partner with the School District, community groups, and neighboring communities to identify and apply for grant opportunities to maintain, enhance, and expand park and recreational opportunities.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.13.4-1 ***Would PLAN Hermosa Increase Demand for Additional School Facilities?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in an increase in student enrollment in public schools. New or expanded school high school facilities would not be required, but the addition of K–8 students in the Hermosa Beach City School District would contribute to existing and future overcrowding in the district's two schools. The HBCSD has identified options for providing additional capacity to address existing and future enrollment, which would be required regardless of whether PLAN Hermosa is adopted and implemented. Payment of applicable fees in accordance with SB 50 would fully mitigate the impacts associated with the development of additional school facilities. Therefore, this impact would be* ***less than significant****.*

PLAN Hermosa could increase the city's population by 660 (3 percent) compared to existing conditions, which would result in additional students in the HBCSD and in the attendance areas of Mira Costa and Redondo Union high schools. The two schools in the HBCSD already have enrollments that exceed permanent classroom capacity. If all population growth were to occur in the near term, the additional students in the HBCSD would further contribute to existing overcrowding in the district's two schools and would add to future projected enrollment through 2023 that would exceed capacity. The overcrowded condition would exist regardless of whether PLAN Hermosa is adopted and implemented. However, exceeding school capacity in and of itself is not considered a physical impact under CEQA. The school district has developed a facilities plan identifying options for providing additional facility space and will address the need for expansion of school facilities or development of new school facilities. As noted above, School Bond Measure S provides $59 million for funding improvements that include the construction of a new school on the site of North School as well as renovations at Hermosa Valley School and Hermosa View School. As of the date of the release of this EIR, the HBCSD has not released an environmental review document related to these improvements. Potential environmental impacts from these school improvements include air quality (construction pollutant emissions), cultural resources (impacts to undiscovered resources during construction), greenhouse gas emissions from construction and operation, soil stability and erosion, construction and operational water quality, accidental release of hazardous materials during construction, construction, traffic and operational noise, and traffic impacts from construction traffic, operational traffic and potential safety conflicts with pedestrian and bicycle use. Future projects developed under PLAN Hermosa would be required to pay applicable fees consistent with SB 50.

The addition of PLAN Hermosa population to existing enrollment at Mira Costa High School would not result in enrollment levels that would exceed capacity; however, it would contribute to projected capacity exceedance at Redondo Union High School

California Government Code Section 65995 specifies that the environmental impact of new development on school facilities is considered fully mitigated through the payment of required development impact fees under SB 50. All new development proposed and approved, including any future development allowed by PLAN Hermosa, would be required to pay applicable development impact fees. Furthermore, any significant expansion of school facilities or development of new school facilities would be subject to the appropriate CEQA environmental review prepared by the respective school districts, which would identify and address any site-specific impacts. Therefore, this impact would be **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

School facilities impacts are associated with a specific district, each of which defines its own attendance boundaries. Although a school may have an attendance boundary that encompasses more than one jurisdiction, the cumulative effect would be limited to the district itself. Thus, the cumulative context for impacts discussed below is the HBCSD for grades K–8 and the Manhattan Beach and Redondo Beach unified school districts for grades 9–12.

IMPACT 4.13.4-2 ***Would PLAN Hermosa Cumulatively Increase Demand for Schools?*** *Population growth associated with implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the Hermosa Beach City Unified School District, Manhattan Beach Unified School District, and Redondo Beach Unified School District, could result in a cumulative increase in student enrollment, which could result in the need for new or expanded public school facilities. PLAN Hermosa's contribution to the need for new or expanded school facilities would be* ***less than cumulatively considerable****.*

Cumulative development in the three districts would result in increased enrollments. For the HBCSD, the increase would only be attributable to PLAN Hermosa because the district's attendance boundary corresponds to the city jurisdictional boundary. There would be no additional impact beyond that described in Impact 4.13.4-1, which was determined to be less than significant.

It would be speculative for the City to forecast 2040 enrollments for all high schools in the districts because the schools are not operated by the City, and the City is not involved in school planning. Further, enrollments may fluctuate on a short-term basis, based on changes to demographic and economic conditions. For the two high school districts, student enrollment projections are not available for 2040. The City has relied on enrollment projections provided by the school districts and has disclosed publicly available information. However, it is reasonable to assume that future enrollments in 2040 in the two school districts will be a function of population changes and changes to land use plans which may increase population. Using projections developed by the Southern California Association of Governments (SCAG) for Manhattan Beach and Redondo Beach combined, there would be an additional 8,800 people and 4,800 households, respectively over the next 25 years. This growth can be expected to increase enrollment in the high schools. (Students from outside these cities may also attend high schools in the districts, though they would not represent a substantial portion of enrollment.)

PLAN Hermosa's contribution to combined population and household growth of the three-city area would represent approximately 6 percent. New or expanded facilities that the individual districts may determine are necessary to accommodate students by 2040 would be subject to

environmental review and any necessary mitigation, which would be the responsibility of the school districts, and the cities would levy SB 50 fees for such development. Based on the foregoing, and given the provisions of SB 50, PLAN Hermosa's contribution to cumulative impacts on the need for new or expanded school facilities is **less than cumulatively considerable**.

If a new or expanded high school facility is later determined by either the MBUSD or the RBUSD to be required to accommodate student enrollment conditions in the year 2040 and beyond, it could result in physical environmental effects associated with construction (e.g., air quality, special-status species and habitats, cultural resources, geological resources, greenhouse gases, water quality and drainage, noise) as well as operational impacts (e.g., air quality, greenhouse gases, water quality, land use, noise, public services and utilities), depending on the location of the new facilities. Because those improvements are not known, it would be speculative to determine the exact extent of those impacts, if any, at this time. Additional evaluation is not required, as provided under CEQA Guidelines Section 15145 pertaining to speculation.

Mitigation Measures

None required.

4.13.5 PARKS AND RECREATION

4.13.5.1 ENVIRONMENTAL SETTING

Appendix C-16 describes the regional and local conditions related to parks and recreation in Hermosa Beach. Key findings of the environmental setting are presented below.

PARK FACILITIES

The City owns, operates, and maintains many developed park and recreation facilities providing green space, picnic facilities, a skateboard park, tennis courts, lawn bowling, and space for sporting events, as well as a community garden. The Strand and the Greenbelt offer city-long paths. Following a ballot initiative (Measure O in 1986), voter approval is required for redesignation of parkland designated Open Space in the General Plan to any other use.

The Hermosa Beach Community Resources Department administers the City's recreation programs, which offer a variety of recreational activities for participants of all ages, and facilitates the rental of City facilities for private events. **Figure 4.13-1 (Parks and Public Facilities)** identifies locations of public services and spaces in the planning area, including parks. Three facilities—Valley Park, Clark Stadium, and South Park—support activities and sport leagues for both youth and adult participants. Clark Stadium also includes space for lawn bowling. The Clark Building, located at 861 Valley Drive, has a multipurpose hall and lighted sports fields. A farmers market is held at South Park and at Pier Plaza. South Park, located at 425 Valley Drive, includes lawn areas, a play area, and a community garden.

Hermosa Beach includes approximately 42.3 acres of parkland and 63.4 acres of public beaches (see **Table 4.13-2 [Parks and Community Facilities in Hermosa Beach]**). The City does not have an established goal or standard for open space or parkland. With 19,772 residents in 2015 and 105.7 acres of accessible open space or parkland in Hermosa Beach, the City provides approximately 5.3 acres of parkland and public beaches per 1,000 residents. This ratio is above the goal or standard of 4 acres set by many cities in Los Angeles County and above the standard of 3 acres per 1,000 residents required under the Quimby Act.

The Hermosa Valley Greenbelt/Trail, located between Valley Drive and Ardmore Avenue, runs the length of the planning area and connects to Redondo Beach and Manhattan Beach. The Greenbelt provides a walking and jogging trail. Also located in the planning area are Ardmore Park (491 Ardmore Avenue) and Bicentennial Park (Valley Drive and 4th Street).

The Community Center and Hermosa Beach Community Theater are located at 710 Pier Avenue, at the intersection of Pacific Coast Highway and Pier Avenue. This complex includes a community center with meeting rooms, senior center, large and small theaters, gymnasium, skate park, tennis courts, and the Hermosa Beach Museum. The P.A.R.K. (Positive Active Recreation for Kids) Program is an after-school program offered at the Hermosa Beach Community Center and South Park for Hermosa Beach residents, emphasizing active recreation for children in first through eighth grades.

FIGURE 4.13-1
PARKS AND PUBLIC FACILITIES

LIFEGUARD AND BEACH MANAGEMENT

The City of Hermosa Beach owns 63.4 acres of public beaches, including 1.8 miles of shoreline and the Hermosa Pier. With annual beach attendance of 3.8 million visitors in fiscal year 2010–11, ocean protection and lifeguard services are important public services to protect public safety along the city's beaches and coastal areas. The City contracts with the Los Angeles County Fire Department's Lifeguard Division for these services. The Lifeguard Division consists of 150 full-time and 700 seasonal lifeguards throughout Los Angeles County.

The Lifeguard Division operates out of four sectional headquarters, one of which is located in Hermosa Beach. The Hermosa Beach sectional headquarters staffs a 24-hour emergency medical technician response unit and is connected to the 911 system.

TABLE 4.13-2
PARKS AND COMMUNITY FACILITIES IN HERMOSA BEACH

	Park Name	Address	Park Type	Size (acres)
1	Shaffer Park	Ingleside Ave & 33rd Place	Parkette	<0.1
2	Valley Park	Valley Dr & Gould Ave	Park	8.8
3	Valley Greenbelt		Trail/Open Space	19
4	Sea View Park	Prospect Ave & 19th St	Park	0.3
5	Scout Parkette	Prospect Ave & 14th St	Parkette	<0.1
6	Greenwood Park	PCH & Aviation Blvd	Park	0.5
7	Fort Lots-o-Fun	Prospect Ave & 6th St	Park	0.4
8	Edith Rodaway Friendship Park	Prospect Ave	Park	0.8
9	4th & Prospect Parkette	4th St & Prospect Ave	Parkette	<0.1
10	Oceanview Parkette	3rd St	Parkette	<0.1
11	Moondust Parkette	2nd St	Parkette	<0.1
12	City Beach, Strand Pier		Trail/Open Space	63.4
13	Noble Park	1400 The Strand	Park	0.8
14	Clark Stadium/Lawn Bowling Green	861 Valley Dr	Park	6.6
15	8th & Valley Parkette	8th St & Valley Dr	Parkette	<0.1
16	South Park	425 Valley Dr	Park	4.5
17	Ardmore Park	491 Ardmore Park	Park	0.2
18	Bicentennial Park	Valley Dr & 4th St	Park	0.4
19	Kay Etow Parkette	Herondo St	Parkette	<0.1
	Total			**105.7**
	Facility Name	**Address**	**Park Type**	**Size (acres)**
20	Hermosa Beach Community Center	710 Pier Ave	Community Center	4.8
21	View School	1800 Prospect Ave	School	4.6
22	Valley School	1645 Valley Dr	School	8.8
23	North School	417 25th St	School	1.8
	Total			**20.0**

Source: City of Hermosa Beach 2015b

BEACHES

Hermosa Beach is known for its beach, surfing, and The Strand, a paved path that parallels the beach, connecting Hermosa Beach to neighboring beach cities. The City owns the wide beach that runs the length of the planning area and serves both locals and visitors. The Strand is also part of the statewide California Coastal Trail system.

As a beach community, Hermosa Beach experiences a high visitor population. During fiscal year 2010–11, monthly beach attendance ranged from a low of 94,300 in December 2010 to a high of 939,000 in July 2010 (Los Angeles County Fire Department 2012). Total beach attendance in fiscal year 2010–11 was up 18.5 percent from fiscal year 2009–10 to 3,763,700.

The total number of residents and visitors on a weekday afternoon is 48,600 people, approximately 2.5 times the total city population. On a weekday evening, the number is just over 60,000 people, and on a weekend afternoon, approximately 108,000 people, or 5.5 times the total city population. Most of the visitors come from 10 miles away or less (Fehr & Peers 2014). The Hermosa Pier is 1,228 feet long and offers year-round fishing. The pier contains the Surfer's Walk of Fame, where surfing legends from Hermosa Beach are commemorated with bronze plaques embedded in the pier's walking surface. In addition to surfing, recreational beach activities include volleyball, skating and skateboarding, jogging, and bicycling. Special events throughout the year are primarily focused on the beach, the adjacent Pier Plaza, and the Downtown area.

4.13.5.2 REGULATORY SETTING

The following state and local plans, policies, regulations, and laws pertain to public services and recreation in the planning area.

STATE

- **Quimby Act:** As part of approval of a final tract or parcel map, the Quimby Act allows a city to require dedication of land, the payment of in-lieu fees, or a combination of both to be used for the provision of parks and recreational services. Cities can require land or in-lieu fees for a minimum of 3 acres per 1,000 residents, with the possibility of increasing the requirement to a maximum of 5 acres per 1,000 residents if the city already provides more than 3 acres per 1,000 residents.
- **California Coastal Act:** The California Coastal Act of 1976 and the California Coastal Commission, the state's coastal protection and planning agency, were established by voter initiative in 1972 to plan for and regulate new development, and create strong policies to protect public access to and along the shoreline. To ensure that maximum public access to the coast and public recreation areas is provided, the Coastal Act directs each local government lying within the Coastal Zone to prepare a Local Coastal Program (LCP) consistent with Section 30501 of the Coastal Act, in consultation with the Coastal Commission and with public participation. Provisions of the Coastal Act related to public services, utilities, and recreation are summarized below.

  Until an LCP has been adopted by the local jurisdiction and certified compliant with the Coastal Act, the Coastal Commission retains permitting authority within the local jurisdiction. A coastal development permit is required for development in the Coastal Zone that results in changes to the density or intensity of the use of land, changes in water use, and impacts to coastal access.

  – Section 30210. Access; recreational opportunities; posting. In carrying out requirements of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all of the

people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from over use.

- Section 30212.5. Public Facilities; distribution. Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.
- Section 30221. Oceanfront land; protection for recreational use and development. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.
- Section 30252. Maintenance and enhancement of public access. The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of on-site recreational facilities to serve the new development.

LOCAL

- **Hermosa Beach Municipal Code:** The City's Municipal Code includes regulations and standards related to development and operations. Title 12, Street, Sidewalks and Public Places, establishes development and operations standards for public spaces in the planning area (e.g., parks, sidewalks, the beach).
- **Hermosa Beach Comprehensive Parks and Recreation Master Plan:** The Comprehensive Parks and Recreation Master Plan was adopted in 1990 and provides guidance for the management and orderly development of parks, recreation, and open space facilities and programs in Hermosa Beach. The plan identifies the long-term goals of the community to be a steward of existing park and recreational spaces, provide recreational resources, programs, and activities, and promote preservation and interpretation of historical resources, cultural resources, and natural environments. These goals are supported by specific policies associated with parkland acquisition, classification of parklands, design and development standards, program and service policies, operation and maintenance objectives, and economic performance policies.
- **Hermosa Beach Local Coastal Program:** The LCP consists of the Coastal Land Use Plan (general plan–level policies and maps) and a Local Implementation Program (coastal zoning code, zoning maps, and implementing ordinances). The Hermosa Beach Coastal Land Use Plan component, adopted by the City and certified by the California Coastal Commission in 1981, addresses public access and recreation considerations in the Coastal Zone. The Local Implementation Program of the LCP has not yet been certified and therefore the City does not have a certified LCP. The Coastal Commission retains the authority to review and issue coastal development permits in the Coastal Zone.

The Coastal Land Use Plan includes a statement of philosophy and supporting goals, policies, and programs to "maintain [Hermosa Beach's] current high level of recreational access to the coast and its recreational facilities to be consistent with maintaining the beach in its most natural state" by maximizing access, maintaining availability of low-cost visitor facilities, and establishing and enforcing building and development standards with priority for recreational and visitor-serving uses.

4.13.5.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G standards of significance. A parks and recreation impact is significant if implementation of PLAN Hermosa would:

1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

2) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

ANALYSIS APPROACH

Evaluation of PLAN Hermosa was based on review of the current facilities, the City's Municipal Code, and other relevant literature. This material was compared to the proposed project's specific parks and recreation service–related impacts. The impact analysis below focuses on whether those impacts would have a significant effect on the physical environment.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

The following proposed PLAN Hermosa policies and implementation actions address parks and recreation facilities and services:

Policies

Parks + Open Space Element

- **1.1 Diverse programs and facilities.** Offer diverse recreational facilities to meet the needs of seniors, youth, families, and persons with disabilities.
- **1.2 Park fees.** Require new discretionary development to contribute fees, consistent with State law, for expanded park space when publicly accessible open space is not provided on-site.
- **1.3 Creative parks and open space.** Encourage creativity and innovation the development and provision of additional open space or parks, rooftop gardens, park space integrated into parking structures.
- **1.4 Park expansion opportunities.** Consider the purchase of property to create additional parks and open space as opportunities arise to expand existing parks or create new parks.
- **1.5 Shared use agreements.** Work with adjacent jurisdictions, the school district, and private facilities to offer recreational opportunities or activities not available at Hermosa Beach facilities.
- **2.1 Facility upgrades.** Improve and update park and open space facilities on a regular basis.

- **2.2 Lighting and visibility.** Provide appropriate lighting and visibility within park facilities while avoiding adverse impacts to adjacent properties.
- **2.3 CPTED principles.** Utilize "Crime Prevention through Environmental Design" (CPTED) principles in the design and renovation of new and existing parks and open space facilities.
- **2.4 Low-maintenance design.** Promote environmentally sustainable and low-maintenance design principles in the renovation, addition, or maintenance of parks and recreation facilities.
- **3.1 Social and cultural events.** Design and program parks and open space to accommodate unique social and cultural events to foster connectedness and interaction.
- **3.2 Family friendly events.** Encourage, permit, and support community group, non-profit, or business organized events on City property that support physical activity, beach culture, and family-friendly social interactions.
- **3.3 Commercial use of facilities.** Regulate commercial use of City parks and open spaces to ensure activities do not impact general use and enjoyment.
- **3.4 Balance space needs.** Balance the space needs and demand on public resources of formal and informal events.
- **3.5 Health and physical activity.** Increase the availability of space and activities that promote community health and physical activity such as community gardens, fitness stations/equipment, and fields/courts.
- **3.6 Community gardens.** Increase available space and necessary infrastructure to incorporate community gardens plots at parks.
- **4.1 Close proximity to parks.** Provide a variety and distribution of parks, open space, and recreational facilities to ensure close proximity and easy access to all residents.
- **4.2 Enhanced access points.** Increase and enhance access to parks and open space, particularly access points that promote physical activity such as pedestrian and bike oriented access points.
- **4.3 Safe and efficient trail network.** Develop a network of safe and efficient trails, streets, and paths that connect residents, visitors, and neighboring communities to the beach, parks, and activity centers.
- **4.4 ADA accessible park access.** Ensure all park access points and facilities are ADA accessible.
- **4.5 Parking to parks.** Consider converting parking areas adjacent to parks into additional greenspace, as access to parks for alternative modes is enhanced.

Implementation Actions

- LAND USE-6. Develop an inventory of underutilized or surplus property that may be appropriate for City or School District use or purchase to serve community education and recreational needs in the future.
- MOBILITY-13. Install and maintain transportation amenities such as bicycle parking and electric vehicle charging stations so that they are available at each commercial district or corridor, park, and public facility.
- PARKS-1. Conduct needs assessments and evaluate recreational program offerings to ensure community needs and priorities are being met. Conduct regular updates to the Parks and Recreation Master Plan.

- PARKS-2. Conduct periodic assessments of public facilities and maintain a list of priority replacement or new facilities projects.
- PARKS-3. Establish parks level of service and level of access standards to prioritize the development, upgrade, and renovation of parks and open space facilities.
- PARKS-4. Update City standards and fees related to the provision of parks and open space and sustainable funding source for providing high quality and well maintained facilities.
- PARKS-5. Construct parkettes, open space, and pedestrian amenities at street ends as they intersect with The Strand.
- PARKS-6. Continue, renew, and expand as needed, joint use agreements with the School District to allow community use of school fields and facilities.
- PARKS-7. Partner with the School District, community groups, and neighboring communities to identify and apply for grant opportunities to maintain, enhance, and expand park and recreational opportunities.
- PARKS-9. Install accessible walkways at parks and onto the beach while minimizing or avoiding negative effects on the aesthetics and ecology of the beach environment.
- PARKS-17. Identify and remove and unauthorized/unpermitted structures, including signs and fences that inhibit visibility of public coastal access points.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.13.5-1 ***Would PLAN Hermosa Increase Demand for Additional Park Facilities?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could increase demand for parks and recreation services. Existing park acreage would continue to meet the Quimby Act standard of 3 acres per 1,000 residents. PLAN Hermosa policies and implementation actions would require the provision of new parks and recreation facilities and ongoing parkland maintenance to prevent deterioration of existing facilities. Therefore, this impact would be* ***less than significant****.*

Impacts to Existing Facilities

An increase in population resulting from implementation of PLAN Hermosa may place greater demands on existing parks or recreational facilities in the planning area such that deterioration of these facilities could occur or be accelerated. Development consistent with PLAN Hermosa would result in about 660 new residents, a 3 percent increase in potential park users.

PLAN Hermosa Parks + Open Space Element policies and implementation actions would ensure that adequate parks and recreational facilities are provided to accommodate the anticipated increase in new residents. Policy 1.1 would offer diverse recreational facilities to meet the needs of seniors, youth, families, and persons with disabilities. Policy 1.4 would consider the purchase of property to create additional parks and open space as opportunities arise to expand existing parks or create new parks. Policy 2.1 would improve and update park and open space facilities on a regular basis. In addition, implementation actions would ensure that adequate parks and recreational facilities are provided to accommodate the anticipated increase in new residents. PARKS-9 would install accessible walkways onto the beach while minimizing or avoiding negative effects on the aesthetics and ecology of the beach environment. PARKS-17 would identify and remove any unauthorized/unpermitted structures, including signs and fences that inhibit visibility of public coastal access points. PARKS-6 would serve to reduce potential impacts by continuing, renewing, and expanding as needed, joint use agreements with the school district to allow community use of school fields and facilities.

Potential Need for New Facilities

The planning area includes approximately 42 acres of parkland and 63 acres of public beaches (see **Table 4.13-2**). Hermosa Beach does not have an established goal or standard for open space or parkland. With 19,772 residents in 2015 and 105.7 acres of accessible open space or parkland in Hermosa Beach, the City provides approximately 5.3 acres of parkland per 1,000 residents. This ratio is above the goal of 4 acres per 1,000 residents set by many cities in Los Angeles County and above the standard of 3 acres per 1,000 residents required under the Quimby Act. With PLAN Hermosa, the ratio would be approximately 5.2 acres per 1,000 residents. Although there would be a decrease, the ratio would remain above the Quimby Act standard. The existing parkland in the city is adequate, as it currently exceeds the amount of parkland required by the Quimby Act. The adoption and implementation of PLAN Hermosa and the associated increase in population would not trigger the need for new parks. Therefore, there would not be physical impacts resulting from the creation of new or expanded parks or park facilities.

PLAN Hermosa Parks + Open Space Element policies and implementation actions would ensure that adequate parks and recreational facilities are provided to accommodate the anticipated increase in new residents. Policy 1.1 would offer diverse recreational facilities to meet the needs of seniors, youth, families, and persons with disabilities. Policy 1.2 would require new discretionary development to contribute fees, consistent with state law, for expanded park space when publicly accessible open space is not provided on-site. Policy 1.4 would consider the purchase of property to create additional parks and open space as opportunities arise to expand existing parks or create new parks. Policy 2.1 would improve and update park and open space facilities on a regular basis. In addition, implementation actions would ensure that adequate parks and recreational facilities are provided to accommodate the anticipated increase in new residents. PARKS-9 would install accessible walkways onto the beach while minimizing or avoiding negative effects on the aesthetics and ecology of the beach environment. PARKS-17 would identify and remove any unauthorized/unpermitted structures, including signs and fences that inhibit visibility of public coastal access points. PARKS-6 would serve to reduce potential impacts by continuing, renewing, and expanding as-needed, joint-use agreements with the school district to allow community use of school fields and facilities.

Implementation of the above proposed policy provisions could result in environmental impacts associated with construction (e.g., air quality, special-status species and habitats, cultural resources, geological resources, greenhouse gases, water quality and drainage, noise) as well as operational impacts (e.g., air quality, greenhouse gases, water quality, land use, noise, public services and utilities) depending on the location of new recreation facilities. This EIR programmatically evaluates development and improvements in the city associated with implementation of PLAN Hermosa. Subsequent review of project-specific park projects would be completed to determine the extent of site-specific environmental review that will be required.

PLAN Hermosa policies and implementation actions would maintain existing parks and recreation facilities for residents, including maintenance to prevent deterioration of existing parks. Therefore, impacts on parks and recreation facilities and services would be **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative setting for parks impacts includes existing, approved, proposed, and reasonably foreseeable development in Hermosa Beach and the South Bay Cities Council of Governments (COG) planning area.

IMPACT 4.13.5-2 ***Would PLAN Hermosa Cumulatively Increase Demand for Parks and Recreation Facilities?*** *Implementation of PLAN Hermosa, along with other existing, planned, proposed, approved, and reasonably foreseeable development in the South Bay Cities COG planning area, could increase the use of existing parks and require additional park and recreation facilities in the cumulative setting, the provision of which could have an adverse physical effect on the environment. However, PLAN Hermosa would continue to provide adequate parks and recreation facilities within the city to accommodate existing and future demand and would not result in the need to construct new or expanded facilities. This impact would be* ***less than cumulatively considerable****.*

Development in Hermosa Beach that may result with the implementation of PLAN Hermosa, as well as development in nearby cities in the South Bay Cities COG planning area, would increase the population of the area, thereby potentially increasing the need for additional or expanded parkland and recreational facilities. Residents of other cities or unincorporated areas lacking in parkland or recreation facilities may travel to an adjacent city to use such facilities, thereby increasing the use and furthering deterioration of those facilities, or resulting in the need for new or expanded facilities. However, PLAN Hermosa would not contribute to this potential impact because there would be sufficient parks and community facilities in the city to serve the future population, as indicated in Impact 4.13.5-1. Therefore, PLAN Hermosa would have a **less than cumulatively considerable** impact on parks and regional recreation facilities and services.

Mitigation Measures

None required.

4.13.6 LIBRARY FACILITIES

4.13.6.1 ENVIRONMENTAL SETTING

The Hermosa Beach Public Library, operated by the County of Los Angeles Public Library, is 6,496 square feet and contains six public computers, two children's computers, two early literacy computers, and free Wi-Fi. The library has a children's area, teen space, and a book drop that is accessible 24 hours. The online collection and research tools are available 24 hours a day.

4.13.6.2 REGULATORY SETTING

No federal, state, and local plans, policies, regulations, and laws pertain to library services in the planning area.

4.13.6.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G standard of significance. A library impact is considered significant if implementation of the proposed project would:

1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for library services.

ANALYSIS APPROACH

The analysis of library impacts is based on information presented in the Technical Background Report about existing library conditions and a qualitative assessment as to whether the approximately 3 percent increase in city population would result in the need for new or expanded library facilities.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

PLAN Hermosa does not include policies or implementation actions addressing library services.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.13.6-1 ***Would PLAN Hermosa Increase Demand for Additional Library Facilities?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could increase the demand for library services. However, the City would not need to expand or construct library facilities to meet recommended standards. Therefore, this impact would be* ***less than significant****.*

With the slight increase in population (around 3 percent over 20 years) and new development and redevelopment anticipated with implementation of PLAN Hermosa, minimal additional demands would be placed on library services. The Hermosa Beach Public Library is 6,496 square feet and contains multiple public computers. Development consistent with PLAN Hermosa would not induce population growth that would require the provision of additional library space. Additionally, the City, in conjunction with Los Angeles County, has initiated a community needs assessment to determine the physical space and service offerings needed to adequately serve the community of Hermosa Beach. The impact would be **less than significant**.

As noted above, the City is considering improvements to the library. No specific recommendations or designs have been established so that specific physical impacts to the environment can be identified. However, construction activities could result impacts related to air quality (construction pollutant emissions), cultural resources (undiscovered resources), greenhouse gas emissions from construction, soil stability and erosion, construction water quality, accidental release of hazardous materials during construction, construction noise, and construction traffic impacts. These issues have been programmatically evaluated in this EIR. Subsequent review of project-specific facility improvements would be completed to determine the extent of site-specific environmental review that will be required.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

Although there is no defined boundary for cumulative impacts to library facilities, residents of a city lacking in library facilities may travel to an adjacent city to use such facilities, thereby increasing the use and furthering deterioration of those facilities. Development in Hermosa Beach that may result with the implementation of PLAN Hermosa, as well as existing, approved, proposed, and reasonably foreseeable development in nearby cities in Los Angeles County, would increase the population of the area, thereby increasing the need for additional or expanded library facilities.

IMPACT 4.13.6-2 ***Would PLAN Hermosa Cumulatively Increase Demand for Library Facilities?*** *Population growth associated with implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the cumulative setting, would not result in a cumulative increase in demand for library services. This would be* ***less than cumulatively considerable*** *impact.*

With the slight increase in population and new development and redevelopment anticipated with implementation of PLAN Hermosa, minimal additional demands would be placed on library services. Additionally, while future growth in nearby cities could also result in use of the Hermosa Beach Library, the library, as well as all public libraries in the county, are operated by the Los Angeles County Public Library. The Los Angeles County library system has over 90 public libraries. A cumulative increase in use at these facilities may in fact result in a need for new or expanded facilities. However, as discussed in Impact 4.13.6-1, the Hermosa Beach Public Library would have adequate space for additional demands with implementation of PLAN Hermosa. Therefore, cumulative impacts on library facilities would be **less than cumulatively significant**.

Mitigation Measures

None required.

4.13.7 WATER SUPPLY AND SERVICE; WASTEWATER SERVICE; STORM DRAINAGE

4.13.7.1 ENVIRONMENTAL SETTING

Appendix C-16 describes the regional and local conditions related to water supply, wastewater, and drainage in Hermosa Beach. Key findings of the environmental setting are presented below.

WATER

Hermosa Beach is located in the California Water Service Company's (Cal Water) Hermosa-Redondo District. The service area encompasses the cities of Hermosa Beach and Redondo Beach and a portion of Torrance. The district supplies are a combination of surface water, groundwater, and recycled water. Purchased water from the West Basin Municipal Water District (WBMWD), one of 27 member agencies of the Metropolitan Water District (MWD) of Southern California, satisfies 85 to 90 percent of the district's water demand. The MWD operates five water treatment plants. The Robert B. Diemer Treatment Plant, which provides treated surface water to coastal Los Angeles County and areas of Orange County, has a treatment capacity of 520 million gallons per day. Groundwater extracted from the West Coast Basin Silverado aquifer comprises 10 to 15 percent of the district's water demand. Cal Water's adjudicated right of the safe yield of the groundwater basin is 4,070 acre-feet per year (afy). However, Cal Water does not currently have the ability to sustain production and delivery of this quantity and only normally produces approximately 2,000 afy. Recycled water generally makes up approximately 1 percent of the total water supplied to customers in the district (Cal Water 2011).

Cal Water has an Imported Water Purchase Agreement with the WBMWD. The agreement establishes base, tier allocations, and purchase commitment requirements. Under the latest agreement, Cal Water's Tier 1 maximum allocation is 70,000 afy. The Hermosa-Redondo District shares in the combined allocations with three other Cal Water service districts. The Hermosa-Redondo allocation is 16,800 afy.

Table 4.13-3 (Hermosa-Redondo District Water Supply and Demand 2010 through 2040) summarizes water supply sources and demand for the period 2010 through 2040, as presented in the district's 2010 Urban Water Management Plan (UWMP). The 2010 UWMP estimated future water demand for the service area through 2040 based on district-estimated population and a per

capita demand factor.[2] Groundwater and recycled water are available in all hydrologic years in the amounts shown in **Table 4.13-3**. As demand increases, Cal Water purchases water from the WBMWD to provide the balance of supply to meet customer demands. As shown, as demand increases, the supply is adjusted to meet the demand. Cal Water has determined that no supply deficiencies are expected and supplies will be reliable for its service area through the planning horizon of the 2010 UWMP under normal year, single dry-year, and multiple dry-year scenarios (Cal Water 2011).

TABLE 4.13-3
HERMOSA-REDONDO DISTRICT SUPPLY AND DEMAND, 2010–2040 (ACRE-FEET PER YEAR)

Supply and Demand	2015	2020	2025	2030	2035	2040
Supply and Demand Comparison – Normal Year						
WBMWD	10,850	10,291	10,680	11,080	11,489	11,910
Groundwater	3,500	4,070	4,070	4,070	4,070	4,070
Recycled	155	159	162	166	169	173
Total Supply	14,506	14,519	14,912	15,315	15,728	16,152
Total Demand	14,506	14,519	14,912	15,315	15,728	16,152
Supply and Demand Comparison – Single Dry Year						
WBMWD	11,304	10,475	11,147	11,559	11,981	12,415
Groundwater	3,500	4,070	4,070	4,070	4,070	4,070
Recycled	155	159	162	166	169	173
Total Supply	14,960	14,974	15,379	15,795	16,221	16,658
Total Demand	14,960	14,974	15,379	15,795	16,221	16,658
Supply and Demand Comparison – Multiple Dry Year 1						
WBMWD	10,200	9,640	10,011	10,393	10,784	—
Groundwater	3,500	4,070	4,070	4,070	4,070	—
Recycled	155	159	162	166	169	—
Total Supply	13,855	13,868	14,244	14,628	15,023	—
Total Demand	13,855	13,868	14,244	14,628	15,023	—
Supply and Demand Comparison – Multiple Dry Year 2						
WBMWD	10,350	9,862	10,240	10,626	11,024	—
Groundwater	3,500	4,070	4,070	4,070	4,070	—
Recycled	156	159	163	166	170	—
Total Supply	14,006	14,092	14,472	14,863	15,264	—
Total Demand	14,006	14,092	14,472	14,863	15,264	—

[2] Specific demand by jurisdiction is not identified in the UWMP. The UWMP also compared its projections to population estimates for 2035 developed by SCAG. At the time the 2010 UWMP was prepared, the 2008 RTP was the most current adopted growth forecast, and the service area population was forecast at approximately 102,000. Based on draft 2016 RTP projections, the service area population for 2040 (which includes PLAN Hermosa) would be 102,790. However, the 2010 UWMP reflects the higher population developed by the district for projecting population-based water demand.

Supply and Demand	2015	2020	2025	2030	2035	2040
Supply and Demand Comparison – Multiple Dry Year 3						
WBMWD	9,710	9,288	9,649	10,021	10,401	—
Groundwater	3,500	4,070	4,070	4,070	4,070	—
Recycled	157	160	163	166	171	—
Total Supply	13,367	13,518	13,883	14,258	14,642	—
Total Demand	13,367	13,518	13,883	14,258	14,642	—
2010 UWMP Population Projections						
District-Estimated Total Service Area Population	99,050	101,740	104,500	107,320	110,230	113,200

Not projected in 2010 UWMP

Source: Cal Water 2011, Table 2.2-2, Tables 5.2-4 through 5.2-6

WASTEWATER

The City of Hermosa Beach provides wastewater collection services in the planning area. The sanitary sewer system network comprises approximately 37 miles of sewer lines. Much of the system is believed to have been installed in the late 1920s, although confirmation of this is difficult. The majority of the original system is concrete, with recent replacements of clay pipe. The system is primarily a gravity flow system, with the exception of two pump stations. The effluent collected by sewer lines is discharged into the Sanitation Districts of Los Angeles County (LACSD) trunk lines, which flow north-northwesterly toward Manhattan Beach (City of Hermosa Beach 2011b).

The LACSD trunk lines flow to the Joint Water Pollution Control Plant (JWPCP), located in Carson. The JWPCP is one of the largest wastewater plants in the world and is the largest of the LACSD wastewater treatment plants. The facility provides both primary and secondary treatment and has a total permitted capacity of 400 million gallons per day (mgd).[3] The plant serves a population of approximately 3.5 million people throughout Los Angeles County. Treated discharge from the plant is transported to the Pacific Ocean through a network of outfalls, which extend 1.5 miles off the Palos Verdes Peninsula, to a depth of 200 feet (LACSD 2013). The JWPCP currently processes an average flow of 263.1 mgd (LACSD 2015). The projected flow to the JWPCP in its service area for 2050 is 359 mgd.[4]

STORM DRAINAGE

Hermosa Beach is part of the Santa Monica Bay Watershed, which has an annual discharge of more than 30 billion gallons of stormwater and urban runoff each year through 200 outlets. Urban runoff is caused by precipitation falling on impermeable pavement.

Urban runoff (stormwater) flows from inland locations through the city to the Pacific Ocean through a network of underground drainage pipes identified in **Figure 4.8-1** in Section 4.8, Hydrology and Water Quality. The network is a mix of County-owned and City-owned lines that generally run east to west along major roads, including 16th Street, Pier Avenue, and 2nd Street. The underground storm drain system is discontinuous, and in some areas of the city storm runoff

[3] The JWPCP operates under National Pollutant Discharge Elimination System (NPDES) Permit CA 0053813 issued by the Los Angeles Regional Water Quality Control Board (Order No. R4-2011-0151).

[4] Estimates of future flows as presented in the Clearwater Program Final Facilities Master Plan (LACSD 2012, p. 4-20), which assumes a per capita generation of 83 gallons per capita per day and the current conveyance system configuration.

flows on the surface of streets. Minor localized street flooding is common throughout many areas of the city. This existing condition is the result of a combination of the city's flat topography and smaller, frequent storm events in which runoff flows into inlets, drains, and sumps where there is insufficient capacity to contain the runoff until the storm subsides. In some locations, where there is neither storm drain nor gutter, runoff is not always contained within the street. Most of the deficiencies are in the western part of the city: the Valley Drive/Ardmore Drive area, along Hermosa Avenue, and the Gould Avenue/27th Street area. The City has implemented some improvements to improve capacity, and additional capacity improvements will be constructed as funding allows.

The storm drain system generally terminates through 11 outfalls at the west end of the city on the beach or directly into the Pacific Ocean. Severe storm events combined with high tides and/or obstruction of the mouth of storm drain outfalls by sand has caused flooding at private properties along The Strand. The underlying cause of this condition, at least in part, is the increased width of the sandy beach over time, leading to periodic burial of the outfall openings. The City's Public Works Department routinely maintains the opening of beach outfalls through a memorandum of understanding with the County.

The City of Hermosa Beach and the County of Los Angeles are co-permittees on a Municipal Separate Storm Sewer System (MS4) Permit in the planning area. The City is responsible for the development, implementation, and enforcement of stormwater runoff and drainage requirements to protect local and coastal water quality. As noted in Section 4.8, Hydrology and Water Quality, future projects proposed in Hermosa Beach under the Beach Cities Enhanced Watershed Management Plan include the Hermosa Beach Infiltration Trench project, the Hermosa Beach Greenbelt Infiltration project, and two green street projects. While the focus of these future projects is water quality protection, controlling the rate and volume of runoff into these features is a key component of their effectiveness.

4.13.7.2 REGULATORY SETTING

The following federal, state, and local plans, policies, regulations, and laws pertain to water and wastewater services in the planning area.

FEDERAL

- **Clean Water Act and National Pollutant Discharge Elimination System (NPDES)**: Authorized by the Clean Water Act in 1972, the NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Any industrial, municipal, or other facility which discharges directly to surface waters must obtain permits through the authorized states. In California, the State Water Resources Control Board (SWRCB) serves as the authorized agency to issue NPDES permits.

STATE

- **Sewer System Management Plan:** The SWRCB adopted new policies in December 2004 requiring wastewater collection providers to report sanitary sewer overflows and to prepare and implement sewer system management plans (SSMP). SSMP requirements are modeled on proposed federal capacity, management, operations, and maintenance plans. The SSMP policy requires dischargers to provide adequate capacity in the sewer collection system, take feasible steps to stop sewer overflows, identify and prioritize system deficiencies, and develop a plan for disposal of grease, among other requirements. In addition, wastewater providers must now report sanitary sewer overflows to the Los Angeles Regional Water Quality Control Board, keep internal records of these overflows,

and produce an annual report on overflows. Overflows from laterals on private property, if caused by an owner, are not required to be reported.

- **Senate Bill 610:** SB 610 (Section 21151.9 of the Public Resources Code and Section 10910 et seq. of the California Water Code) requires the preparation of water supply assessments for large developments (e.g., for projects of 500 or more residential units; 500,000 square feet of retail commercial space; or 250,000 square feet of office commercial space).
- **Urban Water Management Planning Act:** The California Urban Water Management Planning Act of 1983 requires that each urban water supplier providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually prepare, update, and adopt its urban water management plan (UWMP) at least once every five years on or before December 31, in years ending in 5 and 0. The plan describes and evaluates sources of water supply, projected water needs, conservation, implementation strategy, and schedule. The Hermosa-Redondo District of the California Water Service Company, the City's water supplier, adopted its 2010 UWMP in 2011.

REGIONAL

- **Enhanced Watershed Management Plan for Beach Cities (EWMP):** Following adoption of the MS4 permit, the Cities of Hermosa Beach, Manhattan Beach, Redondo Beach, and Torrance, together with the Los Angeles County Flood Control District, collectively referred to as the Beach Cities Watershed Management Group (Beach Cities WMG) agreed to collaborate on the development of an Enhanced Watershed Management Program (EWMP) for the Santa Monica Bay and Dominguez Channel Watershed areas within their jurisdictions (referred to as the Beach Cities EWMP Area). Under Part IV.C of the MS4 permit (Watershed Management Program), the permittees are afforded the flexibility to develop watershed management programs to implement the requirements of the permit on a watershed scale through customized strategies, control measures, and best management practices. The Beach Cities EWMP summarizes watershed-specific water quality priorities identified by the Beach Cities WMG; outlines the program plan, including specific strategies, control measures, and best management practices to achieve water quality targets; and describes the quantitative analysis completed to support target achievement and permit compliance. A timeline, estimated costs, and potential funding sources are also described in the EWMP. Currently, regional best management practices have been constructed within the Beach Cities EWMP planning area, including two in Hermosa Beach (Pier Avenue Improvement project and Hermosa Strand Infiltration Trench project). Future projects proposed in Hermosa Beach are the Hermosa Beach Infiltration Trench project, the Hermosa Beach Greenbelt Infiltration project, and two green street projects. The projects in Hermosa Beach have not been funded, and a schedule for implementation has not been developed. The Beach Cities EWMP was approved by the Los Angeles RWQCB on April 18, 2016, under its authority to administer the MS4 permit. The EWMP does not establish policies or regulations that the participating cities must impose on new development or redevelopment, nor does the program require the construction of the specific features identified in the EWMP. However, the approach described in the Enhanced Watershed Management Program, in combination with the required low impact development–based best management practices that each participating city must impose on development, is anticipated to protect and potentially improve water quality in Santa Monica Bay from pollutants in stormwater runoff.

LOCAL

- **Sanitation Districts of Los Angeles County:** The LACSD serves approximately 5.7 million people in Los Angeles County through 24 independent special districts. The service area includes approximately 820 square miles in 78 cities and unincorporated areas in the county. Approximately 1,400 miles of main trunk sewers and 11 wastewater treatment facilities serve the area. The 23 independent special districts are governed by boards of directors, consisting of the mayors of each city in the districts and the chair of the County Board of Supervisors for unincorporated territories. The Hermosa Beach planning area is within the South Bay Cities District of the LACSD.
- **Los Angeles Regional Agency (LARA):** LARA was approved by the California Integrated Waste Management Board in 2004 to assist its 14 member cities to achieve Assembly Bill (AB) 939 recycling goals through a Joint Powers Agreement on a regional basis. The City of Hermosa Beach is a member of LARA, which assists member cities in complying with recycling requirements.
- **Hermosa Beach Capital Improvement Program (CIP):** The CIP is a budget for the upcoming fiscal year, as well as a projection of revenue and desire projects for the next five years. The City's current CIP is a product of extensive public outreach and reflects the spending priorities of the community including street and highway improvements, sewer/storm drain improvements, parks improvements, and public buildings and grounds improvements. The commitment for FY 2014–15 was just over $6 million.
- **Hermosa Beach Sanitary Sewer Master Plan:** The Sanitary Sewer Master Plan provides an overview of existing conditions and recommends a rehabilitation program for Hermosa Beach's sanitary sewer infrastructure. The Master Plan estimates that the entire sanitary sewer system has a replacement value of $40 million. It recommends that the City invest $7.5 million (present value), plus 20 percent equal to $1.5 million for design and administration to rehabilitate approximately 95,000 linear feet of sanitary sewer pipes through year 2021 (City of Hermosa Beach 2011b). The City adopted a sanitary sewer tax in 2015 to implement the master plan.
- **Hermosa Beach Municipal Code:** The City's Municipal Code includes regulations and standards related to development and operations. Title 8, Health and Safety, includes standards and procedures to protect the health and safety of residents, businesses, and visitors regarding garbage collection and disposal, hazardous materials, nuisances, sewage and industrial waste, stormwater and urban runoff pollution, and water conservation and drought management. Title 13, Public Services, identifies fees associated with sewer connections and the process to establish underground utility districts. Title 15, Buildings and Construction, establishes building and construction standards to protect the public health, safety, and welfare through fire prevention, abatement of dangerous buildings, seismic strengthening, and enforcement of mechanical, plumbing, and electrical codes. Title 16, Subdivisions, identifies standards and procedures for subdividing land in the planning area consistent with the Subdivision Map Act, including park and recreation area dedication and fees.
- **Low Impact Development Ordinance:** The City has been requiring low impact development (LID) best management practices for certain residential and commercial projects since 2010, when it adopted a customized amendment to the California Green Building Code. As required by the current MS4 permit, Municipal Code Section 8.44.095 (LID Ordinance) sets forth low impact development requirements for new development and redevelopment (Ordinance No. 15-1351). All new development or new building construction in Hermosa Beach will be required to comply with the LID requirements regardless of the area of impervious surface or acreage disturbed, which exceeds the

minimum applicability requirements of the MS4 permit. Consistent with the MS4 permit, redevelopment projects of any type that add or replace more than 5,000 square feet of impervious surface area will also be required to comply with the LID requirements, with the further proviso that redevelopment projects located directly adjacent to a significant ecological area will be subject to LID requirements if they propose the addition or replacement of more than 2,500 square feet of impervious surface area.[5] The City began implementing the LID Ordinance requirements in fiscal year 2015–2016.

- **Green Street Policy:** The City adopted a policy (Resolution No. 15-0013) in 2015 to implement green street best management practices as elements of street and roadway projects, including public works capital improvement projects, to the maximum extent practicable. This policy is intended to demonstrate compliance with the MS4 permit. Water quality improvement and groundwater replenishment benefits are achieved through designs that minimize impervious area and incorporate bioretention elements (e.g., vegetated swales) to facilitate natural pollutant removal while allowing stormwater retention and/or infiltration.

4.13.7.3 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G standards of significance. A utilities impact is considered significant if implementation of the proposed project would:

1) Exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board.
2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
3) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
4) Have insufficient water supplies available to serve the project from existing entitlements and resources, or would require new or expanded entitlements.
5) Have inadequate capacity to serve the project's projected demand for wastewater treatment, in addition to the provider's existing commitments.

ANALYSIS APPROACH

Evaluation of PLAN Hermosa was based on review of the current facilities, the City's Municipal Code, and other relevant literature. This material was compared to the plan's water supply and use-related impacts, as well as impacts related to wastewater. The impact analysis below focuses on whether those impacts would have a significant effect on the physical environment.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

The following PLAN Hermosa policies and implementation actions address water supply and use and wastewater:

[5] The complete text of the LID Ordinance may be found at: http://www.codepublishing.com/CA/HermosaBeach/#!/hermosabeach08/HermosaBeach0844.html#8.44.095

Policies

Public Safety Element

- **1.8 Reduce stormwater runoff.** Reduce stormwater runoff consistent with local stormwater permits.

Sustainability + Conservation Element

- **4.2 Building energy disclosure.** Require large buildings to report their energy and water use on a regular basis.
- **5.1 Recycled water facilities.** Ensure recycled water supply and distribution facilities are available throughout the City.
- **5.2 Rainwater collection.** Encourage innovative water recycling techniques such as rainwater capture, use of cisterns, and installation of greywater.
- **5.3 Water conservation programs.** Update and improve water conservation and efficiency programs, requirements, and incentives on a regular basis.
- **5.4 Conservation behavior.** Maximize water conservation and efficiency upgrades through education, regulation, and incentives covering every aspect of water use.
- **7.1 Permeable pavement.** Require the use of permeable pavement in parking lots, sidewalks, plazas, and other low-intensity paved areas.

Infrastructure Element

- **4.8 Holistic systems planning.** Develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness.
- **5.1 Integration of stormwater best practices.** Integrate stormwater infiltration best practices when initiating streetscape redevelopment or public facility improvement projects.
- **5.3 Natural features.** Integrate natural features, such as topography, drainage, and trees, into the design of streets and rights-of-way.
- **5.4 Conservation behavior.** Encourage community behavior changes to reduce urban runoff pollution.
- **5.5 Stormwater system maintenance.** Maintain, fund, and regularly monitor the City's stormwater infrastructure.
- **5.6 Stormwater system repairs.** Ensure that stormwater system repairs are included in maintenance plans for other City infrastructure and that repairs and maintenance are completed in a timely manner to prevent additional repair costs.
- **5.7 Stormwater permits.** Strictly implement, enforce, and monitor MS4 NPDES permit requirements.
- **5.8 Low impact development.** Require new development and redevelopment projects to incorporate low impact development (LID) techniques in project designs, including but not limited to on-site drainage improvements using native vegetation to capture and clean stormwater runoff.

Implementation Actions

- SUSTAINABILITY-8. Develop and market a program to offer incentives such as rebates, fee waivers, or permit streamlining to facilitate the installation of renewable energy, energy efficient, or water conservation equipment.
- SUSTAINABILITY-9. Maintain and periodically update the Water Efficient Landscape Ordinance and Water Conservation and Drought Management Plan sections of the Municipal Code to facilitate the use of new technologies or practices to conserve water.
- INFRASTRUCTURE-1. Create a comprehensive, long-range (20-year) infrastructure plan integrating roadway, water, wastewater, stormwater, waste disposal, and utility infrastructure systems.
  - Consider the best available science describing potential climate change impacts as a basis for preparing the infrastructure plan.
  - Use the infrastructure plan as a resource when preparing five-year Capital Improvement Plans (CIPs) and setting and enforcing discretionary development requirements.
  - Incrementally update the infrastructure plan following the preparation of each CIP to ensure it remains consistent with changes in growth, traffic, funding sources, climate change impacts, and state and regional regulation.
- INFRASTRUCTURE-8. Improve the environmental compatibility of utility and infrastructure facilities by establishing and applying the following standards to new development and redevelopment projects involving utility installation or relocation:
  - New utilities must be located away from, or constructed in a manner compatible with, critical habitat areas, resources, and the shoreline. Physical and service constraints may not allow relocation away from or full compatibility with such areas and resources.
- INFRASTRUCTURE-9. Consult with Cal Water to estimate and evaluate water supplies, provide public information and incentives for water conservation best practices.
- INFRASTRUCTURE-10. Install greywater systems and rainwater collection cisterns in parks and community facilities.
- INFRASTRUCTURE-11. Support efforts by Cal Water to construct necessary pump and storage facilities to ensure adequate water supply and proper water system balance.
- INFRASTRUCTURE-12. Amend the Municipal Code to require the installation of dual water plumbing hookups for landscaping irrigation, grading, and other non-contact uses in new development and redevelopment projects where recycled water is available or expected to be available.
- INFRASTRUCTURE-13. Continue to implement the Water Conservation and Drought Management Plan and any implementing ordinances, including imposition of fines and other appropriate enforcement tools, for violations of water conservation rules.
- INFRASTRUCTURE-14. Ensure adequate and resilient sewer system capacity by establishing and applying the following development review requirements:
  - New development or redevelopment projects involving construction of 8-inch diameter or larger sewers that connect directly or indirectly to the Los Angeles County Sanitation Districts' sewer system must prepare a sewer plan identifying that the existing sewer collection and treatment systems have available capacity to support such an increase, or provide for necessary system upgrades as part of the proposed project.

- INFRASTRUCTURE-16. Implement a financing plan, including use of the adopted sewer fee and loans, to ensure that resources are available for investment in annual rehabilitation projects to improve sanitary sewer pipes.
- INFRASTRUCTURE-17. Prepare an annual report for City Council documenting sewer system operations, actions to minimize overflows, incidents of overflows, and their impacts on receiving waters and public health and safety.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.13.7-1 ***Would PLAN Hermosa Cause Wastewater Treatment Facilities to Exceed Influent Flows Beyond Permitted Capacity?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could increase the amount of wastewater conveyed to and treated by the Joint Water Pollution Control Plant. However, the volume of flows would not cause the plant's permitted capacity to be exceeded, and the influent flows would continue to be domestic sewage, which would not change the quality of the influent compared to existing conditions. Therefore, this impact would be* ***less than significant****.*

The increased population resulting from implementation of PLAN Hermosa could generate additional wastewater flows that would be treated by the Joint Water Pollution Control Plant located in Carson. The LACSD has estimated wastewater flows generated by the additional 300 residential units and 630,400 square feet of nonresidential development to be approximately 251,680 gallons per day (or 0.252 mgd) of wastewater (LACSD 2015).[6] Currently, the JWPCP treats an average of 263.1 mgd, which includes flows from Hermosa Beach. The addition of flows from PLAN Hermosa (0.252 mgd) would increase treated flows to approximately 263.4 mgd, which would not exceed the current 280-mgd primary and secondary treatment capacity or the 400-mgd permitted capacity of the JWPCP. PLAN Hermosa's additional flows would represent less than an approximately 0.1 percent contribution to flows.

Existing flows are typical domestic sewage from residential, retail, office, light industrial, and other commercial uses. Although implementation of PLAN Hermosa would allow additional residential units and an increase in nonresidential square footage, the overall chemical and physical characteristics of the sewage flows would not change because the land uses are generally the same. In addition, any new development or redevelopment of commercial uses would be required to demonstrate compliance with the City's sewer disposal requirements (Municipal Code Chapter 8.36) to ensure the sewage flows would not violate applicable standards.

PLAN Hermosa implementation action INFRASTRUCTURE-16 would ensure that resources are available for investment in annual rehabilitation projects to improve sanitary sewer pipes. INFRASTRUCTURE-8 would serve to reduce any potential impacts from implementation of PLAN Hermosa by improving the environmental compatibility of utility and infrastructure facilities by establishing and applying specific standards to new development and redevelopment projects involving utility installation or relocation. INFRASTRUCTURE-17 requires documentation of sewer system operations to minimize overflows, a record of incidents of overflows, and their impacts on receiving waters and public health and safety. These actions would ensure the quality of

[6] The estimate provided by LACSD was calculated as follows: 300 residential units x 156 gallons/unit/day + 630,400 square feet nonresidential x 325 gallons/1,000 square feet/day. The LACSD assumed the Shopping Center rate (325 gallons/1,000 square feet) from its "Table 1, Loadings for Each Class of Land Use" as a proxy for the nonresidential uses. Specific land uses such as retail stores and offices have lower rates (e.g., 100 gpd/1,000 square feet and 200 gpd/1,000 square feet, respectively).

wastewater flows generated in the city that are conveyed to the JWPCP would not change substantially compared to existing conditions, and some improvement may be realized.

Therefore, implementation of PLAN Hermosa would not result in an exceedance of the JWPCP's permitted capacity or change the quality of influent from the city relative to existing conditions such that the quality of treated water discharged by the JWPCP would be affected by PLAN Hermosa's contribution. PLAN Hermosa would have a **less than significant** impact with regard to compliance with wastewater treatment requirements.

Mitigation Measures

None required.

IMPACT 4.13.7-2 ***Would PLAN Hermosa Increase Demand for New or Expanded Water or Wastewater Treatment Facilities?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could increase the demand for potable water and would generate wastewater. However, the demand would not result in the need for the construction or expansion of water or wastewater treatment facilities that would result in significant environmental effects because the demand is within existing planned capacity projections of the utility providers. Therefore, this impact would be* ***less than significant****.*

PLAN Hermosa could increase the demand for potable water, which would be provided by the Cal Water Hermosa-Redondo District. The primary source of supply to the district is treated water from the MWD. Potential demand through implementation of PLAN Hermosa would generate demand that is within the 2010 UWMP projections, and the district has determined that existing and planned supplies are sufficient for its service area through 2040 (see Impact 4.13.7-4, below). Therefore, PLAN Hermosa would not result in new or expanded water treatment facilities.

As described in Impact 4.13.7-1, PLAN Hermosa's residential and nonresidential uses would generate an additional 0.252 mgd of wastewater, which would be conveyed to the JWPCP. The flows can be accommodated within the plant's existing treatment capacity. The LACSD has indicated that the regional wastewater conveyance system should be able to accommodate the additional uses proposed in PLAN Hermosa (LACSD 2015). The City has developed a Sanitary Sewer Master Plan that describes a rehabilitation program for Hermosa Beach's sanitary sewer infrastructure, and in 2015 adopted a sanitary sewer tax.

Numerous PLAN Hermosa implementation actions would help reduce water consumption and wastewater flow. INFRASTRUCTURE-9 would require consultation with Cal Water to provide public information and incentives for water conservation best practices. INFRASTRUCTURE-10 would require installation of greywater systems and rainwater collection cisterns in parks and community facilities. INFRASTRUCTURE-1 would serve to reduce potential impacts by creating a comprehensive, long-range (20-year) infrastructure plan integrating roadway, water, wastewater, stormwater, waste disposal, and utility infrastructure systems. The infrastructure plan would be used as a resource when preparing five-year Capital Improvement Plans and when setting and enforcing discretionary development requirements and would serve to improve current flooding issues in the city. Each Capital Improvement Plan would be updated as needed to ensure it remains consistent with changes in growth, traffic, funding sources, climate change impacts, and state and regional regulation. INFRASTRUCTURE-11 directs City support for Cal Water's efforts to construct necessary pump and storage facilities to ensure adequate water supply and proper water system balance. INFRASTRUCTURE-16 would implement a financing plan, including use of a sewer tax and loans, to ensure that resources are available for investment in annual rehabilitation projects to improve sanitary sewer pipes. INFRASTRUCTURE-8 would improve the environmental

compatibility of utility and infrastructure facilities by establishing and applying specific standards to new development and redevelopment projects involving utility installation or relocation.

In addition, the following Sustainability + Conservation Element policies would reduce water consumption and wastewater flow, which would reduce the demand on conveyance infrastructure. Policy 4.2 would require large buildings to report their energy and water use on a regular basis. Policy 5.1 would ensure recycled water supply and distribution facilities are available throughout the city. Policy 5.3 would update and improve water conservation and efficiency programs, requirements, and incentives on a regular basis. Policy 5.4 would maximize water conservation and efficiency upgrades through education, regulation, and incentives covering every aspect of water use.

Therefore, implementation of PLAN Hermosa would not result in the need for the construction or expansion of water or wastewater treatment facilities that would result in significant environmental effects. Impacts on water and wastewater treatment facilities would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.13.7-3 ***Would PLAN Hermosa Increase Demand for Stormwater Drainage Facilities?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in redevelopment in the planning area but would generally not increase the amount of impervious surface. PLAN Hermosa policies and implementation actions would direct construction of development projects to include on-site drainage improvements, which would reduce the impact on existing stormwater drainage facilities. Therefore, this impact would be* ***less than significant****.*

There are minor localized flooding problems in some areas of the city due to inadequacies in the storm drain system capacity. However, implementation of PLAN Hermosa would not exacerbate the problem because it would not substantially increase the amount of current impervious surfaces in the city. In fact, as shown in **Table 4.9-2** in Section 4.9, Land Use and Planning, the entire city has only 2.6 vacant acres. This limited amount of vacant land, in combination with the requirements of the City's Low-Impact Development (LID) Ordinance and Green Streets Policy, would reduce the potential for a substantial increase in impervious surfaces.

Stormwater that runs over streets and sidewalks can pick up debris and pollutants, which are carried, untreated, into the ocean. To help reduce the amount of pollution from contaminated stormwater, the City has adopted the LID Ordinance and a Green Streets Policy. The LID Ordinance uses landscape design to retain or filter stormwater runoff, using development techniques such as rain gardens, permeable pavers, and bioswales. As the Green Streets Policy is implemented, low impact development will add to the existing fabric of stormwater infrastructure in Hermosa Beach. Additionally, the Beach Cities Enhanced Watershed Management Plan summarizes watershed-specific water quality priorities identified by the Beach Cities. The approach described in the EWMP, in combination with the required LID-based best management practices, is anticipated to protect and potentially improve water quality in Santa Monica Bay from pollutants in stormwater runoff.

New residential and nonresidential development will occur primarily through infill and redevelopment activities that would occur in areas which are already urbanized. Redevelopment activities may provide opportunities to create new pervious surfaces to facilitate groundwater infiltration through new greenspace, landscaping, or use of porous pavements. Incorporation of stormwater management facilities, such as retention basins, swales, or vegetation planted for evapotranspiration, would reduce drainage loads through the stormwater system. The LID

Ordinance requires these types of pervious surfaces for qualifying projects. Qualifying projects include the following:

- All redevelopment projects, including single- or multifamily residential projects, adding or replacing more than 5,000 square feet of impervious surface area
- Industrial parks or sites with 5,000 square feet or more of surface area
- Commercial malls or sites with 5,000 square feet or more of surface area
- Automotive service facilities (SIC 5013, 5014, 5511, 5541, 7532–7534, and 7536–7539) with 5,000 square feet or more of surface area
- Retail gasoline outlets with 5,000 square feet or more of surface area
- Restaurants (SIC 5812) with 5,000 square feet or more of surface area
- Parking lots with 5,000 square feet or more of impervious surface area or with 25 or more parking spaces (cumulative on the project site)
- Any redevelopment project located in or directly adjacent to or discharging directly into a significant ecological area (as defined herein), where the development will:
    a) Discharge stormwater and dry weather runoff that is likely to impact a sensitive biological species or habitat; and
    b) Create 2,500 square feet or more of impervious surface area

Further, PLAN Hermosa Public Safety Element Policy 1.8 would serve to reduce stormwater runoff consistent with local stormwater permits. Sustainability + Conservation Element Policy 7.1 would require the use of permeable pavement in parking lots, sidewalks, plazas, and other low-intensity paved areas. In addition, the following Infrastructure Element policies would serve to reduce potential impacts. Policy 4.8 would develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness. Policy 5.1 would integrate stormwater infiltration best practices when initiating streetscape redevelopment or public facility improvement projects. Policy 5.3 would integrate natural features, such as topography, drainage, and trees, into the design of streets and rights-of-way. Policy 5.4 would encourage community behavior changes to reduce urban runoff pollution. Policy 5.5 would maintain, fund, and regularly monitor the city's stormwater infrastructure. Policy 5.6 would ensure that stormwater system repairs are included in maintenance plans for other city infrastructure and that repairs and maintenance are completed in a timely manner to prevent additional repair costs. Policy 5.7 would strictly implement, enforce, and monitor MS4 NPDES permit requirements. Policy 5.8 would require new development and redevelopment projects to incorporate low impact development techniques in project designs, including but not limited to on-site drainage improvements using native vegetation to capture and clean stormwater runoff.

Implementation action INFRASTRUCTURE-1 would serve to reduce potential impacts by creating a comprehensive, long-range (20-year) infrastructure plan integrating roadway, water, wastewater, stormwater, waste disposal, and utility infrastructure systems. The infrastructure plan would be used as a resource when preparing five-year Capital Improvement Plans and setting and enforcing discretionary development requirements. Each Capital Improvement Plan would be updated to ensure it remains consistent with changes in growth, traffic, funding sources, climate change impacts, and state and regional regulation. Therefore, with implementation of PLAN Hermosa policies and implementation actions, impacts on stormwater drainage facilities would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.13.7-4 ***Would PLAN Hermosa Increase Demand for Water Supplies Beyond Projections?***
PLAN Hermosa would guide future development and reuse projects in the city in a manner that could increase the demand for potable water. However, the demand is within the 2010 Urban Water Management Plan supply-demand projections adopted by the Cal Water Hermosa-Redondo District, and no new entitlements would be needed. Therefore, this impact would be ***less than significant****.*

Development associated with future land uses consistent with PLAN Hermosa would result in a total of 660 new residents from 2015 to 2040 in the planning area, for a total population of 20,400. When combined with the SCAG-forecasted population for 2040 for Redondo Beach and the portion of Torrance in the Cal Water Hermosa-Redondo District service area, the total estimated population for 2040, based on new forecasts, is approximately 102,790, which only slightly exceeds the estimate developed by the district based on SCAG forecasts. The combined population in the service area, with PLAN Hermosa, would also be well under the district's service area population estimate of 113,200. Because PLAN Hermosa's water demand is within the supply-demand projections presented in the 2010 UWMP through 2040, additional water supply entitlements would not be required for the project.

PLAN Hermosa would reduce the current and future demand for water supply with the following Sustainability + Conservation Element policies. Policy 5.1 would ensure recycled water supply and distribution facilities are available throughout the city. Policy 5.2 would encourage innovative water recycling techniques such as rainwater capture, use of cisterns, and installation of greywater systems. Policy 5.3 would update and improve water conservation and efficiency programs, requirements, and incentives on a regular basis. Policy 5.4 would maximize water conservation and efficiency upgrades through education, regulation, and incentives covering every aspect of water use. In addition, Infrastructure Element Policy 4.8 would develop a comprehensive approach to water infrastructure that integrates sewer system planning with potable and recycled water systems, stormwater systems, and increased conservation awareness.

Implementation action INFRASTRUCTURE-12 would amend the Municipal Code to require the installation of dual water plumbing infrastructure so that recycled water for landscaping irrigation, grading, and other non-contact uses may be utilized in new development and redevelopment projects where recycled water is available or expected to be available. INFRASTRUCTURE-9 would ensure consultation with Cal Water to estimate and evaluate water supplies specifically for Hermosa Beach through 2040. INFRASTRUCTURE-11 directs City support for Cal Water's efforts to construct necessary pump and storage facilities to ensure adequate water supply and proper water system balance. INFRASTRUCTURE-1 would create a comprehensive, long-range (20-year) infrastructure plan integrating roadway, water, wastewater, stormwater, waste disposal, and utility infrastructure systems. The infrastructure plan would be used as a resource when preparing five-year Capital Improvement Plans and setting and enforcing discretionary development requirements. Each Capital Improvement Plan would be updated to ensure it remains consistent with changes in growth, traffic, funding sources, climate change impacts, and state and regional regulation.

The City of Hermosa Beach adopted a Water Conservation and Drought Management Plan Ordinance in 2010 as requested by West Basin/Metropolitan to address water conservation and provide a mechanism for mandating water conserving methods. The City's continued conservation efforts will help it sustain low water use in accordance with the requirements of the California Water Conservation Bill of 2009 (Senate Bill X7-7), which requires urban water suppliers to reduce per capita water use 20 percent by 2020.

Therefore, impacts related to water supply would be less than significant because the projected water demand from PLAN Hermosa buildout is within the demands forecast in the 2010 UWMP, which demonstrates that supply meets the demand in Hermosa Beach. Furthermore, buildout would not result in any new or expanded water supplies or facilities beyond those planned and assumed in the 2010 UWMP. Impacts would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.13.7-5 ***Would PLAN Hermosa Cause the JWPCP to Exceed Capacity for Wastewater Treatment?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in the need for additional wastewater treatment from increased flows. However, the anticipated increase in wastewater generated would not exceed the capacity of the JWPCP or result in the need for the construction or expansion of wastewater treatment facilities. Therefore, this impact would be* ***less than significant****.*

As described under Impact 4.13.7-1, wastewater from the city's system is collected and treated at the Joint Water Pollution Control Plant, which has a permitted capacity of 400 mgd. Current flows are approximately 263.1 mgd, well below the facility's design capacity. It is anticipated that with implementation of PLAN Hermosa, wastewater generation would increase by approximately 0.252 mgd, although the actual amount may be less due to continued water conservation efforts and the use of recycled water. The JWPCP has capacity to treat the anticipated increase in wastewater attributable to the land use changes and population growth proposed in PLAN Hermosa. Therefore, impacts on wastewater treatment facilities would be **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative setting for water supply impacts is the Cal Water Hermosa-Redondo District service area. The cumulative setting for wastewater impacts is the Joint Water Pollution Control Plant in Carson and wastewater conveyance lines operated by the County that discharge to the JWPCP.

IMPACT 4.13.7-6 ***Would PLAN Hermosa Cause Cumulative Water Supply Impacts?*** *Implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the Cal Water Hermosa-Redondo District service area, would increase the demand for water supply. However, PLAN Hermosa water demand is within the district's population-based supply/demand assumptions, and additional supplies would not be required. This impact would be* ***less than cumulatively considerable****.*

Table 4.13-3, above, identifies cumulative water demand and supply through 2040. The Cal Water Hermosa-Redondo District has determined that sufficient and reliable supply will be available for its service area under all water year scenarios, as described in Impact 4.13.7-4. PLAN Hermosa's demand is within the population-based demand projections developed by the district, and would not result in the need for new or expanded supplies to meet cumulative demand. Therefore, the project's contribution would be **less than cumulatively considerable**.

Mitigation Measures

None required.

IMPACT 4.13.7-7 ***Would PLAN Hermosa Cause Cumulative Wastewater Impacts?*** *Implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in the service area of the JWPCP, would increase the demand for wastewater treatment. There is sufficient capacity at the JWPCP for projected future demand, which includes flows from Hermosa Beach, and new or expanded facilities would not be required. PLAN Hermosa's contribution would be* ***less than cumulatively considerable****.*

Cumulative development in the service area for the Joint Water Pollution Control Plant would result in an estimated future average dry weather flow of 359 mgd (LACSD 2012), which would not exceed the plant's permitted design capacity of 400 mgd. PLAN Hermosa's additional contribution (0.252 mgd) would represent less than 0.07 percent of the future demand, which would be **less than cumulatively considerable**, and would not result in the need for new or expanded facilities.

Mitigation Measures

None required.

4.13.8 SOLID WASTE

4.13.8.1 ENVIRONMENTAL SETTING

Hermosa Beach is within the planning area for the County of Los Angeles Countywide Integrated Waste Management Plan, which is administered by the Los Angeles County Department of Public Works. Solid waste is disposed of at in-county and out-of-county landfills. There are several transfer/processing facilities where solid waste collected from the jurisdictions is initially processed, which reduces the amount of solid waste placed into landfills. In 2014, the total amount of solid waste disposed of at in-county landfills, transformation facilities, and out-of-county landfills was nearly 9 million tons. Approximately 52 percent of solid waste was delivered to in-county landfills, and of those in-county landfills nearly 85 percent of the solid waste was disposed of at the Sunshine Canyon City/County Landfill, Chiquita Canyon Landfill, and Antelope Valley Landfill. The County does not anticipate a shortfall in permitted solid waste disposal capacity within the county in the next 15 years (LACDPW 2015). The primary out-of-county facilities are the Mid-Valley Sanitary Landfill and San Timoteo Sanitary Landfill.

Solid waste disposal services in Hermosa Beach are provided by a commercial vendor, Athens Services, pursuant to an agreement for integrated solid waste management services dated May 24, 2013 (City of Hermosa Beach 2013c). Athens Services provides collection service, including recycling, to both residential and commercial properties in the planning area. The agreement includes a guaranteed 50 percent diversion rate or higher, through the implementation of a "pay as you throw" system as well as a single stream waste recovery and disposal system. After implementation of the new franchise agreement, December 2013 records showed that Hermosa Beach reached a 50.3 percent diversion rate (City of Hermosa Beach 2013e). Athens Services also provides street sweeping and cleaning services, while Los Angeles County provides beach cleaning services.

Solid waste is hauled to the Athens United Waste Materials Recovery Facility in the City of Industry, where it is sorted and recycled in compliance with AB 341. The facility has a permitted daily capacity of 5,000 tons per day. Waste materials are then transported to a variety of landfills identified in the Integrated Solid Waste Management agreement. In 2014, approximately 11,236 tons of solid waste from Hermosa Beach was landfilled (LACDPW 2016). This amount represents approximately 0.1 percent of the approximately 9 million tons of countywide disposals at landfills in 2014. Data for the entire year of 2015 are not available at this time.

The City does not make the determination as to which landfill is used for solid waste generated in Hermosa Beach. Some of the landfills are in Los Angeles County and some are outside the county. The amount of solid waste generated in Hermosa Beach and delivered by Athens Services to landfills has shifted in the last few years to more out-of-county disposal. For example, in 2012 and 2013, nearly all of the solid waste generated (approximately 13,000–14,000 tons) was disposed of in-county, primarily at the Sunshine Canyon City/County Landfill. However, in 2014, of the approximately 11,000 tons of landfilled solid waste from Hermosa Beach, over 8,000 tons (approximately 72 percent) was delivered out-of-county for disposal (LACDPW 2016). The California Department of Resources Recycling and Recovery (Cal Recycle) calculates per capita disposal by population and per capita disposal by employee rates for jurisdictions in California.[7] The targets and actual rates are jurisdiction-specific indicators of progress toward meeting a 50 percent disposal per capita requirement. CalRecycle generally uses the per resident disposal rate for most jurisdictions when evaluating progress toward meeting targets, unless business disposal is the primary source of solid waste.

Hermosa Beach disposals are aggregated with many other jurisdictions under the Los Angeles Area Integrated Waste Management Authority. For the aggregated jurisdictions, the per capita residential target is 7.1 pounds per person per day of landfilled solid waste. In 2014, the aggregated jurisdictions achieved an actual disposal rate of 4.8 pounds per person per day (CalRecycle 2016). This exceeds (i.e., is better than) the target. Although CalRecycle does not provide specific rates for Hermosa Beach, using CalRecycle's online disposal rate calculator and population for 2014, the estimated rate for Hermosa Beach was 3.1 pounds per day per person, which exceeds (i.e., is better than) the aggregated jurisdictions' targets and actual rates.

Residential hazardous waste disposal is available at a facility located in Playa Del Rey and operated by the City of Los Angeles Bureau of Sanitation. The facility is open on Saturdays and Sundays. CalRecycle certifies used oil recycling collection centers to encourage recycling of motor oil.

4.13.8.2 REGULATORY SETTING

The following state local plans, policies, regulations, and laws pertain to solid waste in the planning area.

- **California Integrated Waste Management Act:** To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the California Legislature passed the California Integrated Waste Management Act of 1989 (AB 939, Statutes of 1989), effective January 1990. According to this act, all cities and counties were required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. To help in the increase of diversion rates, each jurisdiction is required to create an integrated waste management plan. Each city plan must demonstrate integration with the relevant county plan. The plans must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal. Elements of the plans must be updated every five years.

  AB 939 established the California Integrated Waste Management Board (CIWMB; now CalRecycle) to oversee integrated waste management planning and compliance. The bill's passage led to the refinement of a statewide system of permitting, inspections, maintenance, and enforcement for waste facilities in California, and also required the CIWMB to adopt minimum standards for waste handling and disposal to protect public health and safety and the environment. The CIWMB is responsible for approving permits for waste facilities, approving local agencies' diversion rates, and enforcing the planning

[7] In CalRecycle's program, the term "jurisdictions" comprises counties, cities, unincorporated county areas, and regional waste management entities.

requirements of the law through local enforcement agencies. The agencies are responsible for enforcing laws and regulations related to solid waste management, issuing permits to solid waste facilities, ensuring compliance with state-mandated requirements, coordinating with other government agencies on solid waste-related issues, and overseeing corrective actions at solid waste facilities. Local enforcement agencies inspect facilities, respond to complaints, and conduct investigations into various aspects of solid waste management.

Chapter 476, Statutes of 2011 (Chesbro, AB 341), declared that by 2020 California will source reduce, recycle, or compost no less than 75 percent of solid waste generated.

4.13.8.3 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The following analysis is both quantitative and qualitative and is based on available information for services provided in the planning area. The potential amount of solid waste requiring landfill disposal was based on the current rate of 3.1 pounds per day per person and an increase in population of 660. The analysis assumes that all future and existing development in the planning area complies with applicable laws, regulations, standards, and plans. An analysis of cumulative impacts uses quantitative and qualitative information for the planning area and applicable broader service areas.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

The following PLAN Hermosa policies and implementation actions address solid waste:

Policies

Sustainability + Conservation Element

- **6.1 Franchise agreements.** Ensure waste franchise agreements and program offerings provide progressively higher rates of waste diversion.
- **6.2 Food waste collection.** Ensure food waste collection is available and convenient for all residents, businesses, and organizations.
- **6.3 Multi-family and commercial recycling.** Require the provision of convenient recycling options in multi-family residential and commercial uses.
- **6.4 Material source reduction.** Support and enforce requirements to minimize the use of non-recyclable materials or materials commonly found on the beach, such as plastic bags and polystyrene.
- **6.5 Recycled materials.** Encourage and support the sale of products that minimize packaging or are made from recycled materials.
- **6.6 Composting programs.** Provide composting equipment at community facilities and events and encourage home and commercial composting.
- **6.7 Green purchasing.** Evaluate "green purchasing" options across all City departments and consider the life-cycle effects of purchases.
- **6.8 Recycled building materials.** Where cost effective and structurally feasible, maximize the use of recycled building materials in new construction projects.
- **6.9 Building salvage.** Maximize building salvage and deconstruction in remodeling or building demolition projects.

Implementation Actions

- SUSTAINABILITY-10. Create and adopt a Zero Waste Action Plan to reach 100% waste diversion from landfills.
- SUSTAINABILITY-11. Amend the Municipal Code to require that all commercial facilities make full-service recycling available for both customer use and business use, placing attractive and convenient bins in clear locations.
- SUSTAINABILITY-12. Require that all multi-family residential uses provide an adequate number of attractive and convenient recycling bins to serve the number of units in the complex.
- SUSTAINABILITY-13. Require that all restaurants use compostable single-use items like takeout boxes.
- SUSTAINABILITY-14. Create and update a standard requirement for the use of recycled materials in new development and redevelopment projects.

THRESHOLDS OF SIGNIFICANCE

The impact analysis provided below is based on the following CEQA Guidelines Appendix G standards of significance. A solid waste impact is considered significant if implementation of the proposed project would:

1) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
2) Not comply with federal, state, and local statutes and regulations related to solid waste.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.13.8-1 ***Would PLAN Hermosa Increase Demand for Solid Waste Disposal?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in additional solid waste disposal needs. Adequate capacity exists in the landfills receiving waste generated in Hermosa Beach to accommodate these additional needs. Therefore, this impact would be* ***less than significant****.*

New development and population growth with implementation of PLAN Hermosa could increase demand for solid waste collection services and disposal capacity. The increase in population would result in increased solid waste disposal demand of approximately 1 ton per day (374 tons per year), which would represent an approximately 3 percent increase compared to 2014 levels.

The amount of solid waste requiring landfill disposal would be expected to be reduced through several PLAN Hermosa implementation actions and policies. For example, implementation action SUSTAINABILITY-10 would create and adopt a Zero Waste Action Plan to reach 100 percent waste diversion. This program would further decrease impacts to solid waste and landfill capacity.

In addition, the following policies would decrease the demand for solid waste disposal. Policy 6.1 would ensure waste franchise agreements and program offerings provide progressively higher rates of waste diversion. Policy 6.2 would ensure food waste collection is available and convenient for all residents, businesses, and organizations. Policy 6.3 would require the provision of convenient recycling options in multi-family residential and commercial uses. Policy 6.4 would support and enforce requirements to minimize the use of nonrecyclable materials or materials commonly found on the beach, such as plastic bags and polystyrene. Policy 6.5 would encourage and support the sale of products that minimize packaging or are made from recycled materials. Policy 6.6 would provide composting equipment at community facilities and events and encourage

home and commercial composting. Policy 6.7 would evaluate "green purchasing" options across all City departments and consider the life-cycle effects of purchases. Policy 6.8 would maximize the use of recycled building materials in new construction projects. Policy 6.9 would maximize building salvage and deconstruction in remodeling or building demolition projects.

Historically, Hermosa Beach solid waste was landfilled in-county, but in 2014, there was a shift to out-of-county facilities. It is unknown whether that trend will continue. The City does not make the decision as to where solid waste generated from development under PLAN Hermosa would be disposed. However, the small amount of solid waste generated under PLAN Hermosa, when added to 2014 disposal (approximately 11,236 tons), would be approximately 11,610 tons. This would represent less than a 0.1 percent increase in solid waste delivered to in-county and out-of-county landfills, which would not affect current permitted and remaining capacities. Additionally, records show that Hermosa Beach meets it diversion requirements, and nothing in PLAN Hermosa would reverse that trend. In fact, plan policies are aimed at achieving higher diversion rates, as explained above.

Because PLAN Hermosa policies and implementation actions would further reduce the amount of waste generated by the community and would not result in the need for new or expanded solid waste facilities, impacts would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.13.8-2 ***Would PLAN Hermosa Comply with Solid Waste Disposal Regulations?*** *PLAN Hermosa would guide future development and reuse projects in the city in a manner that could result in additional solid waste disposal needs. The City would continue current programs and policies that result in a per capita disposal rate is better than target amounts. Therefore, this impact would be* ***less than significant****.*

The estimated per capita disposal rate in Hermosa Beach is 3.1 tons per day, which exceeds (i.e., is better than) the CalRecycle aggregated jurisdiction target of 7.1 pounds per day per person and the actual aggregated rate of 4.8 pounds per day per person. This indicates the City is in compliance with existing regulations that require 50 percent diversion. PLAN Hermosa policies and implementation actions identified in the discussion of Impact 4.13.8-1 would further ensure compliance with solid waste disposal regulations, specifically the AB 341 requirement for 75 percent diversion by 2020.

Therefore, with implementation of PLAN Hermosa policies and implementation actions, impacts related to compliance with solid waste regulations would be **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative impact area for solid waste is the Los Angeles Integrated Solid Waste Management Authority planning area for solid waste.

IMPACT 4.13.8-3 ***Would PLAN Hermosa Cause Cumulative Solid Waste Impacts?*** *Implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in* the Los Angeles Integrated Solid Waste Management Authority *planning area, would increase the demand for solid waste facilities. PLAN Hermosa's contribution to the need*

for expanded solid waste services would be considered ***less than cumulatively considerable****.*

The Los Angeles County Department of Public Works (LACDPW) has estimated an annual landfill disposal demand for the aggregated jurisdictions for the period 2014–2029. The estimate is based on its population projections, per capita solid waste generation, current (60 percent) and future (75 percent) diversion, and availability of transformation and alternative technology facilities. Although the population and amount of solid waste generated would increase, the amount of solid waste landfilled is expected to decrease. In its 2014 annual report, the LACDPW (2015) determined that the cumulative need for Class III landfill disposal capacity, approximately 99.8 million tons, will not exceed the 2014 remaining permitted Class III landfill capacity of 112 million tons. PLAN Hermosa's contribution to that cumulative demand would be approximately 0.0004 percent, which is negligible. Although the LACDPW has not developed a forecast for 2040, given that PLAN Hermosa's contribution would not be cumulatively considerable in 2029, the impact would be **less than cumulatively considerable** in 2040.

Mitigation Measures

None required.

4.13.9 ENERGY

4.13.9.1 ENVIRONMENTAL SETTING

Appendix C-8 describes the regional and local conditions related to energy in Hermosa Beach. Key findings of the environmental setting are provided below.

ENERGY SOURCES

Energy generation occurs across the state from many different sources. Tracking the specific source of energy used in any one place can be difficult. Energy that is not generated at a facility by an energy provider can be purchased from other producers and transmitted to the energy user through transmission networks. Energy sources used in Hermosa Beach may include hydroelectric, waste-to-energy, transformation, geothermal, solar, wind, coal, natural gas, and nuclear. The following paragraphs describe the existing sources of electricity and natural gas for Hermosa Beach.

Electricity

Southern California Edison (SCE) supplies electricity to customers in Hermosa Beach. Over the past 15 years, electricity generation in California has undergone a transition. Historically, California has relied heavily on oil- and gas-fired plants to generate electricity. Spurred by regulatory measures and tax incentives, California's electrical system has become more reliant on renewable energy sources, including cogeneration, wind energy, solar energy, geothermal energy, biomass conversion, transformation plants, and small hydroelectric plants. Unlike petroleum production, generation of electricity is usually not tied to the location of the fuel source and can be delivered great distances via the electrical grid.

The generating capacity of a unit of electricity is expressed in megawatts (MW). One MW provides enough energy to power 1,000 average California homes per day. Net generation refers to the gross amount of energy produced by a unit, minus the amount of energy the unit consumes. Generation is typically measured in megawatt-hours (MWh), kilowatt-hours (kWh), or gigawatt-hours (GWh).

Natural Gas

Natural gas is a hydrocarbon fuel found in reservoirs beneath the earth's surface and is composed primarily of methane (CH_4). It is used for space and water heating, process heating and electricity generation, and as transportation fuel. The Southern California Gas Company (SoCalGas) supplies natural gas in Hermosa Beach.

Use of natural gas to generate electricity is expected to increase in coming years because it is a relatively clean alternative to other fossil fuels like oil and coal. In California and throughout the western United States, many new electrical generation plants that are fired by natural gas are being brought online. Thus, there is great interest in importing liquefied natural gas from other parts of the world. As of 2012, 43 percent of the electricity consumed in California was generated using natural gas (CEC 2013).

While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90 percent of its natural gas. Most imports are delivered via interstate pipelines from the Southwest, Rocky Mountains, and Canada (CPUC 2013).

EXISTING ENERGY USE

As of 2012, California ranked second in the United States in total energy consumption of natural gas, petroleum, and retail electricity sales, following only Texas in each category (EIA 2014a). Despite being a large consumer of energy, in particular transportation energy, California's per capita consumption rate for all these energy sources combined is one of the lowest in the country (49th). This is largely because of California's proactive energy efficiency programs and mild weather, which reduces energy demands for heating and cooling (EIA 2014b).

Residential and nonresidential (businesses, industrial processes, government operations) activities in Hermosa Beach such as building heating and cooling, lighting, and appliance operation require electricity and natural gas. **Table 4.13-4 (Energy Use by Sector and Fuel Type)** presents an overview of the electricity, natural gas, and transportation fuel consumed in the city in 2015; more detailed information by fuel source is provided below.

TABLE 4.13-4
ENERGY USE BY SECTOR AND FUEL TYPE – 2015

Type	Total	Percentage of Total
Electricity Use (kWh)		
Residential Energy	49,778,500	54.7%
Nonresidential Energy	41,191,800	45.3%
Total	90,970,300	100.0%
Natural Gas Use (therms)		
Residential Energy	3,364,400	79.3%
Nonresidential Energy	876,000	20.7%
Total	**4,240,400**	**100.0%**
Transportation Fuel		
Vehicle Miles Traveled	133,808,700	
Average Fleet Fuel Efficiency	22	

Type	Total	Percentage of Total
Transportation Fuel (gallons)	6,194,800	
EV Electricity Use (kWh)	—	

Source: City of Hermosa Beach 2015a

ALTERNATIVE AND RENEWABLE ENERGY SOURCES

Wind Energy

Wind energy systems convert the kinetic energy in the wind into mechanical or electrical energy that can be used for practical purposes. Wind electric turbines generate electricity for homes and businesses and for sale to utilities. Wind electricity can be generated on a small residential scale with small turbines (typically a few kilowatts [kW] or less in capacity, but some as large as 30 kW), or on a utility scale via large wind farms.

Wind energy plays an integral role in California's electricity portfolio. According to the California Energy Commission (CEC), in 2004, turbines in wind farms in California generated about 1.5 percent of the state's total electricity resource, enough to light a city the size of San Francisco. This production increased to represent 8.1 percent or 23,913 GWh in 2014 (CEC 2015). Hermosa Beach has adopted regulations for small wind energy systems, and one application for a small residential wind energy system was recently submitted and withdrawn. This energy source is expected to have minimal potential in Hermosa Beach due to existing density and height restrictions and potential aesthetic concerns.

Solar Energy

Solar power can be harnessed for several applications, including heating, cooling, and electricity generation. The most common method to produce energy uses photovoltaic (PV) cells, which convert sunlight directly into electricity. Large-scale use of solar energy represents a major potential energy resource in the Southern California climate. In general, large-scale solar power plants are very land intensive compared to conventional power plants, requiring acres of reflectors, pipelines, and transmission lines. No large-scale solar power plants exist in Hermosa Beach, although small-scale solar generation facilities are used on individual properties.

The State of California has emphasized developing solar-produced energy by developing the California Solar Initiative in 2006. The initiative provides incentives to help increase the amount of solar energy generated in California. One such incentive is to encourage solar energy to be used in new homes. The incentive program is known as the New Solar Homes Partnership. Overall, the California Solar Initiative has a goal to provide 1,750 MW of solar-generated energy by 2016 (CEC 2013). In 2014, California produced 10,557 GWh, which represented 5.3 percent of the total electricity produced in the state (CEC 2015). Residents and businesses in Hermosa Beach have invested nearly $3 million to install approximately 378 kW of solar through this program, consisting of 74 residential PV systems and 6 nonresidential PV systems (Go Solar California 2014). The City waives building permit fees.

Biomass

According to the CEC, biomass electricity is drawn from combusting or decomposing organic matter. There are about 132 waste-to-energy plants in California, with a total capacity of almost 1,000 megawatts. These plants power homes and businesses with electricity from waste matter that would have been released into the atmosphere, added fuel to forest fires, and burdened landfills. Using biomass to produce electricity reduces the reliance on fossil fuels, the nation's

primary energy sources for electricity, and the largest contributors to air pollution and greenhouse gases.

In 2015, 6,280 gigawatt-hours of electricity in homes and businesses were produced from biomass: burning forestry, agricultural, and urban biomass; converting methane-rich landfill gas to energy; and processing wastewater and dairy biogas into useful energy. Biomass power plants produced 3.43 percent of the total electricity in California (CEC 2016a).

Geothermal

Geothermal energy is produced by the heat of the earth and is often associated with volcanic or seismically active regions. California, with its location on the Pacific "Ring of Fire," has 25 Known Geothermal Resource Areas, 14 of which have temperatures of 300 degrees Fahrenheit or greater. The most developed of the high-temperature geothermal resource areas in the state is the Geysers. Located north of San Francisco, the Geysers was first tapped as a geothermal resource to generate electricity in 1960. It is one of only two locations in the world where a high-temperature, dry steam resource is found that can be directly used to move turbines and generate electricity (the other being in Larderello, Italy) (CEC 2016b).

Electricity can be generated from high temperature geothermal resources by using the thermal (heated) water and steam to move turbines that in turn run electrical generators and produce electricity. Several types of geothermal power plants can be used to generate electricity, including dry steam, flash or double flash, and binary cycle power plants.

In 2015, geothermal energy in the state produced 11,994 gigawatt-hours of electricity. Combined with another 700 GWh of imported geothermal power, geothermal energy produced 6.13 percent of the state's total system power. There are a total of 44 operating geothermal power plants in California with an installed capacity of 2,716 megawatts (CEC 2016b).

4.13.9.2 REGULATORY SETTING

The following state and local plans, policies, regulations, and laws pertain to energy.

STATE

- **California Public Utilities Commission:** The California Public Utilities Commission has authority to set electric rates, regulate natural gas utility service, protect consumers, promote energy efficiency, and ensure electric system reliability. California Public Utilities Commission General Order 131-D (adopted by Decision 94-06-014 and modified by Decision 95-08-038) contains the rules for the planning and construction of new transmission facilities, distribution facilities, and substations. This decision requires utility companies to obtain permits to construct certain power line facilities or substations if the voltage would exceed 50 kilovolts (kV) or if the substation would require the acquisition of land or an increase in voltage rating above 50 kV. Utilities do not need to comply with this decision for distribution lines and substations with voltage less than 50 kV; however, they must obtain any nondiscretionary local permits required for the construction and operation of these projects. Compliance with CEQA is required for construction of facilities. The California Public Utilities Commission also has jurisdiction over the siting of natural gas transmission lines.
- **Renewables Portfolio Standard:** California's Renewables Portfolio Standard (RPS), established in 2002 by Senate Bill 1078 (Sher, Chapter 516, Statutes of 2002), originally required retail electricity providers to increase procurement by at least 1 percent per year of their electricity supplies from renewable resources to achieve a 20 percent renewable mix by no later than 2017. Since then, the CEC, the California Public Utilities Commission,

and the California Power Authority approved the first Energy Action Plan in 2003, which accelerated the 20 percent target date to 2010. A second Energy Action Plan was adopted in 2005, which provided updates in energy policy. Senate Bill 107 (Smitian and Perata, Chapter 464, Statutes of 2006) adopted the revised 2010 target date into law. A third update was adopted in 2008, which "examines the state's ongoing actions in the context of global climate change" (CEC 2009). Executive Order S-14-08 expands the state's renewable energy standard to set a target of 33 percent renewable power by 2020. Executive Order S-21-09 directs the California Air Resources Board (CARB) to adopt regulations increasing California's RPS to 33 percent by 2020. Most recently, Governor Edmund G. Brown Jr. signed into legislation Senate Bill 350 in October 2015, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030.

- **California Green Building Standards:** Title 24 of the California Code of Regulations is a statewide standard applied by local agencies through building permits. It includes requirements for the structural, plumbing, electrical, and mechanical systems of buildings and for fire and life safety, energy conservation, green design, and accessibility in and around buildings. Part 6 (the California Energy Code) and Part 11 (the California Green Building Standards Code) include prescriptive and performance-based standards to reduce electricity and natural gas use in every new building constructed in California. These standards are regularly updated every three to four years to incorporate new market-ready technologies and design techniques to further reduce energy use from the built environment. The most recent update to these standards will go into effect January 1, 2017.
- **California Environmental Quality Act:** CEQA Guidelines Appendix F, Energy Conservation, requires consideration of project impacts on energy and focuses particularly on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy (Public Resources Code Section 21100[b][3]). The potentially significant energy implications of a project must be considered in an EIR to the extent relevant and applicable to the project.

LOCAL

- **City of Hermosa Beach Municipal Code:** Section 15.48.020 of the City's Municipal Code modifies the California Energy Code, requiring new residential and nonresidential buildings to be 15 percent more energy efficient than California Energy Code requirements. The section also includes requirements for cool roofs or roofs with high levels of solar reflectance, energy-efficient appliances, and energy-efficient heating, ventilation, and air conditioning systems.
- **Permit Processing and Rebates:** The City provides building permit and planning fee rebates for eligible green building, energy efficiency, and renewable energy projects. Eligible projects include those obtained through Energy Upgrade California or the HERO program, as well as projects certified through Leadership in Energy and Environmental Design (LEED) or Build It Green. Renewable energy projects (including wind and solar) are also eligible for rebates.
- **Hermosa Beach Sustainability Plan:** The Hermosa Beach Sustainability Plan was accepted by the City Council in 2011. Chapter 5 of the plan focuses on building energy and includes measures and projects to reduce energy use at municipal facilities and encourage the installation of renewable energy projects at homes and businesses.
- **Hermosa Beach Energy Efficiency Climate Action Plan:** The City of Hermosa Beach, in concert with the South Bay Cities Council of Governments (COG), is committed to providing a more livable, equitable, and economically vibrant community and subregion

through the implementation of energy efficiency measures. By using energy more efficiently, it is the City's objective to keep dollars in the local economy, create new green jobs, and improve the community's quality of life. The Energy Efficiency Climate Action Plan contains goals and policies that incorporate energy use reduction into the City's daily management of its community and municipal operations.

4.13.9.3 IMPACTS AND MITIGATION MEASURES

ANALYSIS APPROACH

The following analysis is quantitative and is based on available information for energy services provided in the planning area. The impact analysis focuses on the three sources of energy that are relevant to the proposed project: electricity, natural gas, and transportation fuel.

The analysis of impacts is based on the likely consequences of adoption and implementation of PLAN Hermosa compared to existing conditions. This analysis uses the energy information provided in the 2015 City of Hermosa Beach GHG Inventory, Forecasting, Target-Setting Report for an Energy Efficiency Climate Action Plan (2015 GHG Inventory Report) and the local growth projections determined based on available land capacity (see Chapter 3.0, Project Description) as the basis for projecting future energy use in the city.

DRAFT PLAN HERMOSA POLICIES AND IMPLEMENTATION ACTIONS

The following PLAN Hermosa policies and implementation actions address energy demand and conservation. Other policies and implementation actions that would have an effect on energy demand would include greenhouse gas emissions reduction policies and actions, approaches to water conservation and wastewater reductions, and planning concepts that reduce vehicle miles traveled, which are listed in Sections 4.6, 4.8, and 4.14, respectively.

Policies

GOVERNANCE ELEMENT

- **4.4 Regional transportation and infrastructure decisions.** Actively support regional transportation and infrastructure projects and investment decisions that benefit the City and the region.
- **6.4 Jobs-housing balance.** Strive to improve the jobs-housing balance in the city by actively pursuing employment uses that match the skill and educational levels of existing and future residents.

LAND USE + DESIGN ELEMENT

- **Land Use Designations** – The range and diversity of uses allowed within each land use designation plays a role in the number of trips a use generates and the mode of transportation chosen to make that trip. The more diversity in uses (between commercial, office/professional, residential, etc.) in a given area, combined with a safe transportation network, results in shorter trips that can be made by driving, walking, biking, or transit.
- **1.1 Diverse and distributed land use pattern.** Strive to maintain the fundamental pattern of existing land uses, preserving residential neighborhoods, while providing for enhancement and transformation of corridors and districts in order to improve community activity and identity.
- **1.2 Focused infill potential.** Proposals for new development should be directed toward the city's commercial areas with an emphasis on developing transit-supportive land use mixes.

- **1.3 Access to daily activities.** Strive to create sustainable development patterns such that the majority of residents are within one-half mile walking distance to a variety of neighborhood goods and services, such as supermarkets, restaurants, churches, cafes, dry cleaners, laundry mats, farmers' markets, banks, personal services, pharmacies and similar uses.
- **1.4 Diverse commercial areas.** Promote the development of diversified and unique commercial districts with locally owned businesses and job- or revenue-generating uses.
- **4.2 Employment centers.** Encourage the development and co-location of additional office space and employment centers along corridors.
- **4.7 Access to transit.** Support the location of transit stations and enhanced stops near the intersection of Aviation Blvd and Pacific Coast Highway, and adjacent to Gateway Commercial uses to facilitate and take advantage of transit service, reduce vehicle trips and allow residents without private vehicles to access services.
- **4.10 Pedestrian access.** For all new development, encourage pedestrian access, and create strong building entries that are primarily oriented to the street.
- **6.2 Streetscaping.** Proactively beautify existing streetscapes with street trees, landscaping and pedestrian-scaled lighting.
- **6.3 Green infrastructure network.** Establish an interconnected green infrastructure network throughout Hermosa Beach that serves as a network for active transportation, recreation and scenic beauty and connects all areas of the city. In particular, connections should be made between the beach, parks, the Downtown, neighborhoods, and other destinations within the city. Consider the following components when designing and implementing the green/open space network:
  - Preserved open space areas such as the beach and the Greenbelt;
  - Living streets with significant landscaping and pedestrian and bicycle amenities; and
  - Community and neighborhood parks, and schools.
- **6.5 Provision of sidewalks.** Encourage pedestrian-friendly sidewalks on both sides of streets in neighborhoods.
- **6.7 Pedestrian-oriented design.** Eliminate urban form conditions that reduce walkability by discouraging surface parking and parking structures along walkways, long blank walls along walkways, and garage-dominated building facades.
- **6.8 Balance pedestrian/vehicular circulation.** Require vehicle parking design to consider pedestrian circulation. Require the following of all new development along corridors:
  - Where parking lots front the street, the City will work with existing property owners to add landscaping between the parking lot and the street.
  - Parking lots should be landscaped to create an attractive pedestrian environment and reduce the impact of heat islands.
  - The number of curb cuts and other intrusions of vehicles across sidewalks should be minimized.
  - When shared parking supply options are not available, encourage connections between parking lots on adjacent sites.
  - Above-ground parking structures should be designed according to the same urban design principles as other buildings.

  - Encourage the use of systems to increase parking lot efficiency, such as mechanical lift systems or occupancy sensors.

- **9.1 Ocean-based energy resources.** Encourage and support research and responsible development of renewable ocean-based energy sources. Renewable energy sources appropriate to Hermosa Beach shall be limited to wave, tidal, solar, and wind sources that meet the region's and state's need for affordable sources of renewable energy.
- **13.3 Fresh food offerings.** Encourage the continuation and expansion of fresh food offerings including farmers' markets, community gardens, and edible landscapes in Hermosa Beach.

MOBILITY ELEMENT

- **1.1 Consider all modes.** Require the planning, design, and construction of all new and existing transportation projects to consider the needs of all modes of travel to create safe, livable and inviting environments for all users of the system.
- **1.5 Require improvements**. Require new development to provide or pay its share of transportation and infrastructure improvements including any sidewalk improvements, landscaping, bicycle infrastructure, traffic calming, and public realm improvements.
- **2.5 Require sustainable practices.** Incorporate environmental sustainability practices into designs and strategic management of road space and public right-of-ways, prioritizing practices that can serve dual infrastructure purposes.
- **3.2 Invest in sidewalks.** Prioritize investment in designated priority sidewalks to ensure a complete network of sidewalks and pedestrian-friendly amenities that enhances pedestrian safety, access opportunities and connectivity to destinations.
- **3.3 Active transportation.** Require that all development or redevelopment projects accommodate active transportation through providing on-site amenities, necessary connections to existing and planned pedestrian and bicycle networks, and incorporate people-oriented design practices.
- **3.4 Access opportunities.** Provide enhanced mobility and access opportunities for local transportation and transit services in areas of the city with sufficient density and intensity of uses, mix of appropriate uses, and supportive bicycle and pedestrian network connections that can reduce vehicle trips within the city's busiest corridors.
- **3.5 Incentivize other modes.** Incentivize local shuttle/trolley services, rideshare and car share programs, and developing infrastructure that support low speed, low carbon (e.g. electric) vehicles.
- **3.6 Complete bicycle network.** Provide a complete bicycle network along all designated roadways while creating connections to other modes of travel including walking and transit.
- **4.1 Shared parking.** Facilitate park-once and shared parking policies among private developments that contribute to a shared parking supply and interconnect with adjacent parking facilities.
- **4.4 Provision of subsidized parking.** Ensure the provision of subsidized on-street residential parking is limited to residences which cannot provide adequate parking on-site.
- **4.5 Sufficient bicycle parking.** Require a sufficient supply of bicycle parking to be provided in conjunction with new vehicle parking facilities by both public and private developments.

- **4.6 Priority parking.** Provide priority parking and charging stations to accommodate the use of Electric Vehicles (EVs), including smaller short-distance neighborhood electric vehicles.
- **4.9 Encourage TDM strategies.** Encourage use of Transportation Demand Management (TDM) strategies and programs such as carpooling, ride hailing, and alternative transportation modes as a way to reduce demand for additional parking supply.
- **5.1 Prioritize development of infrastructure.** Prioritize the development of roadway and parking infrastructure that encourages private electric and other low carbon vehicle ownership and use throughout the city.
- **5.2 Local transit system.** Develop a local transit system that facilitates efficient transport of residents, hotel guests, and beachgoers between activity centers, and to Downtown businesses and the beach.
- **5.3 Incentivize TDM strategies.** Incentivize the use of Transportation Demand Management (TDM) strategies as a cost effective method for maximizing existing transportation infrastructure to accommodate mobility demands without significant expansion to infrastructure.
- **5.5 Encourage smart growth.** Encourage smart growth land use features in development projects to ensure more compact, mixed, connected, and multimodal development that supports reduced trip generation, trip lengths, and greater ability to utilize alternative modes.
- **6.1 Regional network.** Work with government agencies and private sector companies to develop a comprehensive, regionally integrated transportation network that connects the community to surrounding cities.
- **6.3 Support programs.** Facilitate greater local and regional mobility through programs for shared equipment or transportation options such as car sharing and bike sharing.
- **6.6 Greater utilization.** Consider exploring opportunities for greater utilization of the Beach Cities Transit system for improved mobility along major corridors and as a potential means of improved regional transit connections.

SUSTAINABILITY + CONSERVATION ELEMENT

- **2.4 Land use and transportation investments.** Promote land use and transportation investments that support greater transportation choice, greater local economic opportunity, and reduced number and length of automobile trips.
- **3.2 Mobile source reductions.** Support land use and transportation strategies to reduce vehicle miles traveled and emissions, including pollution from commercial and passenger vehicles.
- **3.3 Fuel efficient fleets.** Promote fuel efficiency and cleaner fuels for vehicles as well as construction and maintenance equipment by requesting that City contractors provide cleaner fleets.
- **4.1 Renewable energy generation.** Require, promote, and facilitate the installation of renewable energy projects on homes and businesses.
- **4.2 Building energy disclosure.** Require large buildings to report their energy and water use on a regular basis.
- **4.3 Retrofit program.** Provide an energy retrofit program to assist home and building owners to make efficiency improvements.

- **4.4 Rental efficiency.** Adopt a financing program to incentivize rental efficiency retrofits, such as green leasing.
- **4.5 Municipal facilities.** Utilize renewable energy sources at City facilities to support achieving municipal carbon neutrality by 2020.
- **4.6 Sustainable building standards.** Use sustainable building checklists to minimize or eliminate waste and maximize recycling in building design, demolition, and construction activities.

PARKS + OPEN SPACE ELEMENT

- **4.2 Enhanced access points.** Increase and enhance access to parks and open space, particularly access points that promote physical activity such as pedestrian- and bike-oriented access points.
- **4.3 Safe and efficient trail network.** Develop a network of safe and efficient trails, streets, and paths that connect residents, visitors, and neighboring communities to the beach, parks, and activity centers.
- **6.4 Transit access.** Coordinate with regional agencies and neighboring jurisdictions to improve regional and local transit access to beach access points.
- **6.5 Bicycle and pedestrian access.** Maximize bicycle and pedestrian access and safety getting to and around the Coastal Zone through infrastructure and wayfinding improvements.
- **6.12 Complete South Bay Bike Master Plan.** Prioritize completion of proposed South Bay Bike Master Plan improvements in the Coastal Zone that connect to other bike routes and paths throughout the city and to the surrounding region.

INFRASTRUCTURE ELEMENT

- **2.4 Sidewalk improvements.** Consider innovative funding strategies, such as cost-sharing, ADA accessibility grants, or sidewalk dedications, to improve the overall condition, safety, and accessibility of sidewalks.
- **2.5 Active transportation dedications.** Require new development and redevelopment projects to provide land or infrastructure necessary to accommodate active transportation, such as sidewalks, bike racks, and bus stops.
- **2.6 Traffic signal coordination.** Maintain and operate the traffic signal system with advanced technologies to manage traffic operations and maintain traffic signal infrastructure.
- **6.4 Innovative and renewable technology**. Encourage the exploration and establishment of innovative and renewable utility service technologies. Allow the testing of new alternative energy sources that are consistent with the goals and policies of PLAN Hermosa and comply with all relevant regulations.
- **6.5 Renewable energy facilities.** Unless a renewable energy facility would cause an unmitigatable impact to health or safety, allow them by right.
- **6.6 Community choice aggregation.** Collaborate with nearby local and regional agencies to develop a community choice aggregation system that provides greater renewable energy choices to the community.

Implementation Actions

- MOBILITY-12. Maintain and periodically update the Transportation Demand Management (TDM) Ordinance with activities that will reduce auto trips associated with new development.
- MOBILITY-13. Install and maintain transportation amenities such as bicycle parking and electric vehicle charging stations so that they are available at each commercial district or corridor, park, and public facility.
- SUSTAINABILITY-7. Concurrent with new State Building Code adoptions, periodically update or amend Green Building Standards and conduct cost effectiveness studies to incorporate additional energy-efficient features.
- SUSTAINABILITY-8. Develop and market a program to offer incentives such as rebates, fee waivers, or permit streamlining to facilitate the installation of renewable energy, energy efficient, or water conservation equipment.
- INFRASTRUCTURE-23. Develop a process for identifying sites deemed appropriate for alternative renewable energy power generation facilities, and provide such information to utility providers and potential developers.
- INFRASTRUCTURE-24. Continue to implement energy-efficient lighting throughout City facilities.
- INFRASTRUCTURE-25. Survey all streetlights periodically for functionality and create a response protocol to respond to reports of streetlight outages within a 24-hour time period.

THRESHOLDS OF SIGNIFICANCE

The impact analysis below is based on CEQA Guidelines Appendix F pertaining to energy conservation. An energy impact is considered significant if implementation of the proposed project would result in a wasteful, inefficient, and unnecessary use of direct or indirect energy. For purposes of the analysis, "wasteful" and "inefficient" are circumstances in which the project would conflict with applicable state or local energy legislation, policies, and standards, or result in increased per capita energy consumption.

IMPACTS AND MITIGATION MEASURES

IMPACT 4.13.9-1 ***Would PLAN Hermosa Increase Demand for Additional Energy Resources?*** *PLAN Hermosa would guide future development and reuse projects in the city that would not result in the use of fuel or energy in a wasteful manner. Therefore, this impact would be* ***less than significant****.*

Electricity and Natural Gas Consumption

As shown in **Table 4.13-5 (Historic Energy Consumption)**, overall electricity consumption was reduced by 8.7 percent between 2005 and 2012. However, this reduction was based on the reduction of electrical consumption from commercial/industrial customers. Residential electrical consumption increased by 4.0 percent during this time, while natural gas consumption increased by 1.0 percent.

TABLE 4.13-5
HISTORIC ENERGY CONSUMPTION

	2005	2012	Percentage Change
Electricity Consumption (kWh)			
Residential Energy	47,843,200	49,778,500	4.0%
Nonresidential Energy	51,741,500	41,191,800	-20.4%
Total	**99,584,700**	**90,970,300**	**-8.7%**
Natural Gas Consumption (therms)			
Residential Energy	3,339,800	3,364,400	0.7%
Nonresidential Energy	857,700	876,000	2.1%
Total	**4,197,500**	**4,240,400**	**1.0%**

Source: City of Hermosa Beach 2015a

In 2015, the City of Hermosa Beach, in concert with the South Bay Cities Council of Governments, collected data on existing energy use and greenhouse gas emissions (GHG). Additionally, the City has projected future energy consumption in the city based on growth projections and a business-as-usual (BAU) scenario, essentially assuming no new regulations are put in place to reduce energy consumption or reduce greenhouse gas emissions (see Section 4.6, Greenhouse Gas Emissions, for a discussion of GHG and climate change). **Table 4.13-6 (Energy Consumption Associated with the Future Development Potential under Plan Hermosa)** provides an estimate of electricity and natural gas use under the BAU scenario. As shown in **Table 4.13-6**, electricity and natural gas consumption will continue to rise through 2040 under the BAU scenario. However, full implementation of PLAN Hermosa would reduce energy consumption by 19.2 percent for electricity and 15.1 percent for natural gas between 2015 and 2040.

TABLE 4.13-6
ENERGY CONSUMPTION ASSOCIATED WITH THE FUTURE DEVELOPMENT POTENTIAL UNDER PLAN HERMOSA

	BAU				Plan Implementation	Change Between 2015 and 2040
	2015	2020	2030	2040	2040	
Electricity Use (kWh)						
Residential Energy	49,778,500	50,759,000	52,730,200	54,696,400	33,363,500	-33.0%
Nonresidential Energy	41,191,800	43,984,400	49,561,600	55,142,800	40,102,000	-2.6%
Total	**90,970,300**	**94,743,400**	**102,291,800**	**109,839,200**	**73,465,500**	**-19.2%**
Natural Gas Use (therms)						
Residential Energy	3,364,400	3,430,700	3,563,900	3,696,800	2,953,000	-12.2%
Nonresidential Energy	876,000	935,400	1,054,000	1,172,700	648,200	-26.0%
Total	**4,240,400**	**4,366,100**	**4,617,900**	**4,869,500**	**3,601,200**	**-15.1%**

Source: City of Hermosa Beach 2015a

As shown in **Table 4.13-6**, the future development potential through 2040 under a BAU scenario could result in the additional consumption of 18,868,900 kilowatt-hours and 629,100 therms over current conditions. However, this consumption does not take into account the energy savings to be gained through the implementation of PLAN Hermosa's policies and implementation actions.

Implementation of PLAN Hermosa's energy consumption policies and implementation actions would support further reductions in energy use, and would result in a reduction in the consumption of electricity and natural gas in the city. Thus, implementation of PLAN Hermosa would not conflict with or obstruct City goals intended to reduce the consumption of electricity and natural gas resources.

Furthermore, the future development allowed under PLAN Hermosa would be required to comply with Title 24 Building Energy Efficiency Standards, which establish minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage.

Automotive Fuel Consumption

As shown in **Table 4.13-7 (Fuel Consumption Associated with the Future Development Potential under PLAN Hermosa)**, increases in fuel economy and the overall reduction in vehicle miles traveled is expected to decrease the amount of fuel consumed between 2015 and 2040 under the BAU scenario.

Implementation of PLAN Hermosa's proposed policies and implementation actions that are designed to promote pedestrian, bicycle, and transit forms of transportation would further reduce dependency on fossil fuels. As shown in **Table 4.13-7,** under PLAN Hermosa**,** the amount of transportation fuels consumed would be reduced to approximately 1.4 million gallons or almost 77 percent when compared to existing (2015) conditions, but would also increase electricity consumption due to the increase in use of electric vehicles.

TABLE 4.13-7
FUEL CONSUMPTION ASSOCIATED WITH THE FUTURE DEVELOPMENT POTENTIAL UNDER PLAN HERMOSA

	BAU				Plan Implementation
	2015	2020	2030	2040	2040
Transportation					
Vehicle Miles Traveled	133,808,700	126,238,300	128,574,500	130,910,800	107,737,700
Average Fleet Fuel Efficiency	22 mpg	34 mpg	44 mpg	55 mpg	55 mpg
Transportation Fuel (gallons)	6,194,800	3,702,000	2,908,900	2,402,000	1,428,600
EV Electricity Use (kWh)	—	—	—	—	9,959,700

Source: City of Hermosa Beach 2015a

As discussed above, implementation of PLAN Hermosa's policies and implementation actions would reduce the consumption of electricity, natural gas, and transportation fuels. Therefore, this impact would be **less than significant**.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The cumulative impact area for energy consumption is Los Angeles County.

IMPACT 4.13.9-2 ***Would PLAN Hermosa Have Cumulative Energy Consumption Impacts?*** *Implementation of PLAN Hermosa, in combination with other existing, planned, proposed, approved, and reasonably foreseeable development in Los Angeles County, would increase the demand for energy resources. PLAN Hermosa's contribution to the need for expanded energy resources would be* ***less than cumulatively considerable****.*

According to the California Energy Consumption Data Management System, residential and nonresidential land uses in Los Angeles County consumed approximately 70 billion kWh of electricity and about 3 billion therms of natural gas in 2014 (the latest year of existing data) (CEC 2014). In addition, about 11 million gallons of automotive fuel was consumed daily in the county in 2015 (roughly 4 billion gallons annually).

Energy consumption associated with PLAN Hermosa in comparison to Los Angeles County is summarized in **Table 4.13-8 (Plan Hermosa Energy Consumption Plus Cumulative Conditions)**. Under the BAU scenario, electricity consumption in the city will increase by about 19 million kWh. This increase represents an increase in total electricity use (when compared to 2014 statistics) in Los Angeles County of 0.03 percent, while natural gas consumption represents an increase of 0.02 percent. Implementation of PLAN Hermosa's policies and implementation actions would result in the reduction of electricity use in the city by about 18 million kWh and natural gas use by about 600,000 therms. As shown, this decrease would reduce the amount of electricity and natural gas consumption in Los Angeles County by 0.03 percent and 0.02 percent, respectively. The reduction in automotive fuel use would decrease use in the county by 0.01 percent for both scenarios.

TABLE 4.13-8
PLAN HERMOSA ENERGY CONSUMPTION PLUS CUMULATIVE CONDITIONS

Energy Type	Los Angeles County	Hermosa Beach		2040 Percentage Difference Countywide	
		Difference 2015–2040 BAU Annual Energy Consumption	Difference 2015–2040 PLAN Implementation Annual Energy Consumption	BAU	Plan Implementation
Electricity Consumption[1]	69,997,000,000 kWh	18,868,900 kWh	-17,504,800 kWh	0.03	-0.03
Natural Gas Consumption[1]	2,857,000,000 therms	629,100 therms	-639,200 therms	0.02	-0.02
Automotive Fuel Consumption[2]	3,986,603,000 gallons	-3,792,800 gallons	-4,766,200 gallons	-0.01	-0.01

Sources: City of Hermosa Beach 2015a; CEC 2014

Note: The project increases in electricity and natural gas consumption are compared with all of the residential and nonresidential buildings in Los Angeles County in 2014. The project increases in automotive fuel consumption are compared with the countywide fuel consumption in 2015.

The increase in electricity and natural gas consumption over existing conditions under the BAU scenario would be negligible. Improvements in energy use would result with PLAN Hermosa implementation. As such, PLAN Hermosa would not place a substantial demand on regional energy supply or require significant additional capacity, or significantly increase peak and base period electricity demand, or cause wasteful, inefficient, and unnecessary consumption of energy

during subsequent project construction, operation, and/or maintenance, or preempt future energy development or future energy conservation. Therefore, this impact would be **less than cumulatively considerable**.

Mitigation Measures

None required.

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4.14 Transportation

4.14.1 INTRODUCTION

This resource section evaluates the potential environmental impacts related to transportation systems from PLAN Hermosa implementation. The analysis includes a review of the vehicular, transit, bicycle, and pedestrian components of the circulation system. PLAN Hermosa policies and implementation actions presented in the Mobility Element provide a framework to evaluate, manage, and improve transportation infrastructure and practices to address increased congestion and serve all modes of transportation.

NOP Responses: No comments were received in response to the NOP related to transportation. Comments included written letters and oral comments provided at the NOP scoping meeting.

Reference Information: Information for this resource section is based on numerous references, including the PLAN Hermosa Technical Background Report (Appendix C-17), US Census Bureau data (2010), California Department of Finance data (2015), the Southern California Association of Governments' (2015) Profile of the City of Hermosa Beach and (2012) draft Regional Transportation Plan projections, Hermosa Beach's (2014) annual Financial Report, and other publicly available documents. The Technical Background Report prepared for the project is attached to this document as **Appendix C-17,** which describes the existing transportation system classifications and functionality. Key findings from the Technical Background Report are summarized below.

4.14.2 ENVIRONMENTAL SETTING

MULTIMODAL TRANSPORTATION SYSTEM

The transportation system in Hermosa Beach features diverse elements that include an extensive network of roadways comprising arterials, collectors, and local streets, 5.1 miles of bicycle facilities, an extensive network of developed pedestrian facilities, and a public transit system providing both local and regional bus service. These facilities support a multimodal transportation network that connects multiple neighborhoods to nearby communities and to the greater surrounding region.

Roadway Network

The existing Hermosa Beach General Plan Circulation, Transportation, and Parking Element (1990) designates three different roadway types in the city. **Table 4.14-1 (Hermosa Beach Roadway Functional Classifications)** summarizes street classification and performance characteristics, and **Table 4.14-2 (Hermosa Beach Roadways)** outlines the classified facilities in the city. Primary roadways include Pacific Coast Highway (PCH or State Route 1), Ardmore Avenue/Valley Drive, Artesia Boulevard (State Route 91), Aviation Boulevard, and Herondo Street, as illustrated in **Figure 4.14-1 (Hermosa Beach Street Classification)**. Regional access is via by the San Diego Freeway (Interstate 405) located approximately 3 miles east of the city border.

TABLE 4.14-1
HERMOSA BEACH ROADWAY FUNCTIONAL CLASSIFICATIONS

Roadway Type	Accommodation for Movement of Traffic	Level of Property Access
Arterial	Primary roadway for movement of traffic at city level; prioritizes traffic movement; can also provide regional connectivity.	Driveways and other curb cuts along arterials are limited to minimize disruption to traffic flow.
Collector	Circulation of traffic between residential neighborhoods and arterial streets. Collectors typically provide intracity and some intercity access, but no regional access.	Access is prioritized similarly to a local street with more considerations for traffic flow and visibility.
Local	Designed to serve adjacent residential land uses only and provide the lowest accommodation for traffic movement.	Local streets provide the highest level of property access. Driveways are closely spaced, and there are few access limitations.
Walk Street	Provide no vehicular access.	Walk streets provide high levels of pedestrian- and bicycle-only property access.

Source: City of Hermosa Beach 1990

FIGURE 4.14-1
HERMOSA BEACH STREET CLASSIFICATION

Source: City of Hermosa Beach 2015

TABLE 4.14-2
HERMOSA BEACH ROADWAYS

Classification	Streets
Arterial Streets	Artesia Boulevard
	Aviation Boulevard
	Hermosa Avenue from 14th Street to south city limit
	Pacific Coast Highway
	Pier Avenue from Pacific Coast Highway to Ardmore Avenue
Collector Streets	2nd Street from Pacific Coast Highway to Hermosa Avenue
	5th Street from Pacific Coast Highway to Prospect Avenue
	8th Street from Pacific Coast Highway to Hermosa Avenue
	25th Street
	27th Street
	Ardmore Avenue from Pier Avenue to north city limit
	Gould Avenue
	Manhattan Avenue from 27th Street to north city limit
	Monterey Boulevard
	Pier Avenue from west of Ardmore Avenue
	Prospect Avenue
	Valley Drive from Pier Avenue to south city limit
Local Roads	All others

Source: City of Hermosa Beach 1990

Transit

Transit service in Hermosa Beach is provided by three transportation agencies—Beach Cities Transit, the Los Angeles County Metropolitan Transportation Authority (Metro), and the Los Angeles Department of Transportation (LADOT)—and includes a demand-responsive paratransit service. Transit services in the city are shown in **Figure 4.14-2 (Existing Transit Network).**

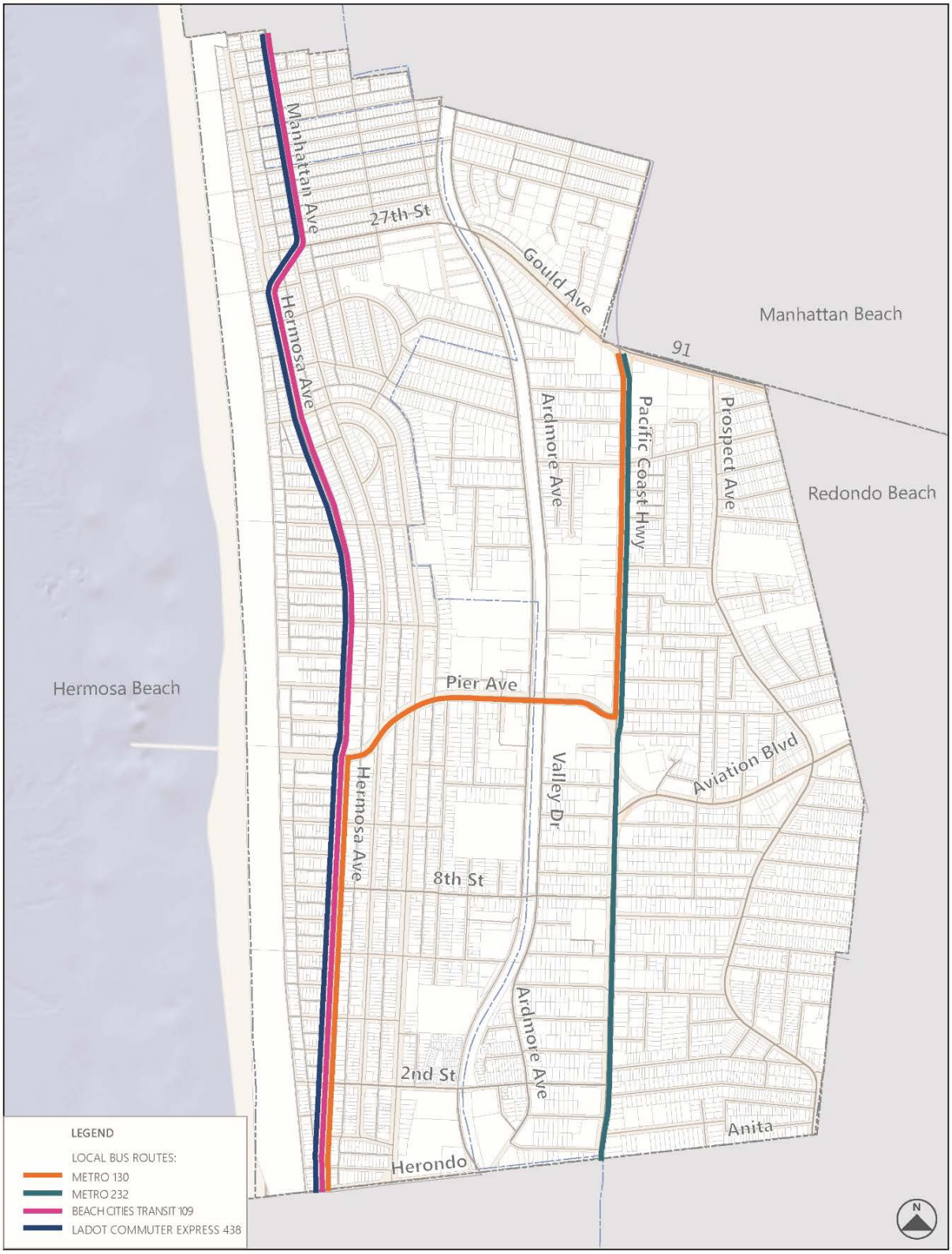
Beach Cities Transit provides local transit service for the Los Angeles Beach Cities. Daily weekday and weekend transit services are served by two routes: Transit Lines 102 (service in Redondo Beach only) and 109. Line 109 runs north–south along the coast through Manhattan Beach, Hermosa Beach, and Redondo Beach, traversing a route between Riviera Village in Redondo Beach and the Los Angeles Airport City Bus Center. Connection to regional transit, the Metro Green Line, is served by two stops: the Aviation/LAX Station and the Douglas Station. Routes operated by Beach Cities Transit are summarized in **Table 4.14-3**.

TABLE 4.14-3
BEACH CITIES TRANSIT ROUTES

Line	From	To	Weekday Headway	Weekend Headway
102	Redondo Beach Pier	Redondo Beach Green Line Station	30–45 min	30–45 min
109	Redondo Beach Riviera Village	Los Angeles Airport City Bus Center	30–50 min	60 min

Source: Beach Cities Transit 2015

FIGURE 4.14-2
EXISTING TRANSIT NETWORK



Source: City of Hermosa Beach 2015

Metro operates several bus routes and rail lines that offer regional transit service. Metro Line 130 provides east–west coverage between the Beach Cities and the Harbor Gateway Transit Center in Gardena. North–south transit coverage is served by Metro Line 232. This route travels along Pacific Coast Highway between downtown Long Beach and the Los Angeles Airport City Bus Center and provides direct connection to the Metro Blue and Green lines. Metro's Green Line provides regional east–west light rail service to the South Bay area and the Gateway Cities communities of Lynwood, Downey, Bellflower, and Norwalk. This rail line has direct connections to north–south rail via the Metro Blue Line. Routes operated by Metro that directly serve Hermosa Beach are summarized in **Table 4.14-4 (Los Angeles County Metro Transit Services)**.

TABLE 4.14-4
LOS ANGELES COUNTY METRO TRANSIT SERVICES

Route	Type	Direction	Service to/from	Weekday Headway	Weekend Headway
130	Local	E–W	Redondo Beach, Hermosa Beach, Los Angeles via Gateway Cities	30 min	50–60 min
232	Local	N–S	Downtown Long Beach to Los Angeles Airport City Bus Center	20 min	30–60 min

Source: Los Angeles County Metropolitan Transportation Authority 2015; Los Angeles Department of Transportation 2015

LADOT's Commuter Express provides one bus route (Commuter Express Route 438) with express service during peak commute periods between the Beach Cities area and downtown Los Angeles via the Century and Harbor freeways. This line makes local stops in Redondo Beach, Hermosa Beach, Manhattan Beach, and El Segundo. The route operated by LADOT that directly serves Hermosa Beach is summarized in **Table 4.14-5 (Los Angeles Department of Transportation Transit Services)**.

TABLE 4.14-5
LOS ANGELES DEPARTMENT OF TRANSPORTATION TRANSIT SERVICES

Route	Type	Service to/from	Weekday Peak-Hour Trips
438	Express	Redondo Beach, Hermosa Beach, Manhattan Beach, El Segundo, and Los Angeles	AM = 6 inbound trips PM = 8 outbound trips

Source: Los Angeles County Metropolitan Transportation Authority 2015; Los Angeles Department of Transportation 2015

The WAVE Dial-A-Ride program offers demand-responsive paratransit service for senior and disabled passengers for travel in Hermosa Beach. Paratransit is an alternative mode of flexible passenger transportation that does not follow fixed routes or schedules. Citywide WAVE operations provide same-day, curb-to-curb transit to anyone who meets qualification conditions. The standard fare for service in Hermosa Beach, Redondo Beach, or any area south of El Segundo Boulevard, west of Crenshaw Boulevard, and north of Pacific Coast Highway is $1.00. Travel outside these boundaries is subject to an additional meter charge.

Bicycle Facilities

Hermosa Beach currently has 5.1 miles of existing bicycle facilities that include the Class I Marvin Braude Bikeway on The Strand and Class II, Class III, and Class IV bicycle facilities on Hermosa Avenue (see **Table 4.14-6 (Hermosa Beach Bicycle Facilities)** and **Figure 4.14-3 (Existing Bicycle Network)**). Brief descriptions of each bikeway class follow.

- Class I Bikeway. Often referred to as a bike path, this facility provides for bicycle travel on a paved right-of-way completely separated from any street or highway.
- Class II Bikeway. Often referred to as a bike lane, this facility provides a striped and stenciled lane for one-way travel on a street or highway.
- Class III Bikeway. Often referred to as a bike route, this facility provides for shared use with pedestrian or motor vehicle traffic and is identified only by signage.
- Class IV Bikeway. Often referred to as a separated bikeway, this facility provides for bicycle-only travel in a facility physically separated from through vehicular traffic.

TABLE 4.14-6
HERMOSA BEACH BICYCLE FACILITIES

Class	Street/Path	From	To
I	Marvin Braude Bike Trail (The Strand)	35th Street	Herondo Street
IV	Hermosa Avenue	35th Street	28th Street
II	Hermosa Avenue	28th Street	24th Street
II	Herondo Street	Hermosa Avenue	Valley Drive
III	Hermosa Avenue	24th Street	Herondo Street

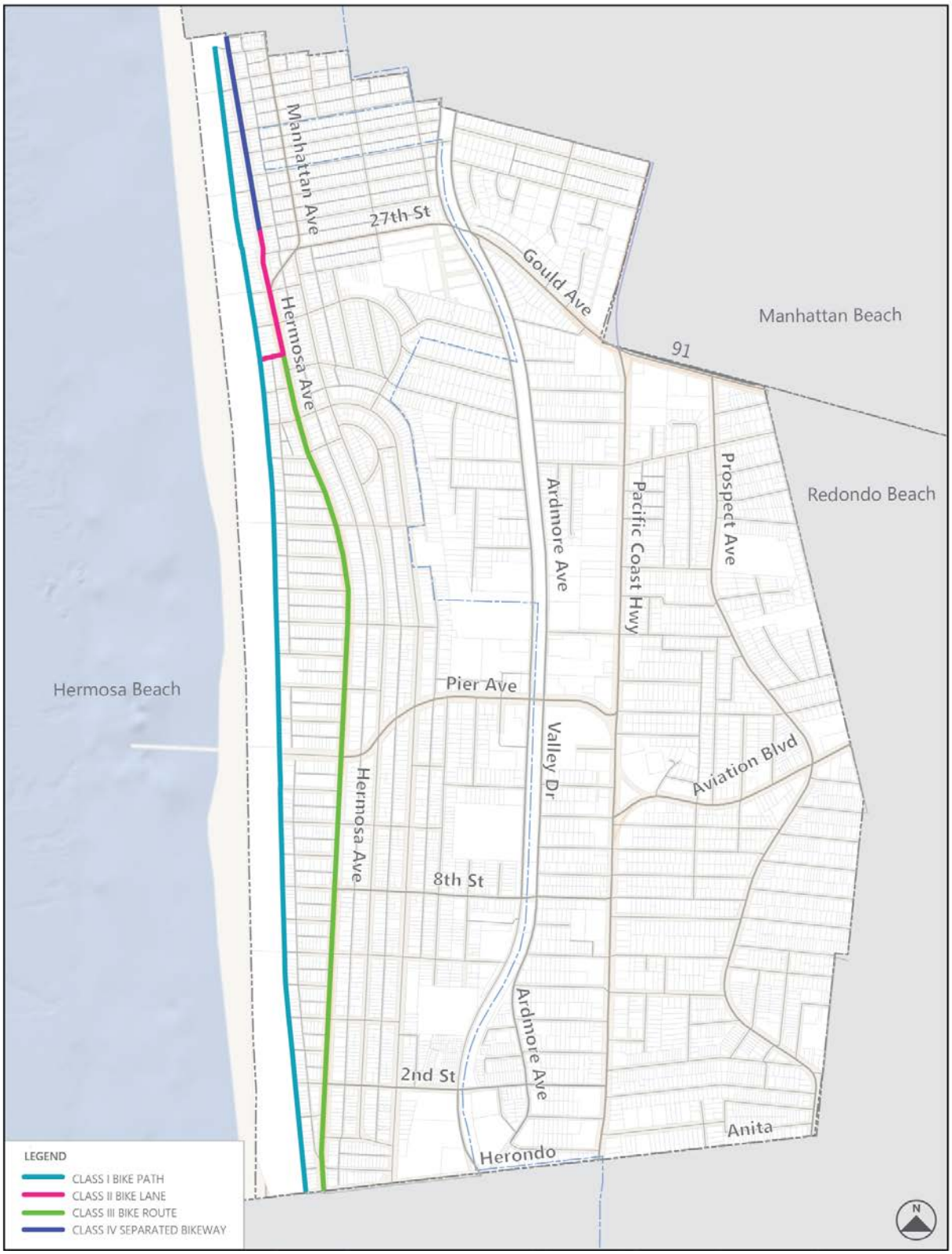
Source: City of Hermosa Beach 2015

Pedestrian Environment

The city's pedestrian infrastructure is along most arterial and local streets interconnected by a network of sidewalks and striped crosswalks. While many streets in the city include pedestrian facilities, a number of locations have noncontiguous sidewalk coverage and lack adequate curb ramps, cross steep driveway entrances, and include sidewalk obstructions that block travel along a number of the city's narrow sidewalks.

In Hermosa Beach's Downtown area, pedestrian facilities offer a range of amenities that include public spaces, shopping, dining, beach access, and shade cover supplied by the city's tree network and streetscape design strategies. Protected pedestrian facilities are common throughout the city along pedestrian-only walk streets and off-street pedestrian paths. The Hermosa Valley Greenbelt provides north–south connections away from the beach. The Strand, Southern California's famous beachside pedestrian walkway and bicycle path (Marvin Braude Bikeway), also serves the Hermosa Beach community on its way between Torrance and Malibu.

FIGURE 4.14-3
EXISTING BICYCLE NETWORK



Source: City of Hermosa Beach 2015

LEVEL OF SERVICE

The performance of a roadway system is measured in terms of level of service (LOS), a standardized methodology describing the efficiency of a roadway circulation system in relation to the quality of traffic operations and flow. LOS is ranked by a letter grade that represents the overall condition of travel through an intersection or road segment, based on number of seconds of delay for vehicles. These grades range from A (minimal delay) to F (excessive congestion). LOS E represents at-capacity operations. LOS definitions for intersections are shown in **Table 4.14-7 (Level of Service Definitions)**.

TABLE 4.14-7
LEVEL OF SERVICE DEFINITIONS

LOS	Definition
A	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: Transportation Research Board 1980

Studied Intersections

Thirteen intersections and 20 street segments were selected for study. These study locations are shown in **Figure 4.14-4 (Study Intersections)** and **Figure 4.14-5 (Study Roadway Segments)**. Studied intersections, intersection control type, and responsible agencies for each study location are shown in **Table 4.14-8 (Study Intersections)**. Studied street segments and their accompanying functional classification, number of lanes, and estimated daily capacities from the existing General Plan Circulation, Transportation, and Parking Element are shown in **Table 4.14-9 (Study Roadway Segments)**.

TABLE 4.14-8
STUDY INTERSECTIONS

Intersection	Intersection Control	Jurisdiction
1. Hermosa Avenue & 13th Street	Signal	Hermosa Beach
2. Hermosa Avenue & Pier Avenue	Signal	Hermosa Beach
3. Pacific Coast Highway & Artesia Boulevard	Signal	Hermosa Beach/Caltrans/CMP
4. Pacific Coast Highway & Aviation Boulevard	Signal	Hermosa Beach/Caltrans
5. Pacific Coast Highway & Pier Avenue	Signal	Hermosa Beach/Caltrans
6. Pacific Coast Highway & 2nd Street	Signal	Hermosa Beach/Caltrans
7. Pacific Coast Highway & 16th Street	Signal	Hermosa Beach/Caltrans

Intersection	Intersection Control	Jurisdiction
8. Pacific Coast Highway & 21st Street	Signal	Hermosa Beach/Caltrans
9. Prospect Avenue & Artesia Boulevard	Signal	Hermosa Beach
10. Prospect Avenue & Aviation Boulevard	Signal	Hermosa Beach
11. Prospect Avenue & Anita Street	Signal	Hermosa Beach
12. Manhattan Avenue & 27th Street	All-Way Stop Control	Hermosa Beach
13. Valley Drive & Gould Avenue	All-Way Stop Control	Hermosa Beach

Source: City of Hermosa Beach 2015

TABLE 4.14-9
STUDY ROADWAY SEGMENTS

Segment	Location	Functional Classification	Lanes	Daily Capacity
1. Hermosa Avenue	27th Street to 22nd Street	Collector	4	22,000
2. Hermosa Avenue	22nd Street to 16th Street	Collector	4	22,000
3. Hermosa Avenue	16th Street to 8th Street	Arterial	4	29,000
4. Hermosa Avenue	8th Street to Herondo Street	Arterial	4	29,000
5. Valley Drive	Gould Avenue to Pier Avenue	Local	2	15,000
6. Valley Drive	Pier Avenue to 8th Street	Collector	2	15,000
7. Ardmore Avenue	16th Street to 11th Street	Local	2	15,000
8. Ardmore Avenue	8th Street to 2nd Street	Local	2	15,000
9. Pacific Coast Highway	Artesia Boulevard to Aviation Boulevard	Arterial	6	44,000
10. Pacific Coast Highway	Aviation Boulevard to 2nd Street	Arterial	6	44,000
11. Prospect Avenue	Artesia Blvd to Aviation Boulevard	Collector	2	15,000
12. Prospect Avenue	Aviation Boulevard to 2nd Street	Collector	2	15,000
13. Artesia Boulevard	Pacific Coast Highway to Prospect Avenue	Arterial	4	29,000
14. Aviation Boulevard	Pacific Coast Highway to Prospect Avenue	Arterial	4	29,000
15. Pier Avenue	Hermosa Avenue to Valley Drive	Collector	4	29,000
16. Pier Avenue	Ardmore Avenue to Pacific Coast Highway	Arterial	4	29,000
17. Gould Avenue	Ardmore Avenue to Pacific Coast Highway	Collector	4	22,000
18. 8th Street	Hermosa Avenue to Valley Drive	Collector	2	15,000
19. 8th Street	Pacific Coast Highway to Prospect Avenue	Local	2	2,500
20. Herondo Street	Hermosa Avenue to Valley Drive	Arterial	2	13,000

Source: City of Hermosa Beach 1990

FIGURE 4.14-4
STUDY INTERSECTIONS

Source: City of Hermosa Beach 2015

FIGURE 4.14-5
STUDY ROADWAY SEGMENTS

Source: City of Hermosa Beach 2015

Traffic study guidelines published by the City of Hermosa Beach (in the existing Circulation, Transportation, and Parking Element [1990]), by the California Department of Transportation (Caltrans), and in the Los Angeles County Congestion Management Program were used to analyze the operation of each study location under Existing (2015) traffic conditions as detailed below.

City of Hermosa Beach

Level of service standards for intersections in Hermosa Beach are outlined in the existing City of Hermosa Beach Circulation, Transportation, and Parking Element (1990). The City maintains a policy of LOS C or better for both signalized and unsignalized intersections during weekday morning peak and evening peak hours. Traffic study guidelines established by the City of Hermosa Beach require the Intersection Capacity Utilization (ICU) methodology for LOS analyses of signalized intersections. The ICU method measures the volume-to-capacity (V/C) ratio (rated on a scale of 0 to 1.000) on a critical lane basis and determines level of service associated with each critical V/C ratio. For unsignalized intersections, LOS is calculated using the Highway Capacity Manual (HCM) methodology. The HCM method determines the average control delay (in seconds per vehicle) and determines level of service based on the average intersection delay for all vehicles. **Table 4.14-10 (Level of Service Thresholds)** shows level of service thresholds for both the ICU and HCM methodologies.

TABLE 4.14-10
LEVEL OF SERVICE THRESHOLDS

Level of Service	V/C Ratio (ICU Signalized)	Control Delay in Seconds (HCM Signalized)	Control Delay in Seconds (HCM Unsignalized)
A	0.00 to 0.60	0.0 to 10.0	0.0 to 10.0
B	0.61 to 0.70	10.1 to 20.0	10.1 to 15.0
C	0.71 to 0.80	20.1 to 35.0	15.1 to 25.0
D	0.81 to 0.90	35.1 to 55.0	25.1 to 35.0
E	0.91 to 1.00	55.1 to 80.0	35.1 to 50.0
F	1.01 or greater	80.1 or greater	50.1 or greater

Source: Transportation Research Board 2010

For the analysis of roadway segments, the City maintains a policy of LOS D for arterial mid-block segments that are based on average daily traffic volumes. Level of service is determined based on a V/C ratio calculated using daily capacities (**Table 4.14-9**) and applies LOS thresholds that are consistent with the criteria for signalized intersections in Hermosa Beach.

California Department of Transportation

Caltrans (2002) developed the Guide for the Preparation of Traffic Impact Studies to establish standards and guidelines for the analysis of traffic impacts generated by local development and land use change proposals that affect traffic along state highway facilities. LOS standards for intersections under the jurisdiction of Caltrans require State-controlled intersections to be under the target threshold of LOS D as measured using the HCM methodology.

Congestion Management Program

The Los Angeles County Congestion Management Program (CMP) is a State-mandated program administered by Metro that provides a mechanism for coordinating regional land use and development decisions in conjunction with the California Environmental Quality Act

(CEQA). The CMP requires arterial intersection analysis at CMP monitoring locations where the proposed project will add 50 or more peak-hour vehicle trips. Intersections are analyzed using ICU methodology and require a minimum level of service of LOS E. Only one study intersection in Hermosa Beach, Pacific Coast Highway and Artesia Boulevard, is a CMP monitoring location. CMP guidelines for roadway analysis require freeway mainline analysis at monitoring locations where the proposed project will add 150 or more peak-hour vehicle trips. The CMP identifies a minimum level of service requirement of LOS E. The closest freeway mainline monitoring location is Interstate 405.

Existing (2015) Level of Service Results

The existing peak-hour traffic volumes shown in **Appendix C-17** were analyzed using the analysis methodologies described above to determine the existing operating conditions at the selected intersections for analysis under existing conditions. LOS calculation worksheets are included in **Appendix G**. Of the 13 intersections, 12 operate at LOS C or better under Existing (2015) peak-hour traffic conditions (**Table 4.14-11 (Existing (2015) Intersection Level of Service: City of Hermosa Beach)** and **Figure 4.14-6 (Existing (2015) Intersection Level of Service)**). Only one intersection currently operates at LOS D, below the adopted standard: Manhattan Avenue and 27th Street (AM peak hour).

TABLE 4.14-11
EXISTING (2015) INTERSECTION LEVEL OF SERVICE: CITY OF HERMOSA BEACH

Intersection	Intersection Control	Peak Hour	Existing	
			V/C or Delay (sec)	LOS
1. Hermosa Avenue & 13th Street	Signal	AM PM	0.302 0.335	A A
2. Hermosa Avenue & Pier Avenue	Signal	AM PM	0.384 0.324	A A
3. Pacific Coast Highway & Artesia Boulevard	Signal	AM PM	0.732 0.767	C C
4. Pacific Coast Highway & Aviation Boulevard	Signal	AM PM	0.777 0.743	C C
5. Pacific Coast Highway & Pier Avenue	Signal	AM PM	0.565 0.703	A C
6. Pacific Coast Highway & 2nd Street	Signal	AM PM	0.678 0.696	B B
7. Pacific Coast Highway & 16th Street	Signal	AM PM	0.526 0.636	A B
8. Pacific Coast Highway & 21st Street	Signal	AM PM	0.590 0.668	A B
9. Prospect Avenue & Artesia Boulevard	Signal	AM PM	0.709 0.749	C C
10. Prospect Avenue & Aviation Boulevard	Signal	AM PM	0.691 0.763	B C
11. Prospect Avenue & Anita Street	Signal	AM PM	0.727 0.645	C B
12. Manhattan Avenue & 27th Street/Greenwich Village	All-Way Stop Control	AM PM	27.6 16.1	C B
13. Valley Drive & Gould Avenue	All-Way Stop Control	AM PM	21.2 24.2	C C

*Source: City of Hermosa Beach 2015 (see **Appendix G**)*

FIGURE 4.14-6
EXISTING (2015) INTERSECTION LEVEL OF SERVICE

Source: City of Hermosa Beach 2015

Six study intersections along Pacific Coast Highway also require analysis under Caltrans operating standards. Under Existing (2015) traffic conditions, all analyzed intersections currently operate at or above the target LOS D standard, as shown in **Table 4.14-12 (Existing (2015) Intersection Level of Service: Caltrans)**.

TABLE 4.14-12
EXISTING (2015) INTERSECTION LEVEL OF SERVICE: CALTRANS

Intersection	Intersection Control	Peak Hour	Existing	
			Delay (sec)	LOS
3. Pacific Coast Highway & Artesia Boulevard	Signal	AM PM	54.3 52.7	D D
4. Pacific Coast Highway & Aviation Boulevard	Signal	AM PM	25.8 36.4	C D
5. Pacific Coast Highway & Pier Avenue	Signal	AM PM	17.6 22.0	B C
6. Pacific Coast Highway & 2nd Street	Signal	AM PM	10.9 11.4	B B
7. Pacific Coast Highway & 16th Street	Signal	AM PM	28.8 35.5	C D
8. Pacific Coast Highway & 21st Street	Signal	AM PM	11.7 5.3	B A

*Source: City of Hermosa Beach 2015 (see **Appendix G**)*

Level of service results for highways and roadways are shown in **Table 4.14-13 (Existing (2015) Roadway Segment Level of Service)**. Since the publication of the City's Circulation, Transportation, and Parking Element in 1990, the AM and PM peak period configurations of Pacific Coast Highway have changed due to parking restrictions, and the daily capacity values have been updated to reflect these changes. The configurations of all other segments are consistent with the existing 1990 element.

Of the 20 selected street segments, 15 currently operate at LOS D or better, as shown in **Figure 4.14-7 (Existing (2015) Roadway Segment Level of Service)**. Five street segments currently operate at LOS E and/or LOS F, below the adopted standard:

- Pacific Coast Highway between Artesia Boulevard and Aviation Boulevard
- Pacific Coast Highway between Aviation Boulevard and 2nd Street
- Artesia Boulevard between Pacific Coast Highway and Prospect Avenue
- Aviation Boulevard between Pacific Coast Highway and Prospect Avenue
- Herondo Street between Hermosa Avenue and Valley Drive

TABLE 4.14-13
EXISTING (2015) ROADWAY SEGMENT LEVEL OF SERVICE

Street Segment	Lanes	Capacity	Volume	Daily Volume	
				V/C	LOS
1. Hermosa Avenue from 27th Street to 22nd Street	4	22,000	8,374	0.381	A
2. Hermosa Avenue from 22nd Street to 16th Street	4	22,000	8,007	0.364	A
3. Hermosa Avenue from 16th Street to 8th Street	4	29,000	11,128	0.384	A
4. Hermosa Avenue from 8th Street to Herondo Street	4	29,000	9,077	0.313	A
5. Valley Drive from Gould Avenue to Pier Avenue	2	15,000	5,044	0.336	A
6. Valley Drive from Pier Avenue to 8th Street	2	15,000	6,509	0.434	A
7. Ardmore Avenue from 16th Street to 11th Street	2	15,000	4,226	0.282	A
8. Ardmore Avenue from 8th Street to 2nd Street	2	15,000	3,005	0.200	A
9. Pacific Coast Highway from Artesia Boulevard to Aviation Boulevard	6	44,000	43,854	0.997	E
10. Pacific Coast Highway from Aviation Boulevard to 2nd Street	6	44,000	51,437	1.169	F
11. Prospect Avenue from Artesia Boulevard to Aviation Boulevard	2	15,000	6,177	0.412	A
12. Prospect Avenue from Aviation Boulevard to 2nd Street	2	15,000	11,924	0.795	C
13. Artesia Boulevard from Pacific Coast Highway to Prospect Avenue	4	29,000	26,354	0.909	E
14. Aviation Boulevard from Pacific Coast Highway to Prospect Avenue	4	29,000	25,721	0.887	D
15. Pier Avenue from Hermosa Avenue to Valley Drive	4	29,000	13,352	0.460	A
16. Pier Avenue from Ardmore Avenue to Pacific Coast Highway	4	29,000	14,314	0.494	A
17. Gould Avenue from Ardmore Avenue to Pacific Coast Highway	4	22,000	13,256	0.603	B
18. 8th Street from Hermosa Avenue to Valley Drive	2	15,000	2,616	0.174	A
19. 8th Street from Pacific Coast Highway to Prospect Avenue	2	2,500	350	0.140	A
20. Herondo Street from Hermosa Avenue to Valley Drive	2	13,000	11,263	0.866	D

*Source: City of Hermosa Beach 2015 (see **Appendix G**)*

FIGURE 4.14-7
EXISTING (2015) ROADWAY SEGMENT LEVEL OF SERVICE

Source: City of Hermosa Beach 2015

4.14.3 REGULATORY SETTING

Federal, state, regional, and local laws, regulations, and policies provide the regulatory framework for addressing the aspects of transportation planning and infrastructure that would be affected by implementation of PLAN Hermosa. The regulatory setting is used to inform decision-makers about the regulatory agencies and policies that affect transportation in the city and is detailed below.

FEDERAL

- **Americans with Disabilities Act:** Title II of the Americans with Disabilities Act (ADA) requires that all public programs, services, and amenities be accessible for persons of all abilities. Governments must adopt ADA Standards for Accessible Design as technical requirements for new constructions, alterations, and architectural changes in order to achieve accessibility goals.

STATE

- **Assembly Bill 417:** Assembly Bill (AB) 417 creates a statutory exemption from CEQA for bicycle transportation plans for an urbanized area in certain instances. Specifically, the bill exempts the following types of bicycle transportation plans or projects prepared pursuant to Streets and Highways Code Section 891.2 for an urbanized area if those projects have been described at a reasonably high level of detail: restriping of streets and highways, bicycle parking and storage, signal timing to improve street and highway intersection operations, and related signage for bicycles, pedestrians, and vehicles. It does not exempt all potential impacts of a bike plan, such as a new path through a natural area, for example. Prior to determining that a bicycle plan is exempt, the lead agency is required to do both of the following: (1) hold properly noticed public hearings in areas affected by the bicycle transportation plan to hear and respond to public comments, and (2) include measures in the bicycle transportation plan to mitigate potential bicycle and pedestrian safety and traffic impacts.
- **Assembly Bill 1358:** The Complete Streets Act of 2008 (AB 1358) requires cities and counties to include Complete Streets policies in their general plan circulation elements. The act requires the consideration of multiple users of the transportation system, including children, adults, seniors, and the disabled, and designing and building streets so that people of all ages and abilities can travel easily, safely, and by all modes.
- **California Coastal Act:** The California Coastal Act of 1976 dictates certain policies related to shoreline resources, including transportation issues related to state shorelines. While the act does not include a section specifically regarding transportation issues, it does state how development must maintain access to coastal resources and maintain or distribute parking supply or adequate public transportation so as to minimize adverse impacts.
- **Senate Bill 375 – California Sustainable Communities and Climate Protection Act:** Passed in 2008 by the California legislature, Senate Bill (SB) 375 requires the state's metropolitan planning organizations to develop a sustainable communities strategy (SCS) to reduce greenhouse gas emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. The Southern California Association of Governments (SCAG) is the metropolitan planning organization with jurisdiction in Hermosa Beach and the region.
- **Senate Bill 743:** SB 743 creates a process to change the way transportation impacts are analyzed under CEQA. The law will require the potential elimination or de-emphasizing of auto delay, level of service, and other similar measures of vehicular capacity or traffic

congestion as a basis for determining significant transportation impacts in CEQA analysis in transportation priority zones. To implement this intent, SB 743 contains amendments to current congestion management law that allows cities and counties to effectively opt out of the LOS standards that would otherwise apply in areas where Congestion Management Plans are still used. The California Governor's Office of Planning and Research (OPR) has released draft recommendations that level of service and other delay-based metrics be potentially replaced with other transportation metrics including but not limited to vehicle miles traveled (VMT), vehicle trips generated, VMT per capita, and vehicle trips per capita. SB 743 does not prevent a city or county from continuing to analyze delay or LOS as a check of consistency with adopted plans (i.e., the general plan), studies, or ongoing network monitoring, but these metrics may no longer constitute the basis for determining CEQA transportation impacts.

- **State Transportation Improvement Program:** Caltrans provides for the mobility of people, goods, services, and information. The agency renders administrative support for transportation programming decisions made by the California Transportation Commission and Caltrans. The State Transportation Improvement Program (STIP) is a multiyear capital improvement program that sets priorities and funds transportation projects envisioned in long-range transportation plans. STIP programming generally occurs every two years. The STIP is a resource management document to assist state and local entities to plan and implement transportation improvements and to use available resources in a cost-effective manner. The STIP lists all capital improvement projects that are expected to receive an allocation of state transportation funds from the California Transportation Commission during the following five years. The STIP consists of two broad programs: the regional program is funded using 75 percent of new STIP funding, while the interregional program is funded using 25 percent of the same source. The 75 percent regional program is further subdivided by formula into county shares.

REGIONAL

- **LA Metro First Last Mile Strategic Plan:** The goal of the First Last Mile Strategic Plan is to extend the reach of transit services in order to increase transit ridership. The policy ensures that access to Metro transit facilities is easy, safe, and efficient and fosters a high level of connectivity among various transit services and among bicycle and pedestrian facilities.
- **Los Angeles County Congestion Management Program:** State statute requires that a congestion management program be developed, adopted, and updated biennially for every county that includes an urbanized area. The CMP, administered by the Los Angeles County Metropolitan Transportation Authority, is a mechanism for coordinating land use and development decisions that addresses the impact of local growth on the regional transportation system. Statutory elements of the CMP include highway and roadway system monitoring, multimodal system performance analysis, the Transportation Demand Management Program, the Land Use Analysis Program, and local conformance for all the county's jurisdictions.
- **Los Angeles County Long Range Transportation Plan:** Metro, the State-designated transportation planning and programming agency for Los Angeles County, developed the Long Range Transportation Plan as a long-range vision for the transportation system that reflects both regional needs and local concerns. The 2009 plan is the guiding policy behind funding decisions on subsequent transportation projects and programs in Los Angeles County. The plan reflects Metro's mobility priorities for regional, state, and federal governments to qualify for transportation funds. Metro's long-range priorities coincide with the SCAG Regional Transportation Plan/Sustainable Communities Strategy.

Consistency between these planning efforts ensures that transportation priorities are eligible for federal funding.

- **SCAG Regional Transportation Plan/Sustainable Communities Strategy:** In April 2012, SCAG adopted the 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The plan involves stakeholders from six counties in Southern California with a shared vision for the region's sustainable future. The RTP/SCS is a regional transportation plan that is driven by a strong commitment toward reducing emissions from transportation sources set forth by SB 375 and meeting the national ambient air quality standards for compliance with the federal Clean Air Act. The plan focuses on the interconnected components of economic, social, and transportation investments required to improve public health and achieve a sustainable regional multimodal transportation system.
- **South Bay Bicycle Master Plan:** The South Bay Bicycle Master Plan (SBBMP) was funded by the Los Angeles County Department of Health's RENEW grant initiative in 2010 to facilitate more cycling and bike infrastructure in seven participating cities in the South Bay region. The City of Hermosa Beach adopted the SBBMP in 2011 and proposes an additional 9.2 miles of bicycle facilities within the city that include connections with other SBBMP facilities in Manhattan Beach and Redondo Beach. The plan prioritizes investments in bicycle infrastructure and incorporates a comprehensive implementation program for the planning of routes and facilities into the circulation network.

LOCAL

- **Aviation Boulevard Master Plan:** This plan focuses on the transformation of Aviation Boulevard into a thriving corridor that will act as a gateway into Hermosa Beach and prioritize the development of pedestrian-oriented facilities.
- **Beach Cities Livability Plan:** The Beach Cities Livability Plan, fostered by the Healthways Blue Zones (Vitality City) Initiative, focuses on how to improve livability and well-being in Hermosa Beach, Manhattan Beach, and Redondo Beach through land use and transportation systems that better support active living. The plan was adopted by each city and includes recommendations to (1) develop a regional pedestrian master plan, (2) adopt and implement the SBBMP, and (3) improve and enhance Safe Routes to School programs.
- **City of Hermosa Beach Coastal Land Use Plan:** The Coastal Land Use Plan (CLUP) addresses parking supply and protection in the Coastal Zone. Policies under the CLUP require that access to coastal resources be accessible to all through the implementation of various parking management strategies. Specific CLUP policies include a prohibition against the elimination of existing on- or off-street parking within the Coastal Zone, the control of congestion through the granting of preferential parking permits, and the separation of short- and long-term parkers in the immediate area around the beach.
- **City of Hermosa Beach Downtown Core Revitalization Strategy:** The Downtown Core Revitalization Strategy is a comprehensive approach to increasing the vitality of Downtown. The strategy requires public and private initiatives including capital improvement projects, changes to parking and zoning, and parking requirements involving private development.
- **City of Hermosa Beach Living Streets Policy:** The goal of the City's Living Streets Policy is to promote the health and mobility of all Hermosa Beach residents and visitors through provision of high quality pedestrian, bicycling, and transit access to destinations across the city. The policy provides a checklist of procedures that evaluate street projects through a comprehensive "sustainability" lens. It ensures that the various segments of the

community—not just vehicle drivers—are considered when determining how to use and improve the public right-of-way.

- **City of Hermosa Beach Municipal Code:** The Municipal Code includes regulations and standards governing traffic, parking and loading, encroachments on the public right-of-way, and development.
- **City of Hermosa Beach Sustainability Plan:** Section 3 of the City's Sustainability Plan addresses transportation through policies and infrastructure improvements that encourage bicycling, walking, and other alternative modes of transportation as part of the City's greenhouse gas emissions reduction goals and Complete Streets policy.
- **City of Hermosa Beach Emergency Operations Plan:** The City's Emergency Operations Plan seeks to identify emergency evacuation protocols in order to establish a comprehensive, all-hazards approach to natural, man-made, and technological disasters.
- **Pacific Coast Highway Streetscape Master Plan:** The Master Plan was implemented in 2013 to improve economic development through the revitalization of Downtown and entry corridors along Pacific Coast Highway.

DRAFT PLAN HERMOSA

PLAN Hermosa is the City of Hermosa Beach's integrated General Plan update and Coastal Land Use Plan for the guidance of development and land use projects into the buildout year 2040. In addition to the Mobility Element, PLAN Hermosa's Sustainability + Conservation, Parks + Open Space, and Infrastructure elements all incorporate aspects of sustainable transportation development. The elements include policies intended to effectively manage and maintain the city's circulation system with the goal of minimizing congestion, increasing local and regional access opportunities, and enhancing traffic circulation by reducing vehicle trips and increasing access to non-motorized and low-carbon transportation options such as walking, bicycling, and transit. PLAN Hermosa policies and implementation actions that address transportation include the following.

Policies

Mobility Element

- **1.1 Consider all modes.** Require the planning, design, and construction of all new and existing transportation projects to consider the needs of all modes of travel to create safe, livable and inviting environments for all users of the system.
- **1.2 Develop design standards.** Encourage the development of context-sensitive street classification design standards that will provide the City with opportunities to repurpose and classify targeted corridors and other roadways fitting needs of adjacent land uses and mode-specific transport.
- **1.5 Require improvements.** Require new development to provide or pay its share of transportation and infrastructure improvements including any sidewalk improvements, landscaping, bicycle infrastructure, traffic calming, and public realm improvements.
- **2.1 Prioritize public right-of-ways.** Prioritize improvements of public right-of-ways that provide heightened levels of safe, comfortable and attractive public spaces for all non-motorized travelers while balancing the needs of efficient vehicular circulation.
- **2.2 Encourage traffic calming.** Encourage traffic calming policies and techniques that limit cut-through traffic and high vehicle speeds that may compromise the safety of travelers along residential areas and highly trafficked corridors.

- **2.5 Require sustainable practices.** Incorporate environmental sustainability practices into designs and strategic management of road space and public right-of-ways, prioritizing practices that can serve dual infrastructure purposes.
- **3.1 Repurpose public right-of-ways.** Require repurposing public right-of-ways enhancing connectivity for pedestrians, bicyclists, and public transit.
- **3.2 Invest in sidewalks.** Prioritize investment in designated priority sidewalks to ensure a complete network of sidewalks and pedestrian-friendly amenities that enhances pedestrian safety, access opportunities and connectivity to destinations.
- **3.3 Active transportation.** Require that all development or redevelopment projects accommodate active transportation through providing on-site amenities, necessary connections to existing and planned pedestrian and bicycle networks, and incorporate people-oriented design practice
- **3.4 Access opportunities.** Provide enhanced mobility and access opportunities for local transportation and transit services in areas of the City with sufficient density and intensity of uses, mix of appropriate uses, and supportive bicycle and pedestrian network connections that can reduce vehicle trips within the City's busiest corridors.
- **3.5 Incentivize other modes.** Incentivize local shuttle/trolley services, rideshare and car share programs, and developing infrastructure that support low speed, low carbon (e.g. electric) vehicles.
- **3.6 Complete bicycle network.** Provide a complete bicycle network along all designated roadways while creating connections to other modes of travel including walking and transit.
- **3.8 Encourage shared streets.** Encourage the concept of shared streets on low volume streets with limited right-of-ways.
- **4.1 Shared parking.** Facilitate park-once and shared parking policies among private developments that contribute to a shared parking supply and interconnect with adjacent parking facilities.
- **4.5 Sufficient bicycle parking.** Require a sufficient supply of bicycle parking to be provided in conjunction with new vehicle parking facilities by both public and private developments.
- **4.6 Priority parking.** Provide priority parking and charging stations to accommodate the use of Electric Vehicles (EVs), including smaller short-distance neighborhood electric vehicles.
- **4.8 Ensure commercial parking.** Ensure that prime commercial parking spaces are available for customers and other short-term users throughout the day.
- **4.9 Encourage TDM strategies.** Encourage use of transportation demand management strategies and programs such as carpooling, ride hailing, and alternative transportation modes as a way to reduce demand for additional parking supply.
- **5.1 Prioritize development of infrastructure.** Prioritize the development of roadway and parking infrastructure that accommodates and encourages private electric and other low carbon vehicle ownership and use throughout the City.
- **5.2 Local transit system.** Develop a local transit system that facilitates efficient transport of residents, hotel guests, and beachgoers between activity centers and to Downtown businesses and the beach.

- **5.3 Incentivize TDM strategies.** Incentivize the use of Transportation Demand Management (TDM) strategies as a cost effective method for maximizing existing transportation infrastructure to accommodate mobility demands without significant expansion to infrastructure.
- **5.4 Evaluate projects.** Ensure the evaluation of projects for transportation and traffic impacts under CEQA consider local and statewide goals related to infill development, the promotion of healthy and active lifestyles through active transportation, and the reduction of greenhouse gases, in addition to traditional congestion management impacts.
- **5.5 Encourage smart growth.** Encourage smart growth land use policies in development projects to ensure more compact, mixed, connected, and multimodal development supports reduced trip generation, trip lengths, and greater ability to utilize alternative modes.
- **6.1 Regional network.** Work with government agencies and private sector companies to develop a comprehensive, regionally integrated transportation network that connects the community to surrounding cities.
- **6.2 Consider travel patterns.** Require considering regional travel patterns when collaborating on regional transit and transportation projects to ensure investments facilitate greater mobility and access for residents, businesses, and visitors to and from Hermosa Beach.
- **6.3 Support programs.** Facilitate greater local and regional mobility through access to shared equipment or transportation options such as car-sharing and bike sharing.
- **6.4 Coordinate with agencies.** Coordinate with regional transportation agencies and surrounding cities to improve local access and connections to region-wide public transit services.
- **6.5 Coordinate with surrounding cities.** Coordinate with surrounding cities to prioritize non-motorized and pedestrian connections to regional facilities and surrounding cities.
- **6.6 Greater utilization.** Consider exploring opportunities for greater utilization of the Beach Cities Transit system for improved mobility along major corridors and as a potential means of improved regional transit connections.
- **7.1 Safe public rights-of-way.** Encourage that all public rights-of-way are safe for all users at all times of day where users of all ages and ability feel comfortable participating in both motorized and non-motorized travel.
- **7.2 Manage speeds.** Monitor vehicle speeds through traffic controls, speed limits, and design features with the intended purpose of minimizing vehicle accidents, creating a pedestrian and bicycle environment, and discouraging pass-through traffic.
- **7.3 Provide street lighting.** Provide pedestrian-oriented street lighting for enhanced pedestrian and bicycling safety on all City streets with appropriate land use designations.
- **7.4 Traffic safety programs.** Prioritize traffic safety programs oriented towards safe access to schools and community facilities that focus on walking, biking, and driving in school zones.
- **7.5 Appropriate sidewalk widths.** Encourage design and construction plans that incorporate sidewalks that are wide enough to safely accommodate high levels of pedestrian activity.

- **7.6 Expanding traffic enforcement.** Encourage expanding traffic enforcement services and installing enhancements along streets with high collision rates and unsafe behaviors.

Sustainability + Conservation Element

- **1.1 Carbon neutral organization.** Demonstrate environmental leadership and achieve carbon neutrality as a municipal organization by 2020.
- **1.2 Highest return on investment.** Prioritize the implementation of greenhouse gas reduction projects that simultaneously reduce ongoing operational costs to the City.
- **1.5 City leadership.** Create a culture of leadership, innovation, and ingenuity to implement creative and cost effective greenhouse gas reducing projects for City facilities and operations.
- **1.6 Demonstration and pilot projects.** Utilize demonstration and pilot projects as a means to evaluate the greenhouse gas reduction potential and cost effectiveness of projects.
- **2.2 Triple bottom line projects.** Prioritize the implementation of greenhouse gas reduction projects that simultaneously provide the greatest economic and health benefits to the community.
- **2.3 Diversify GHG reduction strategies.** Pursue a diverse mixture of greenhouse gas reduction strategies across the transportation, energy, waste sectors, commensurate with their share of the community's greenhouse gas emissions.
- **2.4 Land use and transportation investments.** Promote land use and transportation investments that support greater transportation choice, greater local economic opportunity, and reduced number and length of automobile trips.
- **2.6 Grants and incentives.** Seek grant funding to support implementation of greenhouse gas reduction projects for the City, as well as residents and businesses.
- **2.7 Discretionary projects.** Require discretionary projects to substantially mitigate all feasible greenhouse gas emissions, and offset the remainder of greenhouse gas emissions produced to meet annual thresholds.
- **3.1 Stationary and mobile sources.** Seek to improve overall respiratory health for residents through regulation of stationary and mobile sources of air pollution, as feasible.
- **3.2 Mobile source reductions.** Support land use and transportation strategies to reduce vehicle miles traveled and emissions, including pollution from commercial and passenger vehicles.
- **3.3 Fuel efficient fleets.** Promote fuel efficiency and cleaner fuels for vehicles as well as construction and maintenance equipment by requesting that City contractors provide cleaner fleets.
- **3.4 Two-stroke engines.** Discourage the use of equipment with two-stroke engines and publicize the benefits and importance of alternative technologies.
- **3.5 Clean fuels.** Support increased local access to cleaner fuels and cleaner energy by encouraging fueling stations that provide cleaner fuels and energy to the community.
- **3.6 Healthy Air Hermosa.** When possible, collaborate with other agencies within the region to improve air quality and meet or exceed state and federal air quality standards through regional efforts to reduce air pollution from mobile sources, including trucks and passenger vehicles.

Parks + Open Space Element

- **4.2 Enhanced access points.** Increase and enhance access to parks and open space, particularly access points that promote physical activity such as pedestrian and bike oriented access points.
- **4.3 Safe and efficient trail network.** Develop a network of safe and efficient trails, streets, and paths that connect residents, visitors, and neighboring communities to the beach, parks, and activity centers.
- **6.3 Safe and accessible connections.** Ensure public access points provide safe and accessible connections to The Strand and shoreline, including access for persons with disabilities.
- **6.4 Transit access.** Coordinate with regional agencies and neighboring jurisdictions to improve regional and local transit access to beach access points.
- **6.5 Bicycle and pedestrian access.** Maximize bicycle and pedestrian access and safety getting to and around the Coastal Zone through infrastructure and wayfinding improvements.
- **6.6 Universal access.** Provide resources that improve accessibility to the beach for all visitors.
- **6.8 High-quality connections.** Support high-quality connections to adjacent jurisdictions along The Strand to promote safe and efficient circulation of pedestrians, bicyclists, and other non-motorized uses.

Infrastructure Element

- **2.1 Preventive street maintenance.** Maintain streets, sidewalks and other public rights-of-way to provide a reliable network for circulation through a proactive preventive maintenance program.
- **2.3 Street and sidewalk standards.** Require the use of standardized roadway, sidewalk, parkway, curb and gutter designs to ensure continuity and consistency as property redevelops over time.
- **2.4 Sidewalk improvements.** Consider innovative funding strategies, such as cost-sharing, ADA accessibility grants, or sidewalk dedications, to improve the overall condition, safety, and accessibility of sidewalks.
- **2.5 Active transportation dedications.** Require new development and redevelopment projects to provide land or infrastructure necessary to accommodate active transportation, such as sidewalks, bike racks, and bus stops.

Implementation Actions

- GOVERNANCE-4. Continue to participate and partner with neighboring cities and regional organizations to implement projects and achieve goals that enhance the livability of Hermosa Beach.
- MOBILITY-1. Conduct an inventory and assessment of the City's sidewalk network to identify gaps, assess ADA accessibility, and prioritize improvements within the Capital Improvement Program.
- MOBILITY-2. Evaluate City right-of-ways and establish or update width and design standards for the construction or maintenance of sidewalks, curbs, gutters, and parkways.

- MOBILITY-3. Add definitions to the Municipal Code for street classifications, pedestrian facilities, bicycle and multi-use facilities, and transportation amenities.
- MOBILITY-4. Install new signage and instructions for accessing transit locations, local and regional bicycle routes, and parking meters/machines in the Coastal Zone where existing meters and machines have been shown to cause confusion for visitors.
- MOBILITY-5. Evaluate operations in local neighborhood streets with considerations to speed management strategies and traffic calming measures to increase safety for all people using the street.
- MOBILITY-6. Install traffic calming devices in areas appropriate to mitigate an identified and documented traffic concern, as determined by the City Public Works Director or designee. Potential traffic calming applications include clearly marked and/or protected bike and pedestrian zones, bike boulevards, bulb outs, median islands, speed humps, traffic circles, speed tables, raised crosswalks, signalized crosswalks, chicanes, chokers, raised intersections, realigned intersections, and textured pavements, among other effective enhancements.
- MOBILITY-7. Work with commercial property owners to conduct an assessment for utilization of private parking supplies to supplement private and public parking needs and evaluate the potential for shared use agreements or MOUs.
- MOBILITY-8. Implement a contingency-based overflow parking plan to address seasonal and even- based parking demands.
- MOBILITY-9. Periodically conduct a city-wide parking study to analyze existing parking infrastructure in order to effectively address and manage current and future parking needs.
- MOBILITY-10. Set utilization and turnover rate goals and implement dynamically adjusted (demand-based) pricing strategies for public parking supplies.
- MOBILITY-11. Develop a smart technology street parking system in the Coastal Zone that includes but is not limited to the following features:
- Variable-cost parking linked to demand;
- Smart phone application identifying available metered spaces; and
- Parking pay-by-card and pay-by-phone programs.
- MOBILITY-12. Maintain and periodically update the Transportation Demand Management (TDM) Ordinance with activities that will reduce auto trips associated with new development.
- MOBILITY-13. Install and maintain transportation amenities such as bicycle parking and electric vehicle charging stations so that they are available at each commercial district or corridor, park, and public facility.
- MOBILITY-14. Facilitate the operation of bicycle rental concessions in the Coastal Zone.
- MOBILITY-15. Install additional bicycle parking facilities and wayfinding signage near the beach, the Pier, and The Strand.
- MOBILITY-16. Identify access improvements including, but not limited to, additional bus stop pullouts, bus parking locations, a seasonal shuttle system, and drop off/pick up areas, and prioritize these improvements in the five-year Capital Improvement Program.

- MOBILITY-17. In conjunction with the Hermosa Beach City School District, the City will identify school access points, a proposed network, education and enforcement programs to provide a comprehensive Safe Routes to School Program.
- MOBILITY-18. Develop congestion management performance measures and significant impact thresholds that are in accordance with the California Environmental Quality Act (CEQA) and Senate Bill 743 (SB 743) requirements for roadway segments and intersections.
- SUSTAINABILITY-6. Implement the City's clean fleet policy through the purchase or lease of vehicles and equipment that reduce greenhouse gas emissions and improve air quality.
- PARKS-8. Identify and evaluate the ADA compliance of parks, public facilities, and coastal public access points.
- PARKS-9. Install accessible walkways at parks and onto the beach while minimizing or avoiding negative effects on the aesthetics and ecology of the beach environment.
- PARKS-16. Develop and implement a uniform coastal access sign program to assist the public to locate and use coastal access points. Consider adding signs to walk streets that intersect with Hermosa Avenue.
- PARKS-17. Identify and remove any unauthorized/unpermitted structures, including signs and fences that inhibit visibility of public coastal access points.
- PARKS-22. Amend the Local Implementation Plan/Zoning Code to require applicants for summer events occurring on weekends or holidays between Memorial Day and Labor Day with greater than 1,000 participants to provide and advertise predetermined shuttle services and bicycle corrals.
- INFRASTRUCTURE-6. Aggressively seek regional, state, and federal funds to leverage local money earmarked for projects listed in the CIP.
- INFRASTRUCTURE-7. Periodically review, and if needed revise, the development fee schedule and impact fee process to ensure they are adequate and reflective of proposed projects' impacts and required services.

4.14.4 IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

For the purposes of this EIR, impacts on transportation are considered significant if adoption and implementation of PLAN Hermosa would:

1) Conflict with the adopted Circulation, Transportation, and Parking Element, which establishes LOS C as the performance standard for signalized and unsignalized intersections and LOS D as the performance standard for roadway segments in addition to Caltrans traffic study guidelines.

2) Conflict with the Los Angeles County Congestion Management Program.

3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

5) Result in inadequate emergency access.

6) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Applicable policies, plans, and programs include but are not limited to the Los Angeles County Long Range Transportation Plan, the South Bay Bicycle Master Plan, and the Hermosa Beach Downtown Core Revitalization Strategy.

These thresholds of significance were used to assess significant transportation impacts at the studied signalized intersections and roadway segments.

ANALYSIS SCENARIOS

The operating conditions of Hermosa Beach's circulation system were analyzed based on a comprehensive evaluation of programs and policies to be adopted and implemented under PLAN Hermosa. With the guidance of federal, state, regional, and local transportation and land use policies, the plan's potential for significant transportation impacts was evaluated under the scenarios described below. Impacts for PLAN Hermosa's horizon year of 2040 were analyzed using SCAG's 2012–2035 RTP/SCS scenario.

Transportation and Traffic

Existing (2015)

The Existing (2015) scenario was developed using new peak-hour and daily traffic counts collected at PLAN Hermosa study intersections and along PLAN Hermosa study segments for the express purpose of this analysis.

Future without PLAN Hermosa

The Future without Project [PLAN Hermosa] scenario is consistent with land use growth forecasts and transportation improvement projects from the SCAG Regional Transportation Plan (RTP). The 2012 RTP assumed a conservative increase of 300 residents and 900 employees in Hermosa Beach between 2008 and 2035. By 2015, due to a variety of demographic and economic factors, Hermosa Beach had already exceeded the 2035 population projections. Respectively, these represent a 2 percent and a 16 percent increase in population and employment from 2015 estimates. In addition to the regional transportation improvements included in the 2012 RTP, Caltrans has proposed the removal of a travel lane in each direction along Pacific Coast Highway in Hermosa Beach. This redesign will allow for the following design features at various points along the route: new bicycle lanes, wider sidewalks, new landscaped medians, wider vehicle travel lanes, and additional left turn lanes. CEQA requires the evaluation of the existing condition compared to the proposed project and does not require a comparison of two future scenarios. However, for additional context, level of service results for the Future without Project scenario are provided in this study for informational purposes, but are not used to determine whether traffic impacts are considered significant.

Future PLAN Hermosa

The PLAN Hermosa scenario includes implementation of the plan's programs and policies, regional transportation improvement projects from the 2012 SCAG Regional Transportation Plan, and a land use growth forecast which allows for greater nonresidential development and employment than assumed in the 2012 SCAG RTP. In addition to the regional transportation improvements included in the 2012 RTP, Caltrans has proposed the removal of a travel lane in each direction along Pacific Coast Highway in Hermosa Beach. This redesign will allow for the following design features at various points along the route: new bicycle lanes, wider sidewalks, new landscaped medians, wider vehicle travel lanes, and additional left turn lanes. With a limited inventory of vacant and underutilized land, future development under PLAN Hermosa

would occur through infill and redevelopment activities primarily in the Downtown core, the Cypress Avenue District, the Coastal Zone including The Strand, and along Pacific Coast Highway and Aviation Boulevard.

PLAN Hermosa assumes an increase of approximately 300 housing units and 1,500 employees by 2040. These figures represent a 3 percent and a 26 percent increase in population and employment, respectively, from existing estimates. Since the SCAG 2040 RTP model was not available at the time this report was prepared, the adjusted growth projections were added to the 2035 SCAG RTP forecast to identify projections for 2040. No additional transportation improvement projects that would add or remove vehicle capacity beyond the proposed changes to Pacific Coast Highway are assumed under the PLAN Hermosa scenario.

Bicycle Network

The City of Hermosa Beach adopted the South Bay Bicycle Master Plan (SBBMP) in 2011 with funding provided under the Los Angeles County Department of Health's RENEW grant initiative. The plan seeks to facilitate more bicycle infrastructure in seven participating cities in the South Bay region. The SBBMP proposed bicycle network for Hermosa Beach includes an additional 9.2 miles of bicycle facilities in the city and connects with other SBBMP-recommended networks in Manhattan Beach and Redondo Beach. Implementation of the SBBMP facilities has already begun. With some modifications to further enhance bicycle facility quality, the remaining planned bicycle facilities are assumed to be developed as part of PLAN Hermosa and are shown in **Table 4.14-14 (Planned Hermosa Beach Bicycle Facilities)**.

TABLE 4.14-14
PLANNED HERMOSA BEACH BICYCLE FACILITIES

Class	Street/Path	From	To
Proposed Class II and Class III Facilities			
IV	Prospect Avenue	Artesia Boulevard	South City Limits
IV	Ardmore Avenue	North City Limits	Pier Avenue
II	Aviation Boulevard	Pacific Coast Highway	Harper Avenue
II	Artesia Boulevard	Pacific Coast Highway	Harper Avenue
III	Pier Avenue	Hermosa Avenue	Ardmore Avenue
III	27th Street/Gould Avenue	Hermosa Avenue	Pacific Coast Highway
III	Longfellow Avenue	Hermosa Avenue	Valley Drive
III	Valley Drive	Longfellow Avenue	Herondo Street
III	Highland Avenue	35th Street	Longfellow Avenue
III	10th Street	Ardmore Avenue	Pacific Coast Highway
III	Hermosa Avenue	35th Street	24th Street
Proposed Bicycle-Friendly Streets			
	5th Street/6th Street	Hermosa Avenue	Prospect Avenue
	1st Street	Manhattan Avenue	The Strand
	22nd Street/Monterey Boulevard	The Strand	Herondo Street
	35th Street/Palm Drive	Hermosa Avenue	1st Street
	21st Street	Ardmore Avenue	Prospect Avenue

Source: City of Hermosa Beach 2015

ANALYSIS METHODOLOGY

The analysis of potential transportation impacts at the study locations was based on forecast demand volumes from the 2012 SCAG RTP travel demand model, a trip-based four-step model. No modifications to the model's traffic analysis zone system or roadway network were implemented beyond those changes described above, which were necessary to model the Future without Project and PLAN Hermosa scenarios. The methods used are documented in **Appendix G-5**.

Although the SCAG regional model can quantify the benefits of broad changes in land use development patterns that would increase density and improve network connectivity, the model is not able to accurately predict trip generation for mixed-use and urban infill sites with transit proximity and a density, scale, and design that can facilitate walking, biking, and other alternative travel options. In order to reflect the benefits of smaller-scale improvements included in PLAN Hermosa, the City's traffic consultant used the TDM+ model to quantify potential reductions in trip generation and VMT that could occur by 2040 with full buildout and implementation of PLAN Hermosa.

Fehr & Peers worked with the California Air Pollution Control Officers Association (CAPCOA) to develop the transportation section of the report Quantifying Greenhouse Gas Mitigation Measures. This report is now used as a set of guidelines for quantifying the environmental benefits of mitigation measures. The CAPCOA guidelines were developed by conducting a comprehensive literature review of studies documenting the effects of transportation demand management (TDM) strategies on reducing VMT. Using the results of this study, Fehr & Peers developed TDM+, a quick response tool that demonstrates trip reductions from commonly used TDM strategies. The tool also accounts for the interaction among different measures in various categories to avoid double counting. The following strategies were selected from the TDM+ tool to model the changes that could occur with implementation of PLAN Hermosa.

- **Traffic Calming:** Based on Mobility Element Policies 2.2 and 7.2, traffic calming measures encourage people to walk or bike instead of using a vehicle. Roadways will be designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips with traffic calming features. TDM+ estimates up to a 0.3 percent reduction in VMT in response to traffic calming programs.
- **Car-Sharing Programs:** Based on Mobility Element Policies 4.9 and 6.3, implementing a car-sharing program will allow people to have on-demand access to a shared fleet of vehicles on an as-needed basis. Car-sharing programs may be grouped into three general categories: residential- or citywide-based, employer-based, and transit station–based. TDM+ estimates up to a 1.0 percent reduction in VMT in response to establishing car-sharing programs.
- **Parking Management:** Based on Mobility Element Policies 4.1, 4.5, 4.6, and 4.8, parking management strategies include changing parking requirements to encourage smart growth development and alternative transportation choices by residents and employees in the city. These could include reduction of minimum parking requirements, creation of maximum parking requirements, provision of shared parking, or market-based pricing strategies to encourage park-once behavior. TDM+ estimates up to a 10.5 percent reduction in VMT in response to establishing parking management programs.
- **Commute Trip Reduction Programs:** Based on Mobility Element Policies 2.5, 3.4, 4.9, and 6.3, commute trip reduction strategies include City facilitation of a SchoolPool in which parents of local schoolchildren living near one another are matched to transport students to school in a carpool, and expansion of walking school bus services to accommodate any local schoolchild whose parents wish to use the walking school bus

program. TDM+ estimates up to a 14.7 percent reduction in VMT in response to establishing these programs.

The combined benefit of the PLAN Hermosa strategies as estimated through the TDM+ tool is a 12.9 percent reduction in the number of vehicle trips generated and VMT compared with the demand estimates from the SCAG RTP model. These reductions have been applied to the vehicle demand forecasts for the project scenario, and the methods and empirical research used to estimate VMT reductions are documented in **Appendix G-6.**

SENATE BILL 743

The California Governor's Office of Planning and Research released SB 743 guidelines in a document entitled *Updating Transportation Impacts Analysis in the CEQA Guidelines* in August 2014. At the time of the time of the drafting of this report, a revised set of draft guidelines have been published and OPR is reviewing public comment, which closed in early 2016, and adoption is anticipated in early 2017. The revised CEQA Guidelines will establish new potential criteria for determining the significance of transportation impacts and define alternative metrics to replace LOS in transit priority areas. The legislation does not preclude the application of local general plan policies, zoning codes, conditions of approval, or any other planning requirements in a non-CEQA context.

Under SB 743, OPR proposes to replace level of service with VMT and provides guidance on potential significance thresholds for the analysis of transportation impacts related to development projects, land use plans, and transportation infrastructure projects in transit priority areas. Outside of transit priority areas, lead agencies may elect to be governed by the new guidelines once they go into effect. Since SB 743 implementation is still evolving and will change over time, a defined set of analysis steps to meet all aspects of the law cannot be defined at this time. The City of Hermosa Beach does not have adopted thresholds for evaluating a project's VMT. Since new analysis metrics and thresholds of significance are still under development, the evaluation of vehicle miles traveled conducted for this EIR is strictly an informative exercise and will not be compared to any impact guidelines.

The 2012 SCAG RTP model was used to estimate VMT by isolating trips that start or end within the city boundaries, also known as the Origin-Destination Method. The estimates include all VMT for trips that begin and end in the city, but only half of the VMT for trips that only begin or end in the city. VMT for trips that pass through the city without stopping are not included. VMT estimates for the Existing (2015), Future without Project, and PLAN Hermosa scenarios are shown in **Table 4.14-15 (Daily Citywide Vehicle Miles Traveled (VMT) and Vehicle Trips (VT) Generated)**. VMT per capita and vehicle trips per capita estimates are also provided using the sum of population and employment as the capita basis.

TABLE 4.14-15
DAILY CITYWIDE VEHICLE MILES TRAVELED (VMT) AND VEHICLE TRIPS (VT) GENERATED

Scenario	Population	Employment	Capita	VMT	Avg. Trip Length (miles)	VT	VMT/ Capita	VT/ Capita
2015 Existing	19,800	5,700	25,500	363,000	9.4	38,700	14.2	1.52
2040 Future without Project	20,100	6,600	26,700	356,000	9.6	37,200	13.3	1.39
2040 PLAN Hermosa	20,400	7,200	27,600	326,000	9.4	34,200	11.8	1.25

Source: City of Hermosa Beach 2015

City of Hermosa Beach

The existing Circulation, Transportation, and Parking Element (1990) maintains a policy of LOS C or better for both signalized and unsignalized intersections during weekday morning and evening peak hours. City standards do not specify a particular analysis methodology or significance criteria to be used when evaluating unsignalized intersections or roadway segments, nor do they specify level of service requirements beyond LOS D. The impact criteria shown in **Table 4.14-16 (Hermosa Beach Signalized Intersection Impact Criteria)**, **Table 4.14-17 (Hermosa Beach Unsignalized Intersection Impact Criteria)**, and **Table 4.14-18 (Hermosa Beach Roadway Segment Impact Criteria)** have been established for signalized intersections, unsignalized intersections, and roadway segments.

TABLE 4.14-26
HERMOSA BEACH SIGNALIZED INTERSECTION IMPACT CRITERIA

Level of Service	Impact Threshold
LOS A, B, or C	Degrades to LOS D, E, or F
LOS D	Increase in V/C ratio greater than or equal to 0.02, or degrades to LOS E or F
LOS E	Increase in V/C ratio greater than or equal to 0.05, or degrades to LOS F
LOS F	Increase in V/C ratio greater than or equal to 0.05

Source: City of Hermosa Beach 1990

TABLE 4.14-17
HERMOSA BEACH UNSIGNALIZED INTERSECTION IMPACT CRITERIA

Level of Service	Impact Threshold
LOS A, B, or C	Degrades to LOS D, E, or F
LOS D, E, or F	Increase in intersection traffic volume greater than or equal to 10%

Source: City of Hermosa Beach 1990

TABLE 4.14-18
HERMOSA BEACH ROADWAY SEGMENT IMPACT CRITERIA

Level of Service	Impact Threshold
LOS A, B, or C	Degrades to LOS D, E, or F
LOS D	Increase in V/C ratio greater than or equal to 0.02, or degrades to LOS E or F
LOS E	Increase in V/C ratio greater than or equal to 0.05, or degrades to LOS F
LOS F	Increase in V/C ratio greater than or equal to 0.05

Source: City of Hermosa Beach 1990

California Department of Transportation

The impact criteria for signalized intersections under Caltrans jurisdiction are shown in **Table 4.14-19 (Caltrans Signalized Intersection Impact Criteria)**, which establishes a target of LOS D and significance criteria defined as maintaining the existing level of service when the target LOS is exceeded.

TABLE 4.14-19
CALTRANS SIGNALIZED INTERSECTION IMPACT CRITERIA

Level of Service	Impact Threshold
LOS A, B, C, or D	Degrades to LOS E or F
LOS E	Degrades to LOS F
LOS F	Any increase in average control delay

Source: Caltrans 2002

Congestion Management Program

The CMP statute requires establishment of LOS standards to measure congestion on the system and identifies a minimum level of service requirement of LOS E for analysis of studied intersections and roadway segments. Significant impacts are identified if there is an increase in V/C ratio greater than or equal to 0.02 and the LOS degrades to F or is already at F. The impact criteria for CMP arterial monitoring locations are shown in **Table 4.14-20 (Congestion Management Program Impact Criteria)**.

TABLE 4.14-20
CONGESTION MANAGEMENT PROGRAM IMPACT CRITERIA

Level of Service	Impact Threshold
LOS A, B, C, D, or E	Increase in V/C ratio greater than or equal to 0.02 and degrades to LOS F
LOS F	Increase in V/C ratio greater than or equal to 0.02

Source: Los Angeles County Metropolitan Transportation Authority 2010

IMPACTS AND MITIGATION MEASURES

IMPACT 4.14-1 ***Would PLAN Hermosa Cause an Exceedance of LOS Performance Standards?*** PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not increase overall demand for travel within Hermosa Beach. Both the City's and Caltrans's existing level of service standards for intersections and roadway segments would be maintained at the majority of intersections and segments analyzed. Three intersections and one segment would experience a **significant** impact.

Table 4.14-21 (Future (2040) Intersection Level of Service: City of Hermosa Beach) compares the intersection level of service for the Existing (2015) and 2040 PLAN Hermosa scenarios. **Figure 4.14-8 (PLAN Hermosa (2040) Intersection Level of Service)** shows the level of service for the 2040 PLAN Hermosa scenario. Despite reduced vehicle miles traveled overall and per capita that would result with implementation of PLAN Hermosa, changes in vehicular travel patterns result in three of the 13 studied intersections under the PLAN Hermosa scenario operating below the LOS C standard during the AM and/or PM peak hours.

- Pacific Coast Highway and Artesia Boulevard (AM and PM peak hour)
- Pacific Coast Highway and Aviation Boulevard (AM peak hour)
- Manhattan Avenue and 27th Street (AM peak hour)

TABLE 4.14-21
FUTURE (2040) INTERSECTION LEVEL OF SERVICE: CITY OF HERMOSA BEACH

Intersection	Inter-section Control	Peak Hour	Existing		2040 without PLAN Hermosa		PLAN Hermosa		Existing vs. PLAN Hermosa	
			V/C	LOS	V/C	LOS	V/C	LOS	Change in V/C	Sig. Impact
1. Hermosa Ave & 13th St	Signal	AM	0.302	A	0.347	A	0.319	A	0.017	NO
		PM	0.335	A	0.388	A	0.357	A	0.022	NO
2. Hermosa Ave & Pier Ave	Signal	AM	0.384	A	0.457	A	0.414	A	0.030	NO
		PM	0.324	A	0.391	A	0.356	A	0.032	NO
3. Pacific Coast Hwy & Artesia Blvd	Signal	AM	0.732	C	0.928	E	0.809	D	0.077	YES
		PM	0.767	C	0.969	E	0.851	D	0.084	YES
4. Pacific Coast Hwy & Aviation Blvd	Signal	AM	0.777	C	0.987	E	0.870	D	0.093	YES
		PM	0.743	C	0.762	C	0.681	B	-0.062	NO
5. Pacific Coast Hwy & Pier Ave	Signal	AM	0.565	A	0.703	C	0.619	B	0.054	NO
		PM	0.703	C	0.838	D	0.741	C	0.038	NO
6. Pacific Coast Hwy & 2nd St	Signal	AM	0.678	B	0.825	D	0.744	C	0.066	NO
		PM	0.696	B	0.807	D	0.732	C	0.036	NO
7. Pacific Coast Hwy & 16th St	Signal	AM	0.526	A	0.623	B	0.561	A	0.035	NO
		PM	0.636	B	0.751	C	0.670	B	0.034	NO
8. Pacific Coast Hwy & 21st St	Signal	AM	0.590	A	0.682	B	0.610	B	0.020	NO
		PM	0.668	B	0.822	D	0.729	C	0.061	NO
9. Prospect Ave & Artesia Blvd	Signal	AM	0.709	C	0.844	D	0.740	C	0.031	NO
		PM	0.749	C	0.856	D	0.751	C	0.002	NO
10. Prospect Ave & Aviation Blvd	Signal	AM	0.691	B	0.785	C	0.691	B	0.000	NO
		PM	0.763	C	0.838	D	0.737	C	-0.026	NO
11. Prospect Ave & Anita St	Signal	AM	0.727	C	0.769	C	0.690	B	-0.037	NO
		PM	0.645	B	0.750	C	0.672	B	0.027	NO
12. Manhattan Ave & 27th St	All-Way Stop Control	AM	27.6	C	45.1	D	38.2	D	10.6	YES
		PM	16.1	B	38.6	D	21.2	C	5.1	NO
13. Valley Drive & Gould Ave	All-Way Stop Control	AM	21.2	C	29.9	C	18.1	C	-3.1	NO
		PM	24.2	C	39.7	D	20.8	C	-3.4	NO

Source: City of Hermosa Beach 2015

FIGURE 4.14-8
PLAN HERMOSA (2040) INTERSECTION LEVEL OF SERVICE

Source: City of Hermosa Beach 2015

Table 4.14-22 (Future (2040) Intersection Level of Service: Caltrans) presents a comparison of future intersection level of service along Pacific Coast Highway, analyzed using the HCM methodology. One of the six studied intersections under the PLAN Hermosa scenario is anticipated to operate below the LOS D standard during the AM and/or PM peak hours.

- Pacific Coast Highway and Artesia Boulevard (PM peak hour)

TABLE 4.14-22
FUTURE (2040) INTERSECTION LEVEL OF SERVICE: CALTRANS

Intersection	Inter-section Control	Peak Hour	Existing		2040 without PLAN Hermosa		PLAN Hermosa		Existing vs. PLAN Hermosa	
			Delay	LOS	Delay	LOS	Delay	LOS	Change in V/C	Sig. Impact
3. Pacific Coast Hwy & Artesia Blvd	Signal	AM	54.3	D	63.4	E	52.6	D	-1.7	NO
		PM	52.7	D	88.0	F	66.9	E	14.2	YES
4. Pacific Coast Hwy & Aviation Blvd	Signal	AM	25.8	C	65.5	E	50.7	D	24.9	NO
		PM	36.4	D	30.2	C	27.7	C	-8.7	NO
5. Pacific Coast Hwy & Pier Ave	Signal	AM	17.6	B	22.4	C	21.8	C	4.2	NO
		PM	22.0	C	26.3	C	24.4	C	2.4	NO
6. Pacific Coast Hwy & 2nd St	Signal	AM	10.9	B	11.0	B	10.3	B	-0.6	NO
		PM	11.4	B	11.6	B	11.0	B	-0.4	NO
7. Pacific Coast Hwy & 16th St	Signal	AM	28.8	C	34.6	C	30.9	C	2.1	NO
		PM	35.5	D	50.3	D	37.3	D	1.8	NO
8. Pacific Coast Hwy & 21st St	Signal	AM	11.7	B	15.0	B	12.7	B	1.0	NO
		PM	5.3	A	7.3	A	6.4	A	1.1	NO

Source: City of Hermosa Beach 2015

Table 4.14-23 (Future (2040) Roadway Segment Level of Service) compares the roadway segment level of service results for the future scenarios. **Figure 4.14-9 (PLAN Hermosa (2040) Roadway Segment Level of Service)** illustrates 2040 roadway segment level of service for the PLAN Hermosa scenario. While four of the 20 analyzed street segments are anticipated to operate below the LOS D standard under PLAN Hermosa traffic conditions, just one segment, Prospect Avenue between Aviation Boulevard and 2nd Street, represents a significant impact because three of the segments already operate at LOS D or below.

While the following roadway segments currently operate at LOS D or below, PLAN Hermosa is projected to maintain or improve the volume-to-capacity ratio by 2040 compared to 2015 conditions:

- Pacific Coast Highway between Artesia Boulevard and Aviation Boulevard
- Pacific Coast Highway between Aviation Boulevard and 2nd Street
- Artesia Boulevard between Pacific Coast Highway and Prospect Avenue

TABLE 4.14-23
FUTURE (2040) ROADWAY SEGMENT LEVEL OF SERVICE

Segment	Location	Existing		2040 w/o PLAN Hermosa		PLAN Hermosa		Existing vs. PLAN Hermosa	
		V/C	LOS	V/C	LOS	V/C	LOS	Change in V/C	Sig. Impact
1. Hermosa Avenue	27th Street to 22nd Street	0.381	A	0.473	A	0.414	A	0.033	NO
2. Hermosa Avenue	22nd Street to 16th Street	0.364	A	0.455	A	0.400	A	0.036	NO
3. Hermosa Avenue	16th Street to 8th Street	0.384	A	0.459	A	0.400	A	0.016	NO
4. Hermosa Avenue	8th Street to Herondo Street	0.313	A	0.386	A	0.338	A	0.025	NO
5. Valley Drive	Gould Avenue to Pier Avenue	0.336	A	0.340	A	0.300	A	-0.036	NO
6. Valley Drive	Pier Avenue to 8th Street	0.434	A	0.453	A	0.393	A	-0.041	NO
7. Ardmore Avenue	16th Street to 11th Street	0.282	A	0.293	A	0.253	A	-0.029	NO
8. Ardmore Avenue	8th Street to 2nd Street	0.200	A	0.213	A	0.187	A	-0.013	NO
9. Pacific Coast Highway	Artesia Boulevard to Aviation Boulevard	0.997	E	1.147	F	0.997	E	0.000	NO
10. Pacific Coast Highway	Aviation Boulevard to 2nd Street	1.169	F	1.219	F	1.067	F	-0.102	NO
11. Prospect Avenue	Artesia Boulevard to Aviation Boulevard	0.412	A	0.533	A	0.453	A	0.041	NO
12. Prospect Avenue	Aviation Boulevard to 2nd Street	0.795	C	0.980	E	0.853	D	0.058	YES
13. Artesia Blvd	Pacific Coast Highway to Prospect Avenue	0.909	E	1.024	F	0.876	D	-0.033	NO
14. Aviation Blvd	Pacific Coast Highway to Prospect Avenue	0.887	D	0.790	C	0.683	B	-0.204	NO
15. Pier Avenue	Hermosa Avenue to Valley Drive	0.460	A	0.462	A	0.407	A	-0.053	NO
16. Pier Avenue	Ardmore Avenue to Pacific Coast Highway	0.494	A	0.500	A	0.445	A	-0.049	NO
17. Gould Avenue	Ardmore Avenue to Pacific Coast Highway	0.603	B	0.550	A	0.486	A	-0.117	NO
18. 8th Street	Hermosa Avenue to Valley Drive	0.174	A	0.167	A	0.160	A	-0.014	NO
19. 8th Street	Pacific Coast Highway to Prospect Avenue	0.140	A	0.080	A	0.080	A	-0.060	NO
20. Herondo Street	Hermosa Avenue to Valley Drive	0.866	D	0.854	D	0.746	C	-0.120	NO

Source: City of Hermosa Beach 2015

Per PLAN Hermosa implementation action MOBILITY-12, the City will conduct a periodic update of a Transportation Demand Management (TDM) Ordinance. However, based on the above discussion and despite implementation action MOBILITY-12, implementation of PLAN Hermosa will conflict with the existing intersection and segment operational standards identified in Hermosa Beach's 1990 Circulation, Transportation, and Parking Element, which would be a **significant** impact.

Intersections

Pacific Coast Highway and Artesia Boulevard

The intersection at Pacific Coast Highway and Artesia Boulevard would be significantly impacted by PLAN Hermosa–related traffic in both the morning and evening peak periods. Opportunities for physical mitigations are limited by alignment issues and Caltrans's plan to remove a travel lane in each direction on Pacific Coast Highway, as well as a major change in roadway characteristics, east to west, from Artesia Boulevard to Gould Avenue. Additionally, physical mitigations would conflict with the SBBMP Class III bicycle facility planned for Gould Avenue, as well as PLAN Hermosa Mobility Element Policies 1.1, 2.1, 3.6, 7.2, and 7.5.

Due to the above-mentioned conflicts between physical mitigations and PLAN Hermosa and adopted plans, the significant transportation impacts on traffic operations at the intersection of Pacific Coast Highway and Artesia Boulevard cannot be mitigated to a less than significant level. Therefore, this impact would be **significant and unavoidable**.

Pacific Coast Highway and Aviation Boulevard

The intersection at Pacific Coast Highway and Aviation Boulevard is significantly impacted by PLAN Hermosa–related traffic in the morning peak period. Opportunities for physical mitigations are limited by Caltrans's plan to remove a travel lane in each direction on Pacific Coast Highway and improvement plans for the intersection included in the Aviation Boulevard Master Plan, including enhanced crosswalks and repurposing of public right-of-way for parkettes, pedestrian space, or a crossing refuge. Additionally, physical mitigations would conflict with the SBBMP Class II bicycle facility planned for Aviation Boulevard, as well as PLAN Hermosa Mobility Element Policies 1.1, 2.1, 3.6, 7.2, and 7.5.

Due to the above-mentioned conflicts between physical mitigations to improve level of service and PLAN Hermosa and adopted plans, the significant transportation impacts to traffic operations at the intersection of Pacific Coast Highway and Aviation Boulevard cannot be mitigated to a less than significant level. Therefore, this would be a **significant and unavoidable** impact.

Manhattan Avenue and 27th Street

The intersection at Manhattan Avenue and 27th Street is significantly impacted by PLAN Hermosa–related traffic in the morning peak period. Opportunities for physical mitigations are limited by existing narrow roadway widths. Additionally, physical mitigations would conflict with the SBBMP Class III bicycle facility planned for 27th Street, as well as PLAN Hermosa Mobility Element Policies 1.1, 2.1, 3.6, 7.2, and 7.5.

Due to the above-mentioned conflicts between physical mitigations to improve level of service and PLAN Hermosa policies and adopted plans, the significant transportation impacts to traffic operations at the intersection of Manhattan Avenue and 27th Street cannot be mitigated to a less than significant level. Therefore, this impact would be **significant and unavoidable**.

Roadway Segments

Prospect Avenue from Aviation Boulevard to 2nd Street

Through implementation of PLAN Hermosa, the roadway segment on Prospect Avenue from Aviation Boulevard to 2nd Street would be degraded from its current operation at LOS C to LOS D by 2040. While this is improved from the projected LOS E that would be experienced under the 2040 scenario without PLAN Hermosa, it still represents a significant impact.

In order to reduce the projected level of service impacts along Prospect Avenue, the City would need to consider expanding the roadway to accommodate additional vehicles or consider policies that reduce the number of vehicles traveling along the corridor. However, the opportunities for expanding Prospect Avenue to reduce the impacts to level of service are limited by the narrow roadway and the presence of on-street parking. Additionally, physical mitigations to expand roadway capacity along Prospect Avenue would conflict with the intent of SB 743 and many of the proposed PLAN Hermosa policies. Under SB 743 Section 21099(b)(2), vehicular capacity and traffic congestion would no longer be eligible as considerations of significant impact under CEQA. Guidelines established for the implementation of SB 743 further state that roadway capacity expansions in a congested corridor are presumed to cause a significant impact under CEQA due to their effects on induced travel. Physical mitigations would also conflict with the SBBMP bicycle-friendly street bicycle facility planned for Prospect Avenue and with PLAN Hermosa Mobility Element Policies 1.1, 2.1, 3.6, 7.2, and 7.5. Due to the above-mentioned conflicts between capacity expansion mitigations and SB 743, the SBBMP, and PLAN Hermosa policies, the significant transportation impact to traffic operations along the segment of Prospect Avenue from Aviation Boulevard to 2nd Street cannot be mitigated to a less than significant level. Therefore, this impact would be **significant and unavoidable**.

Mitigation Measures

Opportunities for physical mitigation measures, such as restriping of intersection approaches to add turn lanes, were investigated. The emphasis was on identifying physical improvements that could be implemented efficiently and maintain consistency with PLAN Hermosa goals. Mitigation measures were reviewed for compliance or conflict with PLAN Hermosa goals and policies, as well as adopted policies, plans, and programs regarding public transit, bicycle, or pedestrian facilities. Mitigations that decrease the performance or safety of such facilities were not considered. No mitigation measures could be applied to significantly impacted locations without creating a conflict with PLAN Hermosa goals or other adopted plans. This impact remains **significant and unavoidable.**

FIGURE 4.14-9
PLAN HERMOSA (2040) ROADWAY SEGMENT LEVEL OF SERVICE

Source: City of Hermosa Beach 2015

IMPACT 4.14-2 ***Would PLAN Hermosa Conflict with the Los Angeles County Congestion Management Program?*** Adoption and implementation of PLAN Hermosa would maintain the level of service standard for the intersection located at Pacific Coast Highway and Artesia Boulevard and comply with the CMP. This would result in a **less than significant** impact.

The intersection of Pacific Coast Highway and Artesia Boulevard is a CMP-designated intersection. CMP guidelines require arterial intersection analysis at monitoring locations where the proposed project will add 50 or more peak-hour vehicle trips. Forecast traffic growth at the intersection of Pacific Coast Highway and Artesia Boulevard from Existing (2015) to the future PLAN Hermosa scenario is anticipated to not exceed the CMP threshold for analysis. Therefore, the regional impact on transportation would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.14-3 ***Would PLAN Hermosa Alter Air Traffic Patterns?*** PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not modify the planning or operations of Los Angeles International Airport or introduce land use patterns that may cause substantial safety risks to or from air operations. Thus, this impact would be **less than significant**.

Los Angeles International Airport is located approximately 5 miles north of the city. PLAN Hermosa policies and programs related to land use, mobility, and structural heights would not influence air traffic patterns by creating either an increase in traffic levels or a change in location that results in substantial safety risks. Therefore, the impacts would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.14-4 ***Would PLAN Hermosa Introduce or Create Roadway Design Hazards?*** PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not increase hazards due to design or incompatible uses. Thus, implementation would result in a **less than significant** impact.

Traffic generated by infill and redevelopment from PLAN Hermosa implementation, as addressed in Impact 4.14-1, would not increase hazards due to design features or incompatible uses. Hermosa Beach's adoption of Living Streets, Complete Streets, and Vision Zero policies prioritizes safety by way of design as a means to encourage increased use of active and other non-motorized travel options and improve mobility for pedestrians, bicyclists, and transit users across the city. The following implementation actions support safe design features: MOBILITY-5 will evaluate operations along local neighborhood streets in regard to safety and vehicle speeds; MOBILITY-6 will evaluate and implement traffic calming measures and other safety enhancement features; and PARKS-8 ensures ADA compliance of public access points in future developments in Hermosa Beach.

Mobility Element Policy 1.1 requires that all transportation developments consider the needs of all modes of travel to create safe, livable, and inviting environments for all users; Policy 3.3 requires that all development or redevelopment projects accommodate active transportation by providing connections to existing and planned pedestrian and bicycle networks and incorporating pedestrian-oriented design practices; and Policy 7.1 ensures that public rights-of-way are safe for all users at all times of day. To address safety issues regarding conflicts between incompatible users and poorly designed streets, Mobility Element Policy 1.2 supports the

development of context-sensitive street classification design standards that will better fit the needs of an increasing preference for multimodal travel options and behaviors. Policy 7.2 seeks to discourage pass-through traffic on local neighborhood streets by means of traffic controls, speed limitations, and design features that create a pedestrian- and bicycle-friendly environment and minimize potential vehicle collisions. Additionally, Policy 7.4 prioritizes programs oriented toward safe access to schools and community facilities that focus on walking, bicycling, and driving in school zones.

With the city encompassing approximately 1.4 square miles, active and non-motorized transportation options for local mobility can be convenient and cost-effective travel choices for residents and visitors. As such, Mobility Element Policy 7.5 encourages design and construction plans that improve sidewalk infrastructure to safely accommodate high levels of pedestrian activity. Thus, PLAN Hermosa policies, particularly in the Mobility Element, are designed to reduce design hazards and conflicts between incompatible land uses and between all transportation network users. The impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.14-5 ***Would PLAN Hermosa Result in Inadequate Emergency Access?*** PLAN Hermosa would guide future development and reuse projects in the city that could result in inadequate emergency access. However, PLAN Hermosa policies would reduce emergency access program-level impacts to a **less than significant** level.

Emergency vehicles in the city take the fastest and most expedient routes in case of an emergency. In the event of an evacuation, the primary routes used, if available, are Artesia Boulevard, Aviation Boulevard, Herondo Street, and Pacific Coast Highway. PLAN Hermosa policies include a variety of actions aimed at ensuring emergency response readiness, specifically in the Public Safety Element, which ensures that law enforcement, fire protection/emergency medical services, and lifeguard services are adequately provided for Hermosa Beach residents and visitors as well as to maximize emergency services across neighboring jurisdictions. Working within that framework, Public Safety Element Policy 6.1 requires that the City regularly update disaster preparedness and emergency response plans, and Public Safety Policy 5.4 requires that new development provide adequate emergency access in addition to maintaining current levels of emergency services.

Implementation of current state and federal regulations, combined with PLAN Hermosa policies, would reduce the potential impacts on emergency preparedness and emergency access in Hermosa Beach. Therefore, the impact would be **less than significant**.

Mitigation Measures

None required.

IMPACT 4.14-6 ***Would PLAN Hermosa Support the Maintenance and Expansion of Public Transit, Bicycle, and Pedestrian Facilities?*** PLAN Hermosa would guide future development and reuse projects in the city in a manner that supports the maintenance and expansion of transit, bicycle, and pedestrian facilities consistent with adopted local and regional plans. Thus, implementation would result in a **less than significant** impact.

PLAN Hermosa policies and implementation actions intended to reduce transportation impacts are oriented toward the development of a safe, multimodal, and sustainable transportation system that directly encourages healthy lifestyle choices among Hermosa Beach residents and visitors. Policies under PLAN Hermosa are intended to provide a wide range of transportation options, allowing travelers the flexibility in choosing the transportation option that best fits their needs. Mobility Element Policies 3.1 and 3.4 require the repurposing of public rights-of-way to enhance connectivity among pedestrians, bicyclists, and public transit facilities with the objective of reducing total vehicle trips, while Policy 6.1 incentivizes the development of a comprehensive, regionally integrated transportation network among neighboring communities. In coordination with related policies adopted by the City and surrounding municipalities, the Mobility Element would improve transit, bicycle, and pedestrian connections with the goal of developing a well-balanced circulation system.

The majority of arterials and local streets throughout the city include sidewalks to accommodate a moderate level of pedestrian activities. Specific key corridors are the 22 walk streets that connect pedestrians between neighborhoods, the Downtown core, and the beach, while walking paths on the Hermosa Valley Greenbelt offer north–south pedestrian connections throughout the length of the city. Mobility Element Policy 3.2 prioritizes investment in the development of a complete network of sidewalks and pedestrian-friendly amenities. As a means of prioritizing pedestrian safety, Mobility Element Policies 2.1 and 2.2 prioritize the development of safe, comfortable, and attractive public spaces and encourage traffic calming strategies that will reduce vehicle speeds and reduce cut-through traffic on residential streets.

Implementation of policies under PLAN Hermosa would be consistent with the goals of the South Bay Bicycle Master Plan (SBBMP). Mobility Element policies support and reinforce SBBMP policies by promoting bicycle facilities and parking throughout the city to provide a higher level of connectivity and access for bicycles. In close coordination with the SBBMP, Mobility Element Policy 3.6 would provide a complete bicycle network along designated roadways in the city and create connections to other sustainable modes of travel. To further promote bicycle circulation, Policy 3.8 encourages shared streets along low volume roadways with limited rights-of-way, and Policy 4.5 requires a sufficient supply of bicycle parking facilities that can support increasing bicycle ridership.

Implementation of PLAN Hermosa would be consistent with the goals of the Los Angeles County Long Range Transportation Plan. Existing transit facilities in Hermosa Beach are supported by local and regional transportation authorities, with local mobility and access to major regional transit facilities in nearby municipalities. Mobility Element policies promote transit opportunities within the city and opportunities to connect to regional infrastructure. Specifically, Mobility Element Policies 6.2 and 6.4 encourage coordination with regional transportation agencies and surrounding cities and require the consideration of regional travel patterns when prioritizing regional transit and transportation projects that will improve local access and connections to region-wide transit services. On the local level, Policy 5.2 proposes the development of a local transit system that facilitates efficient transport between key activity centers, including the Downtown core and the beach. To further support a robust transit system locally and regionally, Infrastructure Element Policy 2.5 requires new developments and redevelopment projects to provide the land or infrastructure necessary to accommodate active transportation, such as sidewalks, bike racks, and bus stops. Therefore, PLAN Hermosa policies directly support and are consistent with the Los Angeles County Long Range Transportation Plan.

PLAN Hermosa policies directly support the expansion of pedestrian, bicycle, and transit facilities and support the City's goal of being a multimodal community. Mobility Element and Land Use + Design Element policies also support the goals and policies of the Los Angeles County Long

Range Transportation Plan and the South Bay Bicycle Master Plan. Therefore, impacts to pedestrian, bicycle, and transit facilities would be **less than significant**.

Mitigation Measures

None required.

CUMULATIVE SETTING, IMPACTS, AND MITIGATION MEASURES

The traffic analysis included in this EIR addresses cumulative impacts to the regional transportation system. A regional traffic model was used to analyze impacts of PLAN Hermosa at buildout, along with projected regional growth. The regional traffic model already assumes a level of growth for other nearby jurisdictions based on all reasonably foreseeable and probable future projects in the region, including the Redondo Beach waterfront, as these sites are likely to be developed at some point in the future, and on population and employment projections. In sum, all scenarios studied in this section of the EIR are considered cumulative in nature because anticipated land use forecasts for other areas are already included in the traffic model.

IMPACT 4.14-7 ***Would PLAN Hermosa Cumulatively Contribute to Exceedance of LOS Performance Standards?*** PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not increase overall demand for travel within Hermosa Beach. Both the City's and Caltrans's existing level of service standards for intersections and roadway segments would be maintained at the majority of intersections and segments analyzed. Nonetheless, three intersections and one segment would experience a **cumulatively considerable** impact.

Regional population and employment growth will not result in increased vehicular travel demand. Policies and implementation actions in PLAN Hermosa would maintain levels of service at a majority studied intersections and two street segments in the buildout year, as discussed in Impact 4.14-1. PLAN Hermosa includes various policies aimed at developing an integrated multimodal transportation system with opportunities for travel by alternative modes, including walking, bicycling, and transit, and is supported by implementation actions such as MOBILITY-12 intended to reduce vehicle auto trips associated with new developments; MOBILITY-5 evaluating improvements to pedestrian amenities and safety; MOBILITY-4 that will improve transit access and services; and PARKS-9 and PARKS-22 that will improve bicycle facilities and services citywide.

As discussed above in Impact 4.14-1, three studied intersections and one street segment under PLAN Hermosa would have a significant impact to level of service standards. Because mitigation measures are not viable at these intersections, given the state laws directing jurisdictions to move away from expanding roadway capacity based on LOS analysis, PLAN Hermosa implementation would have a **cumulatively considerable** impact at three intersections and one roadway segment.

Mitigation Measures

None feasible.

IMPACT 4.14-8 ***Would PLAN Hermosa Contribute to a Cumulatively Considerable Conflict with the Los Angeles County Congestion Management Program?*** Adoption and implementation of PLAN Hermosa would maintain the level of service standard for the intersection at Pacific Coast Highway and Artesia Boulevard and would comply with the CMP. This would result in a **less than cumulatively considerable** impact.

As discussed under Impact 4.14-2, adoption and implementation of PLAN Hermosa would not conflict with the Los Angeles County Congestion Management Program. Therefore, implementation and adoption of PLAN Hermosa would have **less than cumulatively considerable** impacts on the CMP.

Mitigation Measures

None required.

IMPACT 4.14-9 ***Would PLAN Hermosa Contribute to a Cumulative Effect on Air Traffic Patterns?*** Adoption and implementation of PLAN Hermosa in addition to anticipated cumulative growth in the region would not modify the planning or operations of Los Angeles International Airport or introduce land use patterns that may cause substantial safety risks to or from air operations. This impact would be **less than cumulatively considerable**.

As discussed under Impact 4.14-3, implementation of PLAN Hermosa would not influence air traffic patterns by creating either an increase in traffic levels or a change in location that results in substantial safety risks. Therefore, the impacts on air traffic patterns would be **less than cumulatively considerable.**

Mitigation Measures

None required.

IMPACT 4.14-10 ***Would PLAN Hermosa Contribute to Cumulative Roadway Design Hazards?*** Adoption and implementation of PLAN Hermosa in addition to anticipated regional growth would not increase hazards due to design or incompatible uses. This would result in a **less than cumulatively considerable** impact.

As discussed under Impact 4.14-4, traffic generated by infill and redevelopment under PLAN Hermosa would not increase hazards due to design features or incompatible uses. Development policies from surrounding jurisdictions in combination with PLAN Hermosa policies would reduce design hazards and conflicts between incompatible land uses and between all transportation network users. Therefore, impacts would be **less than cumulatively considerable**.

Mitigation Measures

None required.

IMPACT 4.14-11 ***Would PLAN Hermosa Cumulatively Contribute to Inadequate Emergency Access?*** Adoption and implementation of PLAN Hermosa policies in addition to anticipated regional growth would not result in inadequate emergency access. The impact would be **less than cumulatively considerable**.

As discussed in Impact 4.14-5, emergency vehicles take the fastest and most expedient routes to access an emergency. In some cases, emergency vehicles may travel through multiple jurisdictions to respond to a mutual aid call. PLAN Hermosa policies would ensure emergency response readiness and address emergency preparedness impacts, including maintaining emergency response plans and establishing designated emergency response and evacuation routes. Implementation of current state and federal regulations, combined with PLAN Hermosa policies and adjacent jurisdictions' emergency response plans, would reduce potential cumulative impacts on emergency preparedness and emergency access. The impact would be **less than cumulatively considerable**.

Mitigation Measures

None required.

IMPACT 4.14-12 ***Would PLAN Hermosa Cumulatively Contribute to the Maintenance and Expansion of Public Transit, Bicycle, and Pedestrian Facilities?*** PLAN Hermosa supports the maintenance and expansion of transit, bicycle, and pedestrian facilities consistent with adopted local and regional plans. Thus, implementation of PLAN Hermosa and additional development would result in a **less than cumulatively considerable** impact.

Future growth into the buildout year (2040) would increase the demand for transit, bicycle, and pedestrian facilities. The majority of arterials and local streets, including specific key corridors throughout the city and in surrounding communities, include sidewalks to accommodate pedestrians. Many streets currently are impacted by issues regarding sidewalk quality and continuity, and many are not in compliance with ADA standards. PLAN Hermosa includes plans to improve sidewalk connectivity citywide and will bring sidewalks into ADA compliance. Bicycle paths (Class I), lanes (Class II), and routes (Class III) are in the general north–south direction along The Strand and Hermosa Avenue and are connected to surrounding communities. Implementation of PLAN Hermosa and other multimodal plans would ensure the maintenance and expansion of transit, bicycle, and pedestrian facilities. Therefore, the impact on transit, bicycle, and pedestrian facilities would be **less than cumulatively considerable**.

Mitigation Measures

None required.

4.14.5 REFERENCES

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5.0 Other CEQA—Required Considerations

This section discusses significant unavoidable impacts, growth-inducing impacts, and significant irreversible changes associated with the project.

5.0.1 INTRODUCTION

California Environmental Quality Act (CEQA) Guidelines Section 15126 requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the EIR must also identify (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, and (4) growth-inducing impacts of the proposed project. It should be noted that although growth inducement itself is not considered an environmental effect, it could potentially lead to foreseeable physical environmental effects, which are discussed under growth-inducing impacts below.

5.0.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(b) requires that an EIR describe significant impacts that cannot be avoided, even with implementation of feasible mitigation measures. In addition, CEQA Guidelines Section 15093(a) allows the decision-making agency to determine whether the benefits of a project outweigh its unavoidable adverse environmental impacts. The City can approve a project with unavoidable adverse impacts if it prepares a Statement of Overriding Considerations setting forth the specific reasons for making such a judgment.

The following project impacts, which have been recognized as significant and unavoidable in either the project or cumulative context, are specifically identified in Section 4.2, Air Quality; Section 4.4, Cultural Resources; and Section 4.14, Transportation, of this Draft EIR. All other thresholds of significance have been identified as having either no impact, a less than significant impact, or a less than significant impact with mitigation.

Air Quality

Impact 4.2-2 Short-Term Construction Emissions. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would generate air pollutant emissions from short-term construction.

Impact 4.2-7 Cumulative Construction and Operational Emissions. PLAN Hermosa in addition to anticipated growth in the South Coast Air Basin would increase the amount of construction-related air pollutant emissions occurring within the basin, thereby affecting the region's ability to attain ambient air quality standards.

Cultural Resources

Impact 4.4-4 Substantial Change in the Significance of a Historical Resource. PLAN Hermosa would provide for future development and reuse projects in the city in a manner that could cause a substantial change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.

Impact 4.4-8 Cumulative Effects on Historical Resources. PLAN Hermosa in addition to anticipated future development in the South Bay Cities COG planning area could cause a substantial change in the significance of a historical resource.

Transportation

Impact 4.14-1 Exceedance of LOS Performance Standards. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not increase overall demand for travel within Hermosa Beach. Both the City's and Caltrans's existing level of service standards for intersections and roadway segments would be maintained at the majority of intersections and segments analyzed, except at three intersections and on one roadway segment.

Impact 4.14-7 Cumulative Contribution to Exceedance of LOS Performance Standards. PLAN Hermosa would guide future development and reuse projects in the city in a manner that would not increase overall demand for travel within Hermosa Beach. Both the City's and Caltrans's existing level of service standards for intersections and roadway segments would be maintained at the majority of intersections and segments analyzed, with the exception of three intersections and one roadway segment.

5.0.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

CEQA Guidelines Section 15126.2(c) requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. Section 15126.2(c) states:

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 impact 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 e evaluated at assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project;
- The project would involve a large commitment of nonrenewable resources; or
- The proposed consumption of resources is not justified (e.g., the project involved the wasteful use of energy).

PLAN Hermosa would allow and continue urban development in the city. Returning Hermosa Beach to a less urban and developed condition would not be feasible given the degree of disturbance, the urbanization of the area, long-term historical urban use, and the level of capital investment. PLAN Hermosa would protect historic resources, open space, and other resources to limit the commitment of nonrenewable resources to urbanized areas.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with the project. While implementation of PLAN Hermosa would result in the use, transport, storage, and disposal of hazardous wastes, as described in Section 4.7, Hazards and Hazardous Materials, all activities would comply with applicable state and federal laws related to hazardous materials transport, use, and storage, which significantly reduces the likelihood and severity of accidents that could result in irreversible environmental damage.

PLAN Hermosa would result in incremental change to the city with an estimated 0.29 percent growth in both residential and nonresidential square footage. However, this incremental increase

would be accomplished in a manner that would limit urban development in areas not already developed. Operations associated with future uses would also consume fossil fuels, water, natural gas, and electrical energy, and would create GHG emissions. These unavoidable consequences of urban growth are described throughout Chapter 4.0 of this EIR. These consequences do not constitute an adverse effect on the environment.

Resources that would be permanently and continually consumed with implementation of PLAN Hermosa include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in the inefficient or wasteful use of such resources. Future construction activities related to implementation of PLAN Hermosa would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobiles and construction equipment. However, compliance with all applicable building codes, as well as with PLAN Hermosa policies, standard conservation features, and current City programs, would ensure that natural resources are conserved to the maximum extent possible and would not be used in a wasteful manner.

5.0.4 GROWTH-INDUCING IMPACTS

CEQA Guidelines Section 15126.2(d) requires that an EIR evaluate a project's growth-inducing impacts. A growth-inducing impact is defined by the CEQA Guidelines as:

The way in which a 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.

A project can have direct and/or indirect growth inducement potential. For example, direct growth inducement potential would result if a project involved construction of new housing. A project would have indirect growth inducement potential if it established substantial new permanent employment opportunities or if it involved a construction effort with substantial short-term employment opportunities that would indirectly stimulate the need for additional housing and services to support the new employment demand (*Napa Citizens for Honest Government v. Napa County Board of Supervisors*). Similarly, a project would indirectly induce growth if it removed an obstacle to additional growth and development, such as removing a constraint on a required public service. A project providing an increased water supply in an area where water service historically limited growth could be considered growth-inducing.

The CEQA Guidelines further explain that the environmental effects of induced growth are considered indirect impacts of a project. These indirect impacts or secondary effects of growth may result in significant, adverse environmental impacts. Potential secondary effects of growth include increased demand on other community and public services and infrastructure, increased traffic and noise, and adverse environmental impacts such as degradation of air and water quality, degradation or loss of plant and animal habitat, and conversion of agricultural and open space land to developed uses.

Growth inducement may constitute an adverse impact if the growth is not consistent with, or accommodated by, the land use plans and growth management plans and policies for the area affected. Local land use plans establish land use development patterns and provide growth policies that allow the orderly expansion of urban development supported by adequate urban public services, such as water supply, roadway infrastructure, sewer service, and solid waste service.

DIRECT AND INDIRECT GROWTH IMPACTS

PLAN Hermosa does not include any development proposals and as such, all potential induced growth would be indirect as a result of the plan's implementation. Potential indirect impacts from PLAN Hermosa implementation are discussed throughout this Draft EIR. For example, Section 4.2, Air Quality, discusses the air quality impacts if land uses allowed under PLAN Hermosa policies are implemented in the city. Further, Section 4.12, Population and Housing, describes the expected population growth from proposed policies' implementation.

The purpose of a general plan is to guide growth and development in a community. Accordingly, PLAN Hermosa assumes that growth will take place. The focus of PLAN Hermosa is to provide a framework where growth can be managed in a sustainable way that would meet the needs of the community. PLAN Hermosa provides direction for new development and redevelopment projects by establishing the desired mix and relationship between land use types. Because Hermosa Beach is a built-out city that is surrounded by other built-out communities and the Pacific Ocean, continued growth in the city would not remove obstacles to growth beyond its borders. As outlined in PLAN Hermosa, growth would mainly take place through infill and intensification of uses. As such, allowing for continued growth in urbanized areas reduces development pressure in undeveloped peripheral areas regionally. Therefore, although the proposed plan would remove obstacles to growth in Hermosa Beach, it would not represent a significant adverse impact.

6.0 ALTERNATIVES

6.0.1 INTRODUCTION

Section 15126.6(a) of the California Environmental Quality Act (CEQA) Guidelines requires environmental impact reports (EIRs) to describe "a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."

An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible.

The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed, other than the rule of reason. CEQA Guidelines Section 15126.6(b) describes the purpose of the alternatives analysis as follows:

> *Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.*

The CEQA Guidelines suggest that alternatives should be compared to the proposed project's environmental impacts and that the "no project" alternative be considered (CEQA Guidelines Section 15126.6[e]). In defining feasibility (e.g., "feasibly attain most of the basic objectives of the project"), CEQA Guidelines Section 15126.6(f)(1) states, in part:

> *Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.*

In determining what alternatives should be considered in the EIR, it is important to acknowledge the project's objectives, significant effects, and unique considerations. These factors are crucial to the development of alternatives that meet the criteria specified in CEQA Guidelines Section 15126.6(a).

For the purposes of this EIR, the proposed project is the draft of PLAN Hermosa and is designed to achieve the following objectives:

1) Preserve the city's small beach town character through policies and design standards that maintain buildings at an appropriate scale and size with existing ones (including potentially historic buildings) and recognize the unique features of the city's eclectic residential neighborhoods.

2) Enhance and support a strong, diverse, and vibrant local economy through policies that stimulate sustainable businesses and jobs, enhance safe and beautiful commercial corridors, articulate clear and consistent standards for new businesses, and provide convenient services to residents, employees, and visitors.

3) Promote healthy and active lifestyles through land use and transportation improvements that enhance pedestrian, transit, and bike safety and access to a variety of destinations in the city.

4) Provide a safe and clean natural environment—including clean air and water—and stewardship of our ocean resources, open space, and other natural resources.

5) Achieve a low or no carbon future through the reduction of greenhouse gas emissions by reducing fuel consumption, diverting solid waste from landfills, conserving water, and improving the efficiency of energy use and utilizing renewable energy sources.

6.0.2 ALTERNATIVES EVALUATED

Project alternatives are intended to reduce or eliminate the potentially significant adverse environmental effects of PLAN Hermosa while attempting to meet most of the project objectives. An EIR is required to contain a discussion of a reasonable range of alternatives to the project, or to the location of the project, that could feasibly attain the basic objectives of the project (CEQA Guidelines Section 15126.6[a]). The comparative merits of the alternatives should also be presented. CEQA also provides the following guidelines for considering alternatives to the project:

- If an alternative would cause one or more significant environmental effects in addition to those that would be caused by the project, the significant effects of the alternatives shall be discussed, but in less detail than the significant effects of the project (CEQA Guidelines Section 15126.6[d]).
- The "no project" alternative shall be evaluated. If the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e]).
- The range of alternatives required by an EIR is governed by the rule of reason that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The key issue is whether the selection and discussion of alternatives fosters informed decision-making and informed public participation. An EIR need not consider an alternative whose effect cannot be ascertained and whose implementation is remote and speculative (CEQA Guidelines Section 15126.6[f]).

POTENTIALLY SIGNIFICANT ADVERSE ENVIRONMENTAL EFFECTS OF PLAN HERMOSA

- Since the project alternatives should be designed to reduce or eliminate potentially adverse effects of the proposed project, it is important to identify where the proposed project may have significant adverse environmental effects. The potentially significant adverse environmental effects of PLAN Hermosa, as analyzed and identified in this EIR, are noted in **Table 6.0-1 (Potentially Significant Adverse Effects of PLAN Hermosa)**.

TABLE 6.0-1
POTENTIALLY SIGNIFICANT ADVERSE EFFECTS OF PLAN HERMOSA

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
4.1 Aesthetics and Visual Resources		
4.1-1 Scenic Vistas and Viewsheds	PS	LTS
4.1-2 Scenic Resources within a State Scenic Highway	LTS	LTS
4.1-3 Visual Character	LTS	LTS

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
4.1-4 Shade and Shadow	LTS	LTS
4.1-5 Light or Glare	LTS	LTS
4.1-6 Cumulative Visual Resources	LTCC	LTCC
4.2 Air Quality		
4.2-1 Applicable Air Quality Plan	LTS	LTS
4.2-2 Violate Air Quality Standards – Short-Term Impacts	PS	SU
4.2-3 Violate Air Quality Standards – Long-Term Impacts	LTS	LTS
4.2-4 Increase in Criteria Pollutants – CO Hot Spots	LTS	LTS
4.2-5 Toxic Air Contaminants	LTS	LTS
4.2-6 Odors	LTS	LTS
4.2-7 Cumulative Air Quality Impacts	CC	CC/SU
4.3 Biological Resources		
4.3-1 Special-Status Species	PS	LTS
4.3-2 Sensitive Biological Communities or Riparian Habitat	NI	NI
4.3-3 Wetlands	LTS	LTS
4.3-4 Movement or Migration of Wildlife Species	LTS	LTS
4.3-5 Conflict with Species Protection Policies or Ordinances	LTS	LTS
4.3-6 Cumulative Effects on Biological Resources	LTCC	LTCC
4.4 Cultural Resources		
4.4-1 Archaeological Resources	LTS	LTS
4.4-2 Disturbance of Human Remains	LTS	LTS
4.4-3 Paleontological Resource, Site, or Geologic Feature	PS	LTS
4.4-4 Historical Resources	PS	SU
4.4-5 Cumulative Effects on Archaeological Resources	LTCC	LTCC
4.4-6 Cumulative Effects on Human Remains	LTCC	LTCC
4.4-7 Cumulative Effects on Paleontological Resources	CC	LTCC
4.4-8 Cumulative Effects on Historical Resources	CC	CC/SU
4.5 Geology and Soils		
4.5-1 Fault Rupture and Seismic Hazards	LTS	LTS
4.5-2 Soil Erosion or Loss of Topsoil	LTS	LTS
4.5-3 Unstable and Expansive Soils	LTS	LTS
4.5-4 Cumulative Geologic and Soil Hazards	LTCC	LTCC
4.6 Greenhouse Gas Emissions		
4.6-1 Generate GHG Emissions	PS	LTS

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
4.6-2 Conflict with an Applicable Plan, Policy, or Regulation	LTS	LTS
4.7 Hazards and Hazardous Materials		
4.7-1 Transport, Use, or Disposal of Hazardous Materials	LTS	LTS
4.7-2 Accidental Release of Hazardous Materials	PS	LTS
4.7-3 Emission or Handling of Hazardous Materials Near Schools	LTS	LTS
4.7-4 Adopted Emergency Response Plan	LTS	LTS
4.7-5 Cumulative Effects of Hazardous Materials	LTCC	LTCC
4.8 Hydrology and Water Quality		
4.8-1 Water Quality Standards and Waste Discharge Requirements	LTS	LTS
4.8-2 Groundwater Supplies or Recharge	LTS	LTS
4.8-3 Surface Hydrology and Drainage – Off-Site Erosion or Siltation	LTS	LTS
4.8-4 Surface Hydrology and Drainage – On- or Off-Site Flooding	LTS	LTS
4.8-5 Surface Hydrology and Drainage – Water Runoff	LTS	LTS
4.8-6 Water Quality	LTS	LTS
4.8-7 Housing within Flood Hazard Area	LTS	LTS
4.8-8 Impede or Redirect Flood Flows	LTS	LTS
4.8-9 Risk of Loss, Injury, or Death Involving Flooding	LTS	LTS
4.8-10 Inundation by Seiche, Tsunami, or Mudflow	LTS	LTS
4.8-11 Cumulative Effects on Water Quality Standards and Waste Discharge Requirements	LTCC	LTCC
4.8-12 Cumulative Effects on Groundwater Supply or Recharge	LTCC	LTCC
4.8-13 Cumulative Effects on Surface Hydrology and Flooding	LTCC	LTCC
4.8-14 Cumulative Effects on Risk of Loss, Injury, or Death Involving Flooding	LTCC	LTCC
4.8-15 Cumulative Effects of Inundation by Seiche, Tsunami, or Mudflow	LTCC	LTCC
4.9 Land Use and Planning		
4.9-1 Physically Divide an Established Community	LTS	LTS
4.9-2 Conflict with an Applicable Plan, Policy, or Regulation	LTS	LTS
4.9-3 Cumulative Impact on Dividing a Community or Conflicting with a Plan	LTCC	LTCC
4.10 Mineral Resources		
4.10-1 Result in the Loss of Availability of Mineral Resources	NI	NI
4.11 Noise and Vibration		
4.11-1 Noise Levels in Excess of Standards	LTS	LTS
4.11-2 Groundborne Vibration or Groundborne Noise Levels	PS	LTS
4.11-3 Permanent Increase in Ambient Noise Levels	LTS	LTS

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
4.11-4 Temporary or Periodic Increase in Ambient Noise Levels	LTS	LTS
4.11-5 Cumulative Effects of Noise Sources	LTCC	LTCC
4.12 Population and Housing		
4.12-1 Induce Substantial Population Growth	LTS	LTS
4.12-2 Displace People or Housing	LTS	LTS
4.12-3 Cumulative Inducement of Population Growth	LTCC	LTCC
4.12-4 Cumulative Impacts on Displacing People or Housing	LTCC	LTCC
4.13 Public Services, Community Facilities, and Utilities		
4.13.2-1 Demand for Fire Protection Services	LTS	LTS
4.13.2-2 Cumulative Demand for Fire Protection Services	LTCC	LTCC
4.13.3-1 Demand for Law Enforcement Services	LTS	LTS
4.13.3-2 Cumulative Demand for Law Enforcement Services	LTCC	LTCC
4.13.4-1 Demand for Additional School Facilities	LTS	LTS
4.13.4-2 Cumulative Demand for Additional School Facilities	LTCC	LTCC
4.13.5-1 Demand for Additional Park Facilities	LTS	LTS
4.13.5-2 Cumulative Demand for Parks and Recreation Facilities	LTCC	LTCC
4.13.6-1 Demand for Additional Library Facilities	LTS	LTS
4.13.6-2 Cumulative Demand for Library Facilities	LTCC	LTCC
4.13.7-1 Wastewater Treatment Facilities Exceeding Influent Flows Beyond Permitted Capacity	LTS	LTS
4.13.7-2 Demand for New or Expanded Water or Wastewater Treatment Facilities	LTS	LTS
4.13.7-3 Demand for Stormwater Drainage Facilities	LTS	LTS
4.13.7-4 Demand for Water Supplies Beyond Projections	LTS	LTS
4.13.7-5 Exceed Capacity for Wastewater Treatment	LTS	LTS
4.13.7-6 Cumulative Water Supply Impacts	LTCC	LTCC
4.13.7-7 Cumulative Wastewater Impacts	LTCC	LTCC
4.13.8-1 Demand for Solid Waste Disposal	LTS	LTS
4.13.8-2 Compliance with Solid Waste Disposal Regulations	LTS	LTS
4.13.8-3 Cumulative Solid Waste Impacts	LTCC	LTCC
4.13.9-1 Demand for Additional Energy Resources	LTS	LTS
4.13.9-2 Cumulative Energy Consumption Impacts	LTCC	LTCC
4.14 Transportation		
4.14-1 Exceedance of LOS Performance Standards		
4.14-1a Intersections	10/13 LTS	10/13 LTS

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
1. Hermosa Ave & 13th St	LTS	LTS
2. Hermosa Ave & Pier Ave	LTS	LTS
3. Pacific Coast Hwy & Artesia Blvd	PS	SU
4. Pacific Coast Hwy & Aviation Blvd	PS	SU
5. Pacific Coast Hwy & Pier Ave	LTS	LTS
6. Pacific Coast Hwy & 2nd St	LTS	LTS
7. Pacific Coast Hwy & 16th St	LTS	LTS
8. Pacific Coast Hwy & 21st St	LTS	LTS
9. Prospect Ave & Artesia Blvd	LTS	LTS
10. Prospect Ave & Aviation Blvd	LTS	LTS
11. Prospect Ave & Anita St	LTS	LTS
12. Manhattan Ave & 27th St	PS	SU
13. Valley Drive & Gould Ave	LTS	LTS
4.14-1b Roadway Segments	19/20 LTS	19/20 LTS
1. Hermosa Avenue (27th Street to 22nd Street)	LTS	LTS
2. Hermosa Avenue (22nd Street to 16th Street)	LTS	LTS
3. Hermosa Avenue (16th Street to 8th Street)	LTS	LTS
4. Hermosa Avenue (8th Street to Herondo Street)	LTS	LTS
5. Valley Drive (Gould Avenue to Pier Avenue)	LTS	LTS
6. Valley Drive (Pier Avenue to 8th Street)	LTS	LTS
7. Ardmore Avenue (16th Street to 11th Street)	LTS	LTS
8. Ardmore Avenue (8th Street to 2nd Street)	LTS	LTS
9. Pacific Coast Highway (Artesia Boulevard to Aviation Boulevard)	LTS	LTS
10. Pacific Coast Highway (Aviation Boulevard to 2nd Street)	LTS	LTS
11. Prospect Avenue (Artesia Boulevard to Aviation Boulevard)	LTS	LTS
12. Prospect Avenue (Aviation Boulevard to 2nd Street)	PS	SU
13. Artesia Blvd (Pacific Coast Highway to Prospect Avenue)	LTS	LTS
14. Aviation Blvd (Pacific Coast Highway to Prospect Avenue)	LTS	LTS
15. Pier Avenue (Hermosa Avenue to Valley Drive)	LTS	LTS
16. Pier Avenue (Ardmore Avenue to Pacific Coast Highway)	LTS	LTS
17. Gould Avenue (Ardmore Avenue to Pacific Coast Highway)	LTS	LTS
18. 8th Street (Hermosa Avenue to Valley Drive)	LTS	LTS
19. 8th Street (Pacific Coast Highway to Prospect Avenue)	LTS	LTS
20. Herondo Street (Hermosa Avenue to Valley Drive)	LTS	LTS

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
4.14-2 Conflict with the LA County Congestion Management Program	LTS	LTS
4.14-3 Air Traffic Patterns	LTS	LTS
4.14-4 Roadway Design Hazards	LTS	LTS
4.14-5 Adequate Emergency Access	LTS	LTS
4.14-6 Public Transit, Bicycle, and Pedestrian Facilities	LTS	LTS
4.14-7 Cumulative Exceedance of LOS Performance Standards	CC	CC
4.14-8 Cumulative Impact on LA County Congestion Management Program	LTCC	LTCC
4.14-9 Cumulative Effect on Air Traffic Patterns	LTCC	LTCC
4.14-10 Cumulative Roadway Design Hazards	LTCC	LTCC
4.14-11 Cumulative Effect on Emergency Access	LTCC	LTCC
4.14-12 Cumulative Effect on Public Transit, Bicycle, and Pedestrian Facilities	LTCC	LTCC

Definition	
LTS	*Less Than Significant – if impacts were identified as less than significant in the technical analysis*
PS	*Potentially Significant – if impacts were identified as potentially significant*
NI	*No Impact – if no impacts were identified in the technical analysis*
CC	*Cumulatively Considerable – if impacts, cumulative in nature, were determined to be significant*
LTCC	*Less Than Cumulatively Considerable – if impacts, cumulative in nature, were determined to be less than significant*
SU	*Significant and Unavoidable – if impacts, after feasible mitigation measures were identified, remained a significant impact and determined unavoidable in the technical analysis*

The City of Hermosa Beach considered a range of land use alternatives when formulating PLAN Hermosa. The previous public discussion of land use alternatives is distinct from the alternatives analysis presented in this EIR, although there may be overlap with certain concepts presented earlier. The purpose of the EIR alternatives is primarily to identify means to reduce or avoid significant environmental effects of the project. For this EIR, the following three alternatives to PLAN Hermosa are evaluated:

- **Alternative 1** – Retain Existing General Plan/Coastal Land Use Plan (No Project Alternative)
- **Alternative 2** – Achieve Carbon Neutrality by 2030 (2030 Carbon Neutral Alternative)
- **Alternative 3** – Stronger Retention of Visual and Cultural Resources (Character Retention Alternative)

Each alternative—with the exception of the CEQA-required No Project Alternative—was formulated to provide rational and meaningful modifications to proposed land uses that would reduce environmental impacts while still achieving most project objectives. CEQA Guidelines Section 15126.6(a) allows the City to select alternatives that would result in reduction of any significant effects of the project, but does not require reduction of all impacts to a less than significant level. Project alternatives are not required to reduce specific individual impacts of PLAN

Hermosa, as long as the City has established a reasonable range of feasible alternatives that address the significant effects of the project. Each alternative is described briefly below.

Alternative 1 – Retain Existing General Plan/Coastal Land Use Plan (No Project Alternative)

This alternative assumes that PLAN Hermosa would not be implemented and that future development would proceed as indicated in the existing General Plan and Coastal Land Use Plan. Hermosa Beach would continue to grow and develop consistent with currently allowable land uses according to the existing 1980 Land Use Element (Figure 3-3). However, redevelopment patterns would be expected to be similar to PLAN Hermosa because the same infill properties would be vacant or available for redevelopment, resulting in increased intensity of development in an identical development footprint as PLAN Hermosa. **Table 6.0-2 (Comparison of Allow/Estimated Density and Intensity)** provides an estimate of what density or intensity of development is anticipated to be allowed under the adopted General Plan, compared to the proposed densities and intensities of PLAN Hermosa. Note that the existing General Plan does not include floor area ratios (FAR) but has setback and height requirements which can be used to calculate an estimate of FAR allowed based on recently approved or constructed projects.

TABLE 6.0-2
COMPARISON OF ALLOWED/ESTIMATED DENSITY AND INTENSITY

	No Project Alternative	Proposed under PLAN Hermosa		Allowed Density/Intensity Comparison of No Project to PLAN Hermosa
Land Use Designation	Maximum	Minimum	Maximum	
Low Density (DU/AC)	13.0	2.0	13.0	Similar
Medium Density (DU/AC)	25.0	13.1	25.0	Similar
High Density (DU/AC)	33.0	25.1	33.0	Similar
Mobile Home (DU/AC)	13.0	2.0	13.0	Similar
Neighborhood Commercial (FAR)	1.0	0.5	1.0	Similar
Community Commercial (FAR)	1.75	0.5	1.25	Greater
Recreational Commercial (FAR)	2.5	1.0	1.75	Greater
Gateway Commercial (FAR)	1.5	1.0	2.0	Lesser
Service Commercial (FAR)	1.0	0.25	0.5	Greater
Light Industrial Creative (FAR)	0.75	0.25	1.0	Lesser
Public Facilities (FAR)	n/a	0.1	1.0	Similar
Open Space (FAR)	n/a	0.0	0.1	Similar
City Beach (FAR)	n/a	0.0	0.05	Similar

DU/AC = dwelling units per acre; FAR = floor area ratio.

Information on du/acre and FAR from the public review draft of PLAN Hermosa (City of Hermosa Beach 2015). Italicized lines indicate new or altered land use designations introduced through PLAN Hermosa.

This alternative is analyzed in this EIR, as it is required under CEQA Guidelines Section 15126.6(e). According to CEQA Guidelines Section 15126.6(e)(2), the "no project" analysis shall discuss "what is 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."

As shown in **Table 6.0-2**, the No Project Alternative would allow similar levels of residential development as PLAN Hermosa. For nonresidential development, the No Project Alternative would allow greater levels of development in the Community Commercial, Recreational Commercial, and Service Commercial designations, and lesser levels of development in the Gateway Commercial and Light Industrial Creative designations than proposed under PLAN Hermosa. All other nonresidential or institutional categories propose similar levels of allowed development intensity for both PLAN Hermosa and the No Project Alternative.

Additionally, as shown in **Table 6.0-3 (No Project/Existing General Plan Vehicle Miles Traveled (VMT) and Vehicle Trips Generated)**, Alternative 1 would result in 30,000 more VMT per day and 2,600 more daily vehicle trips compared to PLAN Hermosa.

TABLE 6.0-3
NO PROJECT/EXISTING GENERAL PLAN VEHICLE MILES TRAVELED (VMT) AND VEHICLE TRIPS GENERATED

Scenario	Daily Vehicle Miles Traveled	Daily Vehicle Trips
2040 No Project Alternative	356,000	37,200
2040 PLAN Hermosa	326,000	34,600

Source: City of Hermosa Beach Traffic Study 2015

Alternative 2 – Achieve Carbon Neutrality by 2030 (2030 Carbon Neutral Alternative)

This alternative would be focused on achieving a community-wide goal of carbon neutrality by 2030. Carbon neutrality is the state of achieving net zero carbon emissions, generally by balancing a measured amount of carbon released with an equivalent amount sequestered or offset by the community. There are two primary differences between this alternative and the proposed draft of PLAN Hermosa, which currently includes a goal to achieve carbon neutrality no later than the year 2040:

1) Expediting achievement of a carbon neutral goal by 10 years from 2040 to 2030.
2) Bypassing the use of carbon credits to offset carbon emissions that could not be eliminated.

Changing these two parameters would have a number of effects. While the total levels of local reductions needed to achieve a carbon neutral goal by 2030 or 2040 are virtually identical, the number of years to achieve the goal would be reduced from 24 years to 14. A 2030 goal would necessitate the implementation of new policies and programs each year to reduce emissions at a rate of 6,750 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year, compared to annual reductions of 3,975 $MTCO_2e$ per year for a 2040 goal.

To do this, the following steps would be taken to modify PLAN Hermosa to increase and accelerate the rate of carbon emissions reductions from the energy, waste, and transportation sectors:

- Require on-site renewable energy generation and zero net energy as part of all new construction and major building renovations.
- Mandate retrofits to existing buildings to improve energy efficiency at time of sale, through rental inspections, and prior to issuance of building permits.
- Eliminate the use of natural gas within the city through the installation of biogas technologies and electrification of heating and cooking appliances and fixtures within the building stock.

- Participate in a Community Choice Aggregation program or other similar program, and procure or generate renewable energy to account for 100 percent of the energy portfolio by increasing the rate of installation for local renewable energy generation sources or procuring long-term renewable energy contracts for sources outside of the city.
- Modify land use designations to facilitate mixed-use development and increase commercial and residential densities within the Community Commercial and Gateway Commercial designations to facilitate shorter trip lengths and increase the number of trips captured internally.
- Mandate public and private clean fuel and electric vehicle infrastructure to facilitate deployment of electric vehicles, neighborhood electric vehicles, and/or clean fuel vehicles.
- Modify parking standards and programs to disincentivize conventionally fueled automobile use, and incentivize alternative modes of transportation and zero-emission vehicle use through programs that include, but are not limited to, increases in the cost of public parking, elimination of parking minimums and establishment of maximums for new development, elimination of practices to assign parking spaces to particular uses, and changes to the preferential parking permit program.
- Pursue regional transportation projects and infrastructure to facilitate carbon-free regional travel options.
- Mandate transportation demand management (TDM) programs for institutions and businesses.
- Accelerate the implementation of pedestrian and bicycle network investments, electric vehicle and alternative fuel infrastructure, programs to achieve zero waste, and net zero energy requirements.

The 2030 Carbon Neutral Alternative with the added or modified policies would result in greater levels of emissions reductions compared to the policies and programs proposed in PLAN Hermosa, as noted in **Table 6.0-4 (Comparison of Emissions Reduction Scenarios 2030 vs. 2040).**

TABLE 6.0-4
COMPARISON OF EMISSIONS REDUCTION SCENARIOS 2030 VS. 2040

	2030 Scenario		2040 Scenario	
	Share of Carbon Reductions (%)	Annual Carbon Reduction (MTCO2e)	Share of Carbon Reductions (%)	Annual Carbon Reduction (MTCO2e)
Baseline 2005 Emissions		137,160		137,160
2012 Emissions	-7.7%	126,610	-7.7%	126,610
BAU Emissions (2040)	+1.2%	128,290	+5.0%	133,430
State Programs (2040)	-24.6%	33,750	-27.7%	38,010
Local Remaining Emissions to be Reduced		94,540		95,420
Building Efficiency				
New Construction Residential Efficiency	-0.8%	1,090	-1.3%	1,810
Existing Buildings Residential Efficiency	-4.4%	6,100	-4.4%	6,100
New Construction Nonresidential Efficiency	-1.2%	1,690	-2.0%	2,810
Existing Buildings Nonresidential Efficiency	-2.0%	2,770	-2.0%	2,770
Subtotal	-8.5%	11,650	-9.8%	13,490
Renewable Energy Generation				
Rooftop Solar	-5.8%	8,020	-5.9%	8,100
Community Solar	-27.0%	36,990	-0.4%	550
Community Choice Aggregation	-7.5%	10,290	-7.3%	10,010
Purchased Renewables (Green Rate)	-0.0%	0	-0.0%	0
Subtotal	-40.3%	55,300	-13.6%	18,660
Transportation + Land Use				
Land Use & Transportation Alternatives	-8.1%	11,130	-4.0%	5,500
Additional Transportation Strategies	-3.2%	4,450	-1.9%	2,560
Electric Vehicles	-5.7%	7,750	-7.4%	10,100
Subtotal	-17.0%	23,330	-13.0%	18,160
Other Sectors + Offsets				
Waste + Recycling	-2.5%	3,430	-2.5%	3,480
Water + Wastewater	-0.6%	840	-0.2%	330
Purchase Offsets	-0.0%	0	-30.1%	41,310
Subtotal	-3.1%	4,270	-32.9%	45,120
TOTAL	**-100.0%**	**94,540**	**-100.0%**	**95,420**

Source: City of Hermosa Beach 2016

Alternative 3 – Stronger Retention of Visual and Cultural Resources (Character Retention Alternative)

This alternative would focus on implementing additional policies or implementation actions that would facilitate greater retention of visual and cultural resources in Hermosa Beach. While PLAN Hermosa includes several goals and policies to address community character, historic buildings, and scenic views, they largely do so in a manner that encourages rather than mandates the protection of these resources. To facilitate greater retention of the existing visual and cultural resources in Hermosa Beach, the steps taken to modify PLAN Hermosa would include:

- Reduction in density or establishment of floor area ratios (FAR) for medium- and high-density residential (reduce capacity to encourage retention of existing buildings that contribute to the character of residential neighborhoods).
- Establishment of an overall cap or reduction in development intensity for the Community Commercial and Recreational Commercial land use designations to limit the scale and amount of additional development or increased redevelopment within those areas.
- Addition of a mixed-use designation to allow limited residential development, in conjunction with commercial uses, accommodating the projected population growth reduced through changes to medium- and high-density designations.
- Development of design standards (as opposed to guidelines) to address the compatibility of building scale, design aesthetics, and community character for residential and commercial neighborhoods.
- Addition of historic resource protection policies, including City initiation of historic landmark designation of potentially eligible historic resources.
- Achievement as a Certified Local Government (CLG) by the California Office of Historic Preservation, including establishment of an historic preservation commission.
- Development of a historic preservation plan, historic context statement, and/or historic preservation element of the General Plan.
- Establishment of view protection ordinances and development standards to physically depict building form/massing in the evaluation of a project's impact on views.
- Revision of the issuance of a demolition permit from a ministerial action to a discretionary action for those properties that have been identified as a potentially eligible historic resource.

The Character Retention Alternative, with the added or modified policies, would result in greater levels of certainty that cultural and visual resources would be retained, compared to the policies and programs proposed in PLAN Hermosa. However, the policies in this alternative may also discourage the redevelopment, reuse, or renovation of existing buildings and structures that will be necessary to improve energy efficiency and reduce carbon emissions.

6.0.3 IMPACTS OF EACH ALTERNATIVE

In the following discussion, the impacts of PLAN Hermosa for each environmental topic area considered in this EIR are described. This is followed by a description of how impacts for each alternative would differ from PLAN Hermosa, including whether impacts would be greater, lesser, or similar to the proposed project and why the alternative would result in different impacts to the proposed project. **Table 6.0-5 (Comparison of Environmental Impacts of Alternatives to PLAN Hermosa)** summarizes the impact comparison.

AESTHETICS AND VISUAL RESOURCES

Impacts of PLAN Hermosa related to adverse effects on scenic vistas, degradation of existing visual character, creation of shadows, and creation of new sources of light or glare that would adversely affect nighttime views are less than significant. No designated scenic highways are located in the planning area, so there is no impact to scenic highways. PLAN Hermosa would result in new development that could alter views and the visual character, and add new sources of shadow, light, and glare in the planning area. However, policies and actions applicable to new development would reduce these impacts to a less than significant level.

Alternative 1

The No Project Alternative would generally have similar effects on degradation of existing visual character, creation of shadows, and creation of new sources of light or glare as PLAN Hermosa. The existing General Plan has similar policies related to the preservation of aesthetic resources, especially the beaches, shoreline, and the Santa Monica Bay viewshed. However, the existing General Plan does not identify specific scenic vistas associated with the beaches, shoreline, and the Santa Monica Bay viewshed, nor does it identify the character defining features of the city's mix of neighborhoods, corridors, and districts. In the absence of these identified vistas and public viewing areas, and the absence of descriptors to identify the visual character, impacts to scenic vistas and visual character would be **greater** under this alternative than with PLAN Hermosa. This would potentially be a new significant impact and may cause greater cumulative impacts to visual resources.

Alternative 2

The 2030 Carbon Neutral Alternative would include similar policies to PLAN Hermosa to identify the locations and public viewing areas for scenic vistas and viewsheds. This alternative would also include similar descriptions of the community's character-defining features and similar policies addressing scenic resources within a state scenic highway. However, this alternative could increase the amount of renewable energy installations in Hermosa Beach by an order of magnitude (34 megawatts [MW] in PLAN Hermosa compared to 166 MW in this alternative) compared to the projections used in the draft of PLAN Hermosa, potentially in the form of solar, wind, or ocean-based renewable energy development. These renewable energy resources have the potential to create new sources of light or glare or be placed in areas adjacent to high quality scenic viewing areas or within the Santa Monica Bay viewshed. Thus, impacts to aesthetics could be **greater** than those of PLAN Hermosa.

Alternative 3

The Character Retention Alternative would incorporate additional development standards to address compatibility of building scale, design aesthetics, and community character as well as the consideration of scenic views. While this alternative would incorporate descriptions of the community's character-defining features, similar to PLAN Hermosa, it would take additional steps to further protect scenic vistas and visual character by incorporating development standards and a design review process. These design standards would guide and evaluate new construction or redevelopment projects to design buildings and structures in a manner that minimizes impacts to visual resources and provide guidance to ensure new buildings are consistent with the form, scale, and orientation of existing buildings. This alternative would also identify specific vistas and key public viewpoints of the identified vistas. The Character Retention Alternative would also potentially have lesser impacts on shade and shadow, by establishing intensities or floor area ratios for residential development, thereby facilitating greater variation of building forms to avoid creating shadow impacts. Thus, this alternative would have **lesser** impacts than PLAN Hermosa.

AIR QUALITY

Air pollutants are generated from the combustion of fuels for automobiles and small engines powering equipment for activities such as landscaping and construction. Impacts of PLAN Hermosa related to consistency with air quality plans, long-term operational emissions, carbon monoxide (CO) hot spots, toxic air contaminants, and odors are less than significant. PLAN Hermosa would result in potentially significant impacts related to short-term construction emissions. These impacts would remain significant and unavoidable even after implementation of PLAN Hermosa policies and implementation actions.

Alternative 1

The No Project Alternative results in similar amounts of residential and commercial development as PLAN Hermosa; however, this alternative would result in an increase of approximately 30,000 daily vehicle miles traveled (VMT) and 2,600 daily vehicle trips (VT). Fuel consumption from vehicle trips is a primary determinant in the emittance of several air quality pollutants, and contributes to CO hot spots and toxic air contaminants. Therefore, this alternative would result in relatively **greater** impacts related to violating long-term air quality standards, CO hot spots, and toxic air contaminants compared to PLAN Hermosa. Similarly, due to the greater VMT and VT, this alternative would be potentially inconsistent with the South Coast Air Quality Management District's (SMAQMD) Air Quality Management Plan and would have greater cumulative impacts on air quality. Since this alternative would result in similar levels of construction compared to the proposed project, it would have similar air quality impacts related to short-term emissions and would have similar impacts on odors.

Alternative 2

Under the 2030 Carbon Neutral Alternative, the quantity of internal combustion engines in the city would be reduced at a greater rate and would be replaced with electric equipment and vehicles at a greater rate. Thus, because the decrease would occur more quickly and there would be a greater rate of conversion, there would be fewer transportation-related pollutants generated locally, resulting in **lesser** impacts related to consistency with the Air Quality Management Plan, long-term operational emissions, CO hot spots, and toxic air contaminants. Since this alternative would result in greater levels of construction compared to PLAN Hermosa, it would have higher air quality impacts related to short-term construction-related emissions and would have similar impacts on odors.

Alternative 3

The Character Retention Alternative proposes to reduce density or establish floor area ratios (FAR) for medium- and high-density residential to encourage the retention of existing buildings that contribute to the character of residential neighborhoods. This would in effect discourage redevelopment of existing parcels, which would reduce the amount of emissions generated by construction equipment, resulting in fewer impacts from or a lower likelihood of violating air quality standards on a short-term basis. This alternative would otherwise have similar mobility and transportation policies, resulting in **similar** impacts to PLAN Hermosa related to consistency with the Air Quality Management Plan, long-term operational emission, CO hot spots, toxic air contaminants, and odors. This would result in similar cumulative air quality impacts compared to PLAN Hermosa.

BIOLOGICAL RESOURCES

PLAN Hermosa was evaluated to determine whether its adoption and implementation would cause adverse effects to special-status species, sensitive natural communities, and wildlife movement. The majority of the planning area is urbanized, and limited areas of habitat are

focused along the beach and shoreline, where no change in the developed footprint is planned. The Draft EIR has found that, after mitigation, no significant biological impacts would occur.

Alternative 1

Although the existing General Plan lacks some of the specific policies and programs requiring consideration of biological resources in development decisions, the current General Plan does not envision development or changes to existing open space areas along the beach and shoreline that would potentially affect biological resources. By retaining existing open spaces along the beach and shoreline, Alternative 1 would have impacts to sensitive biological communities, wetlands, movement or migration of wildlife, and conflicts with species protection policies, similar to those identified for PLAN Hermosa. However, impacts to special-status species have been identified as a potentially significant impact under PLAN Hermosa, but lowered to a less than significant impact with a mitigation measure to require any construction on the beach proposed to occur during the summer months to conduct preconstruction surveys for western snowy plovers or California least terns, and not allowing any construction on the beach to occur if the surveys identify these species as roosting. Since this alternative proposes a continuation of existing adopted policy, there is no discretionary action and associated environmental review required to implement mitigation of this impact. Thus, the impacts on special-status species would be potentially **greater** under the No Project Alternative.

Alternative 2

The 2030 Carbon Neutral Alternative would follow the same general footprint of development and policies as PLAN Hermosa. However, this alternative may introduce additional renewable energy resources—including solar, wind, or ocean-based renewable energy sources—each of which may have varying adverse effects on special-status species, sensitive natural communities, and wildlife migration. While the potential impacts to California least terns and western snowy plovers could be mitigated with similar measures identified for PLAN Hermosa, the potential introduction of ocean-based renewable energy sources may cause impacts to other special-status species, particularly marine mammals such as cetaceans (whales, dolphins, and porpoises), pinnipeds (seals and sea lions), and sea otters, which are protected under the Marine Mammal Protection Act. Additionally, both ocean- and land-based renewable energy resources have been known to alter or impact the movement and migration of wildlife species. Since the location, size, technology, and design of any new renewable energy resources cannot be identified at this time, further study of the potential impacts and additional mitigation measures or implementation actions may be needed to protect sensitive biological habitats and wildlife movement or migration and to reach a less than significant impact related to biological resources for this alternative. Thus, impacts to special-status species, movement and migration of wildlife species, and cumulative effects on biological resources may be **greater** than those of PLAN Hermosa.

Alternative 3

The Character Retention Alternative would include similar policies related to biological resources and generally follows the same development footprint or urbanized area as PLAN Hermosa. Additionally, this alternative does not envision development or changes to existing open space areas along the beach and shoreline that could potentially affect biological resources. While a potentially significant impact to special-status species has been identified for PLAN Hermosa, this alternative could similarly incorporate a mitigation measure to require any construction on the beach proposed to occur during the summer months to conduct preconstruction surveys for western snowy plovers or California least terns, and not allow any construction on the beach to occur if the surveys identify these species as roosting. Therefore, biological resources impacts with this alternative would be **similar** to PLAN Hermosa.

CULTURAL RESOURCES

Impacts of PLAN Hermosa related to archaeological, paleontological, cultural, and historic resources are considered potentially significant. With the application of mitigation measures, the impacts to archaeological and paleontological resources would be reduced to less than significant. PLAN Hermosa, with application of mitigation measures, would still be considered a significant and unavoidable impact causing substantial change to the significance of a historical resource. With redevelopment and reuse of existing properties, as opposed to development of vacant land, as the primary means to reinvestment in Hermosa Beach in the future, the risk of potentially historic buildings or structures being demolished or substantially modified is high.

Alternative 1

The No Project Alternative would retain the policies and programs of the existing General Plan. Such policies related to cultural and historic resources are included in the Urban Design Element, but do not preclude property owners from demolishing or significantly altering older buildings and identified potentially historic resources. Since PLAN Hermosa includes an inventory of potentially historic resources, additional policies, and a set of implementation actions, this alternative would result in potentially greater impacts to historic resources than the plan. Additionally, impacts to archaeological and paleontological resources are less than significant because of the inclusion of specific implementation actions to require archaeological investigations for future projects involving ground-disturbing activities in areas that have not been previously surveyed and/or determined sensitive for cultural resources. Since this alternative proposes a continuation of existing adopted policy, there is no discretionary action or associated environmental review required to implement mitigation measures to reduce impacts. Thus, the impacts on archaeological and paleontological resources would be potentially greater under this alternative. On a cumulative basis, this alternative would likely cause **greater** impacts to cultural resources than PLAN Hermosa.

Alternative 2

Potential impacts to archaeological or paleontological resources and disturbance of human remains would be similar to PLAN Hermosa under this alternative because Alternative 2 would have similar implementation actions to address future ground-disturbing activities.

However, this alternative would likely result in greater alterations or demolitions to the existing building stock to increase the installation of solar panels on the majority of rooftops in Hermosa Beach, achieve deep energy renovations of existing buildings, and result in a greater number of buildings being torn down and rebuilt as zero net energy and high-performance buildings. While the installation of energy-efficient equipment or renewable energy technology would not necessarily damage or alter designated or potentially historic resources, additional guidance and technical information would be needed to describe how historic properties can incorporate sustainable practices to reduce energy consumption, while maintaining those characteristics that make historic properties significant. Unless additional policies are identified to prohibit the demolition or significant alteration of potentially historic resources, impacts to historical resources would still be expected to be significant and unavoidable and would likely be somewhat **greater** under this alternative given the level of alterations to building stock needed to achieve higher energy performance. Potential impacts to historical resources on a cumulative basis, which is identified as a significant and unavoidable impact with PLAN Hermosa, would also be somewhat greater under this alternative.

Alternative 3

The Character Retention Alternative would incorporate similar implementation actions as PLAN Hermosa to address archaeological and paleontological resources, and therefore would have

similar impacts on those resources. However, this alternative would incorporate additional policies and programs to directly or indirectly address cultural and specifically historic resources. Additional policies or implementation actions under this alternative would include:

- Addition of historic resource protection policies, including City initiation of historic landmark designation of potentially eligible historic resources.
- Achievement as a Certified Local Government (CLG) by the California Office of Historic Preservation, including establishment of an historic preservation commission.
- Development of a historic preservation plan, historic context statement, and/or historic preservation element of the General Plan.
- Reduction in density or establishment of floor area ratios (FAR) for medium- and high-density residential (reduce capacity to encourage retention of existing buildings that contribute to the character of residential neighborhoods).
- Revision of the issuance of a demolition permit from a ministerial action to a discretionary action for those properties that have been identified as a potentially eligible historic resource.

These specific additions proposed for this alternative are intended to provide additional oversight and information or regulation to preserve both designated historic resources and potentially eligible resources. Thus, the impacts and cumulative effects on historic resources, under this alternative, would be **lesser** than with PLAN Hermosa, although the impact may not necessarily be reduced to a less than significant level.

GEOLOGY AND SOILS

Implementation of PLAN Hermosa, including future land uses consistent with the Land Use Map, would provide for construction of new uses in areas potentially subject to seismic ground shaking, soil liquefaction and ground failure, and earthquake-induced landslides. New land uses would also potentially be exposed to erosion hazards and to expansive and collapsible soils. However, PLAN Hermosa policies and implementation actions require enforcement of regulations, programs, and building code requirements. All geology and soils impacts of PLAN Hermosa would be less than significant.

Alternative 1

The No Project Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa and would follow the same general footprint of development; therefore, the number of people and structures subject to potential geological hazards would be similar. The same regulations and building code requirements would apply to new development under this alternative. Thus, impacts related to geology and soils, including fault rupture, soil erosion, and unstable expansive soils, would be **similar** to those with PLAN Hermosa.

Alternative 2

The 2030 Carbon Neutral Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa and would follow the same general footprint of development; therefore, the number of people and structures subject to potential geological hazards would be similar. The same regulations and building code requirements would apply to new development under this alternative. Thus, impacts related to geology and soils, including fault rupture, soil erosion, and unstable expansive soils, would be **similar** to those with PLAN Hermosa.

Alternative 3

The Character Retention Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa and would follow the same general footprint of development; therefore, the number of people and structures subject to potential geological hazards would be similar. The same regulations and building code requirements would apply to new development under this alternative. Thus, impacts related to geology and soils, including fault rupture, soil erosion, and unstable expansive soils, would be **similar** to those with PLAN Hermosa.

GREENHOUSE GAS EMISSIONS

PLAN Hermosa includes numerous policies and implementation actions to address and dramatically reduce greenhouse gas (GHG) emissions. While the generation of GHG emissions is identified as a potentially significant impact with the proposed project, the mitigation measures establish interim GHG reduction goals and requirements to evaluate progress a minimum of every five years, and to adjust policies or programs if Hermosa Beach is not on track to achieve long-term targets. The policies and actions identified in PLAN Hermosa are designed to comply with local GHG reduction planning efforts and policies, including the 2011 Hermosa Beach Sustainability Plan and the Municipal Carbon Neutral Goal for 2020, and are consistent with the State's long-term GHG reduction targets articulated under Assembly Bill (AB) 32, Senate Bill (SB) 32, and the AB 32 Scoping Plan. With these mitigation measures, PLAN Hermosa would result in less than significant impacts related to GHG emissions and would not conflict with any applicable plans, policies, or regulations.

Alternative 1

Impacts related to the generation of GHG emissions have been identified as potentially significant under PLAN Hermosa, but are lowered to a less than significant impact with mitigation measures to establish interim GHG reduction goals and requirements to evaluate progress a minimum of every five years, and to adjust policies or programs if Hermosa Beach is not on track to achieve long-term targets. Since this alternative proposes a continuation of existing adopted policy, there is no discretionary action and associated environmental review required and therefore no mitigation measures.

This alternative would result in similar amounts of residential and commercial development as PLAN Hermosa; however, because of the location and distribution of uses allowed, this alternative would result in an increase of approximately 30,000 VMT per day and 2,600 additional daily vehicle trips. Additionally, Alternative 1 would not include the policies and implementation actions identified in PLAN Hermosa that would reduce operational emissions from other sources such as energy use, waste disposal, and water consumption. Therefore, this alternative would result in **greater** impacts related to GHG emissions compared to PLAN Hermosa. Similarly, this alternative would not include policies and actions that reduce GHG emissions to the levels identified by the City's 2011 Sustainability Plan and the Municipal Carbon Neutral Goal for 2020. Therefore, impacts related to consistency with applicable GHG reduction plans would be **greater**.

Alternative 2

Under the 2030 Carbon Neutral Alternative, a greater quantity of emissions would be reduced by 2030. The key policies incorporated into this alternative include:

- Require on-site renewable energy generation and zero net energy as part of all new construction and major building renovations.
- Mandate retrofits to existing buildings to improve energy efficiency at time of sale, through rental inspections, and prior to issuance of building permits.

- Eliminate the use of natural gas within the city through the installation of biogas technologies and electrification of heating and cooking appliances and fixtures within the building stock.
- Participate in a Community Choice Aggregation program or other similar program and procure or generate renewable energy to account for 100 percent of the energy portfolio by increasing the rate of installation for local renewable energy generation sources or procuring long-term renewable energy contracts for sources outside of the city.
- Modify land use designations to facilitate mixed-use development and increase commercial and residential densities within the Community Commercial and Gateway Commercial designations to facilitate shorter trips lengths and increase the number of trips captured internally.
- Mandate public and private clean fuel and electric vehicle infrastructure to facilitate deployment of electric vehicles, neighborhood electric vehicles, and/or clean fuel vehicles.
- Modify parking standards and programs to disincentivize conventionally fueled automobile use, and incentivize alternative modes of transportation and zero-emission vehicle use through programs that include, but are not limited to, increases in the cost of public-parking, elimination of parking minimums and establishment of maximums for new development, elimination of practices to assign parking spaces to particular uses, and changes to the preferential parking permit program.
- Pursue regional transportation projects and infrastructure to facilitate carbon-free regional travel options.
- Mandate transportation demand management (TDM) programs for institutions and businesses.
- Accelerate the implementation of pedestrian and bicycle network investments, electric vehicle and alternative fuel infrastructure, programs to achieve zero waste, and net zero energy requirements.

However, the certainty in which emissions could be reduced when relying, even if to a lesser extent than PLAN Hermosa, on voluntary and incentive-based measures remains. Therefore, similar mitigation measures to ensure emissions reductions were achieved by the identified target years would be required. More aggressive implementation of programs and policies to achieve a goal of community-wide carbon neutrality by 2030 rather than 2040 would set the City of Hermosa Beach up to exceed state greenhouse gas reduction targets earlier, and therefore would have **lesser** impacts related to GHG emissions than PLAN Hermosa. This alternative would similarly include policies and actions that reduce GHG emissions to levels that meet or exceed local plans such as the 2011 Hermosa Beach Sustainability Plan and the Municipal Carbon Neutral Goal for 2020 and would therefore have a **similar** impact on applicable plans, policies, or regulations compared to PLAN Hermosa.

Alternative 3

The Character Retention Alternative proposes to reduce density or establish floor area ratios (FAR) for medium- and high-density residential to encourage the retention of existing buildings that contribute to the character of residential neighborhoods. This would in effect discourage redevelopment of existing parcels, which would result in lower construction-related emissions, but would also discourage the development of higher-performance buildings or the installation of renewable energy systems, a key strategy to reducing GHG emissions. The mobility policies and implementation actions in this alternative would mirror those proposed in PLAN Hermosa, resulting in similar levels of transportation-related reductions in GHG emissions. Waste reduction, water

conservation, and some energy efficiency measures, similar to PLAN Hermosa, would still be implemented under Alternative 3.

Given that energy-related emissions account for 41 percent of the emissions profile for Hermosa Beach and that this alternative may decrease the GHG reduction potential from energy sources, the GHG impacts under this alternative would be **greater** than with PLAN Hermosa. However, the implementation of policies and actions related transportation, waste, and water/wastewater and the incorporation of similar mitigation measures to PLAN Hermosa means that Alternative 3 may not necessarily result in a significant impact. Similarly, this alternative would have **similar** impacts, compared to PLAN Hermosa, related to consistency with applicable GHG reduction plans, policies, and regulations.

HAZARDS AND HAZARDOUS MATERIALS

Implementation of PLAN Hermosa could result in increased routine use, transport, and disposal of hazardous materials, including the potential for hazardous materials handling near schools and development on sites included on the Cortese List. However, compliance with existing hazardous materials regulations and PLAN Hermosa policies and implementation actions would result in less than significant impacts related to the transport, use, or disposal of hazardous materials, emission or handling of hazardous materials near schools, and consistency with adopted emergency response plans.

As it relates to the accidental release of hazardous materials into the environment, PLAN Hermosa has been identified to have a potentially significant impact due to the known contamination at the City of Hermosa Beach Maintenance Yard and the potential for unknown contamination at other sites throughout the city. To mitigate the potential impacts, this EIR includes mitigation measures to require the development and implementation of a Human Health Risk Assessment and Remedial Action Plan for any development activities at the City Maintenance Yard, and requirements for future projects involving hazardous materials to stop work, identify the scope, coordinate with the appropriate agencies, and conduct the necessary remediation. With these measures, the impacts related to the accidental release of hazardous materials is mitigated to a less than significant level.

Alternative 1

The No Project Alternative results in similar amounts and the same general footprint of residential and commercial development as PLAN Hermosa; therefore, the volume of materials used and transported, and the number of people subject to potential hazards through routine use and transport of materials, would be similar. The use and transportation of hazardous materials would be subject to the same federal, state, and local regulations as identified for PLAN Hermosa. Impacts related to hazards and hazardous materials would be **similar**.

Alternative 2

The 2030 Carbon Neutral Alternative would result in similar amounts and the same general footprint of residential and commercial development as PLAN Hermosa; therefore, the volume of material used and transported, and the number of people subject to potential hazards through routine use and transport of materials, would be similar. The use and transportation of hazardous materials would be subject to the same federal, state, and local regulations as identified for PLAN Hermosa. Impacts related to hazards and hazardous materials would be **similar** with this alternative.

Alternative 3

The Character Retention Alternative would result in slightly less but the same general footprint of residential and commercial development as PLAN Hermosa; therefore, the volume of material used and transported, and the number of people subject to potential hazards through routine use and transport of materials, would be similar. The use and transportation of hazardous materials would be subject to the same federal, state, and local regulations as identified for PLAN Hermosa. Impacts related to hazards and hazardous materials would be **similar**.

HYDROLOGY AND WATER QUALITY

Development under PLAN Hermosa would result in infill development and a slight increase in impervious surfaces in a largely built-out environment. Development would not result in increased erosion. Development under PLAN Hermosa would not significantly affect water quality or flooding potential and hazards. Implementation of PLAN Hermosa policies and implementation actions and compliance with existing regulations would result in less than significant impacts to water quality, groundwater recharge, and stormwater drainage patterns related to erosion. Similarly, PLAN Hermosa identifies policies, programs, and implementation actions that would reduce impacts related to flooding from anticipated sea level rise to less than significant.

Alternative 1

Compliance with the existing General Plan and enforcement of existing regulations would result in similar water quality and flood hazard impacts, including impacts related to seiche or mudflow. The No Project Alternative includes a similar development footprint, resulting in similar impacts related to stormwater flows (including erosion and flooding) and groundwater recharge. While the existing General Plan does not include policies to address the current standards or regulations related to water quality, groundwater recharge, surface hydrology, and flood hazard areas, the City's existing code requirements related to stormwater compliance and use of low impact development standards to reduce stormwater runoff would ensure that impacts related to these topics are less than significant.

This alternative would not include the policies, programs, and actions related to resiliency and the mitigation of potential sea level rise. Current sea level rise projections identify that the 100-year flood zone could be expanded up to 300 percent—from approximately 22 acres currently to 64 acres in Hermosa Beach—by the end of the twenty-first century with 55 inches of sea level rise. In Hermosa Beach, there are currently no structures or roadways located within the 100-year flood zone, but with 55 inches of sea level rise, approximately 200 existing buildings and nearly 1,000 residents could be located in an expanded flood zone and thereby exposed to loss, injury, or death involving flooding. Therefore, Alternative 1 would have **greater** impacts related to hydrology and water quality, specifically as it relates to impacts involving flood hazard areas.

Alternative 2

The 2030 Carbon Neutral Alternative includes a similar development footprint, resulting in similar impacts related to stormwater flows (including erosion and flooding) and groundwater recharge. This alternative would also include the policies, programs, and actions related to resiliency and the mitigation of potential sea level rise. Therefore, Alternative 2 would have **similar** impacts related to hydrology and water quality.

Alternative 3

The Character Retention Alternative includes a similar development footprint, resulting in similar impacts related to stormwater flows (including erosion and flooding) and groundwater recharge. This alternative would also include the policies, programs, and actions related to resiliency and

the mitigation of potential sea level rise. Therefore, Alternative 3 would have **similar** impacts related to hydrology and water quality.

LAND USE AND PLANNING

The environmental analysis for PLAN Hermosa examined potential impacts related to consistency with applicable local and regional land use regulations including the Hermosa Beach Zoning Ordinance, California Coastal Act, Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), South Coast Air Quality Management Plan, and Beach Cities Livability Plan. The review included a detailed assessment of consistency with the California Coastal Act and SCAG's RTP/SCS and found that PLAN Hermosa is consistent with the goals and policies of these applicable regulations and plans and therefore would have a less than significant impact.

The proposed land use changes identified in PLAN Hermosa follow established land use patterns and would not divide an existing community, resulting in a less than significant impact requiring no mitigation measures. Implementation of PLAN Hermosa policies and implementation actions would result in less than significant impacts related to the division of existing communities and consistency with applicable land use plans.

Alternative 1

The No Project Alternative would not divide existing communities because it would continue to allow development in conformance with the established land use patterns in the community. The existing General Plan, which would be continued under this alternative, is generally consistent with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy and with air quality plans. Although the existing General Plan's policies and programs meet many of the goals of the RTP/SCS, it does not have the same emphasis on sustainability and a reduction in vehicle miles traveled as PLAN Hermosa. Additionally, the existing Coastal Land Use Plan, which would be continued under this alternative, does not address certain topics of the California Coastal Act—including public access, low-cost visitor and recreational facilities, and flood hazards—at a level that meets today's standards or expectations. As a result, this alternative would have a **greater** impact related to consistency with other plans.

Alternative 2

Under the 2030 Carbon Neutral Alternative, the proposed land use mix would be adjusted, allowing mixed-use and professional office uses, and would allow additional neighborhood-serving uses in some neighborhoods. This would be done with the express intent to reduce vehicle miles traveled, improve the jobs-housing balance, and allow a greater percentage of residents to reach daily goods and services on bike or foot or by electric vehicle. Under this alternative, the City's land use plan would be aligned with the intent of the RTP/SCS. Alternative 2 would also incorporate policies and implementation actions, similar to PLAN Hermosa, to address the California Coastal Act. Therefore, the impacts would be **similar** to PLAN Hermosa.

Alternative 3

With the Character Retention Alternative, some land use designations would be adjusted to discourage redevelopment of medium- and high-density residential uses and instead allow some residential development to occur within a mixed-use designation. This alternative would have a similar amount of overall allowable development and would identify sufficient land area in which redevelopment may occur to be consistent with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy and with air quality plans. This alternative would retain a similar emphasis on sustainability policies and policies to reduce vehicle miles traveled as PLAN Hermosa. The alternative would also incorporate policies and implementation actions similar to

PLAN Hermosa to address the California Coastal Act. Therefore, Alternative 3 would have a **similar** impact related to consistency with other plans.

MINERAL RESOURCES

The entirety of Hermosa Beach is classified as Mineral Resource Zone 3 (MRZ-3) under the California Mineral Land Classification System. In MRZ-3 areas, mineral resources are present, but the significance of the resource is considered speculative because no mining has historically occurred in the area. Additionally, the City of Hermosa Beach currently prohibits drilling for oil within the city. A vote of the people would be required to lift the existing ban. A ballot measure in 2015, Measure O, proposed to lift the existing ban, but failed at a rate of four to one. Therefore, PLAN Hermosa would have no impact on mineral resources, and each alternative would **similarly** have no impact because these resources can no longer be feasibly extracted.

NOISE AND VIBRATION

The environmental analysis for PLAN Hermosa examined potential noise and vibration impacts associated with future transportation levels and land use activities. Evaluated noise and vibration sources include transportation sources, bars and restaurants, events and parties, commercial and industrial activities, construction and demolition activity, and refuse collection. These noise and vibration sources were found to have a less than significant impact on noise standards, periodic and permanent increases in ambient noise levels, and cumulative effects of noise sources.

However, the Draft EIR has found that groundborne vibration and noise levels with the implementation of PLAN Hermosa could have a potentially significant impact. To mitigate this impact, new development that may cause exceedance of groundborne vibration and noise standards would be required to have a report prepared by a structural engineer identifying the vibration limits and specifying measures and a monitoring plan to mitigate the site-specific impacts. With the incorporation of this mitigation measure, all noise-related impacts from PLAN Hermosa would be considered less than significant.

Alternative 1

The No Project Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa, resulting in similar impacts to temporary or periodic increases in ambient noise levels. This alternative would, however, result in an increase of approximately 30,000 VMT and 2,600 VT, and would subsequently generate additional sources of transportation-related noise that could exceed noise standards or create a permanent increase in ambient noise levels causing impacts that are **greater** than PLAN Hermosa.

Additionally, impacts related to groundborne noise and vibration levels have been identified as a potentially significant impact under PLAN Hermosa, but lowered to a less than significant impact with a mitigation measure to require the preparation of a report by a structural engineer identifying the vibration limits and specifying measures and a monitoring plan to mitigate the site-specific impacts for new development projects. Since this alternative proposes a continuation of existing adopted policy, there is no discretionary action or associated environmental review required and therefore no mitigation measures. Thus, the impacts to groundborne noise and vibration standards would be potentially **greater** under Alternative 1.

Alternative 2

The 2030 Carbon Neutral Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa, resulting in similar impacts to temporary or periodic increases in ambient noise levels and groundborne noise or vibration sources. This alternative would similarly

incorporate a mitigation measure applied to new development projects to reduce impacts related to groundborne noise and vibration sources.

This alternative would also lower VMT by an additional 12 percent, compared to PLAN Hermosa (25 percent in Alternative 2 compared to 13 percent in PLAN Hermosa). With automobile use a primary contributor to ambient noise levels, a reduction in vehicle trips would also result in a reduction in automobile-related noise to a lesser impact than with PLAN Hermosa. Thus, this alternative would overall have **lesser** impacts on noise levels than PLAN Hermosa due to the reduction in transportation noise.

Alternative 3

With the Character Retention Alternative, the goals, policies, and implementation actions related to transportation, events, and commercial activity would largely mirror PLAN Hermosa. These sources of noise would have a similar effect to the proposed project; however, there would potentially be fewer sources of construction/demolition noise and vibration and temporary increases in ambient noise levels due to reduced construction activity compared to PLAN Hermosa. Overall, this alternative would have **lesser** impacts to noise and vibration, depending on the source of noise.

POPULATION AND HOUSING

The environmental analysis examined the potential of PLAN Hermosa to induce population growth or to displace people or housing. PLAN Hermosa provides accommodation for a limited increase in population (660 residents), housing (300 units), and employment (2,400 jobs) in Hermosa Beach over the next 25 years. PLAN Hermosa includes policies to manage this anticipated growth and focus it in certain infill areas while maintaining existing density in established residential neighborhoods. Therefore, the Draft EIR has found that PLAN Hermosa would have a less than significant impact related to the displacement of people or housing, nor would the plan induce population growth directly or indirectly.

Alternative 1

The No Project Alternative would follow the same general footprint of development and housing-related policies and allow similar amounts of residential and commercial development as PLAN Hermosa, generating a modest level of growth in population, housing, and employment over the next 25 years. This alternative would have a **similar** impact on population and housing as PLAN Hermosa.

Alternative 2

The 2030 Carbon Neutral Alternative would follow the same general footprint of development and housing-related policies; thus, impacts would be largely the same as those of PLAN Hermosa. Generally, the same amount of residential growth would be expected with this alternative. Nonresidential growth would be similar in magnitude, but different in type, with less regional-serving commercial development and more professional office development. Thus, the impacts of Alternative 2 related to population growth and displacement would be **similar** to PLAN Hermosa.

Alternative 3

The Character Retention Alternative would reduce the development capacity in medium- and high-density residential land uses, and correspondingly introduce a new designation to allow limited residential development as part of a mixed-use development. These two actions under Alternative 3 would have the same amount of residential development capacity of approximately 300 units, which would accommodate roughly the same population as the proposed project.

Nonresidential development capacity and policies to create additional employment opportunities would mirror those of PLAN Hermosa. Thus, the impacts of this alternative related to population growth and displacement would be **similar** to PLAN Hermosa.

PUBLIC SERVICES, COMMUNITY FACILITIES, AND UTILITIES

The environmental analysis examined the potential impacts of PLAN Hermosa on fire protection and emergency medical services, law enforcement services, public schools, parks and recreation, library facilities, water supply and service, wastewater services, solid waste services, and energy. PLAN Hermosa would have less than significant impacts related to the provision of fire protection, law enforcement, school, park, library, wastewater conveyance and treatment, stormwater drainage, water supply, and solid waste generation facilities and services.

Alternative 1

The No Project Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa. However, the current General Plan, which would be continued under this alternative, does not include the same focus on conservation of resources and sustainability policies and programs that are contained in PLAN Hermosa. A lesser focus on resource conservation policies would generally result in greater consumption or disposal of water, wastewater, solid waste, and energy, which could contribute to greater impacts on wastewater treatment facilities, water supply, solid waste facilities, and energy consumption on an individual and cumulative basis. Therefore, impacts related to the provision of public services and utilities would be **greater**.

Alternative 2

The 2030 Carbon Neutral Alternative would follow the same general footprint of development and public services–related policies; thus, demand for public services would be largely the same as those with PLAN Hermosa. However, this alternative would require significant public investment to be implemented, and additional City spending might ultimately impact funding for public services. Thus, the impacts of Alternative 2 are expected to be **similar** to PLAN Hermosa as long as funding for public services is not significantly diverted for emissions reduction projects and programs.

Alternative 3

The Character Retention Alternative would follow the same general footprint of development and would include similar public services–related policies as PLAN Hermosa. This alternative would also include similar sustainability and resource conservation policies as the plan. Thus, demand for public services would be largely the same as those of PLAN Hermosa, and impacts to public services under this alternative are expected to be **similar** to the plan.

TRANSPORTATION

The environmental analysis of the proposed project examined direct and cumulative impacts related to congestion and level of service (LOS) standards, conflicts with the Los Angeles County Congestion Management Program, conflicts to air traffic patterns, creation of design hazards, impacts to emergency vehicle access, and impacts to transit, bicycle, and pedestrian facilities. Impacts related to conflict with the Congestion Management Program, design hazards, emergency access, and public transit, bicycle, and pedestrian facilities would be less than significant.

As it relates to LOS standards, PLAN Hermosa was evaluated for potential impacts to 13 intersections and 20 roadway segments in Hermosa Beach. Based on the analysis of volume-to-capacity ratios for these study intersections and roadway segments, three intersections and one

roadway segment would operate at a reduced level of service compared to existing conditions, thereby causing a potentially significant impact. The three intersections where level of service would be LOS D or lower are Pacific Coast Highway and Artesia Boulevard; Pacific Coast Highway and Aviation Boulevard, and Manhattan Avenue and 27th Street.

Opportunities to apply physical mitigations at these intersections to improve LOS were investigated, but were ultimately deemed infeasible because they would conflict with other impact areas, potentially adding roadway hazards or decreasing safety for other modes of transportation. Therefore, impacts to these three intersections would be considered a significant and unavoidable impact.

Through implementation of PLAN Hermosa, the roadway segment on Prospect Avenue from Aviation Boulevard to 2nd Street would be degraded from its current operation at LOS C to LOS D by 2040. While this operation is improved from the projected LOS E that would be experienced under the 2040 scenario without PLAN Hermosa, it still represents a potentially significant impact. Opportunities to expand roadway volume on this segment through physical changes to the street were explored but were ultimately deemed infeasible. In order to mitigate this impact, Prospect Avenue would need to be widened to accommodate an additional lane of travel in each direction, which would require removal of on-street parking and/or expansion of the street right-of-way. This would additionally conflict with other impact areas, potentially adding roadway hazards or decreasing safety for other modes of transportation. Therefore, the impacts to this roadway segment would be considered a significant and unavoidable impact.

Alternative 1

The No Project Alternative would generate similar amounts of residential and commercial development as PLAN Hermosa; however, this alternative would result in an increase of approximately 30,000 daily VMT and 2,600 daily VT. Alternative 1 was evaluated specifically for impacts to the 13 study intersections and 20 roadway segments. The analysis identified that nine of the 13 study intersections would have greater impacts, including greater impacts to all three intersections identified as significant and unavoidable impacts, and that five of the 20 roadway segments would experience greater impacts than with PLAN Hermosa. Therefore, this alternative would result in **greater** impacts related to level of service performance standards compared to the plan.

Additionally, the No Project Alternative would not include the policies and implementation actions that would balance the need for complete streets and alternative modes of transportation with efficient movement of vehicles. Therefore, impacts related to conflict with the Congestion Management Program, design hazards, emergency access, and public transit, bicycle, and pedestrian facilities would also be **greater** compared to PLAN Hermosa.

Alternative 2

Under the 2030 Carbon Neutral Alternative, a suite of additional land use and transportation measures would be implemented with the express intent of reducing vehicle miles traveled by shortening trip lengths, eliminating trips, and shifting trips from conventionally fueled automobiles to electric vehicles powered by renewable energy sources. The policies to reduce total vehicle miles traveled would reduce VMT by an additional 13 percent, which would reduce the congestion burden on the road network. This alternative would support improvements to the level of service at the three intersections identified as having significant and unavoidable impacts under PLAN Hermosa, though may not necessarily mitigate impacts to a level that is less than significant. For roadway segments, this alternative would improve LOS performance of four roadway segments, although it may not mitigate impacts to a less than significant level for impacted roadway segments.

Additionally, Alternative 2 would include similar policies and implementation actions that would balance the need for complete streets and alternative modes of transportation with efficient movement of vehicles. Therefore, impacts related to conflict with the Congestion Management Program, design hazards, and emergency access would be **similar** compared to PLAN Hermosa, while impacts to public transit, bicycle, and pedestrian facilities would be **lesser** than with the plan due to greater implementation of TDM measures and pursuit of regional transportation options.

Alternative 3

The Character Retention Alternative would generate similar amounts of residential and commercial development as PLAN Hermosa. Additionally, this alternative would retain transportation and mobility goals, policies, and implementation actions that mirror PLAN Hermosa to balance the need for complete streets and alternative modes of transportation with the efficient movement of vehicles. Therefore, impacts related to conflict with the Congestion Management Program, design hazards, emergency access, and public transit, bicycle, and pedestrian facilities would be **similar** to the plan.

6.0.4 SUMMARY OF IMPACTS OF EACH ALTERNATIVE COMPARED TO PLAN HERMOSA

The factors that may be used to eliminate alternatives from detailed consideration in an EIR include (1) failure to meet most of the basic project objectives, (2) infeasibility of implementation, or (3) inability to lessen or avoid significant environmental effects (CEQA Guidelines Section 15126.6[c]). A summary of how each alternative compares to these factors is provided following **Table 6.0-5 (Comparison of Environmental Impacts of Alternatives to PLAN Hermosa),** which summarizes the environmental impacts of each alternative and compares these relative impacts to the environmental impacts of PLAN Hermosa.

TABLE 6.0-5
COMPARISON OF ENVIRONMENTAL IMPACTS OF ALTERNATIVES TO PLAN HERMOSA

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.1 Aesthetics and Visual Resources			**Greater**	**Greater**	**Lesser**
4.1-1 Scenic Vistas and Viewsheds	PS	LTS	▲	▲	▼
4.1-2 Scenic Resources within a State Scenic Highway	LTS	LTS	●	●	●
4.1-3 Visual Character	LTS	LTS	▲	●	▼
4.1-4 Shade and Shadow	LTS	LTS	●	●	▼
4.1-5 Light or Glare	LTS	LTS	●	▲	●
4.1-6 Cumulative Visual Resources	LTCC	LTCC	▲	▲	▼
4.2 Air Quality			**Greater**	**Lesser**	**Similar**
4.2-1 Applicable Air Quality Plan	LTS	LTS	▲	▼	●
4.2-2 Violate Air Quality Standards – Short-Term Impacts	PS	SU	●	▲	▼
4.2-3 Violate Air Quality Standards – Long-Term Impacts	LTS	LTS	▲	▼	●
4.2-4 Increase in Criteria Pollutants – CO Hot Spots	LTS	LTS	▲	▼	●
4.2-5 Toxic Air Contaminants	LTS	LTS	▲	▼	●
4.2-6 Odors	LTS	LTS	●	●	●
4.2-7 Cumulative Air Quality Impacts	CC	CC/SU	▲	▼	●
4.3 Biological Resources			**Similar**	**Greater**	**Similar**
4.3-1 Special-Status Species	PS	LTS	▲	▲	●
4.3-2 Sensitive Biological Communities or Riparian Habitat	NI	NI	●	●	●
4.3-3 Wetlands	LTS	LTS	●	●	●
4.3-4 Movement or Migration of Wildlife Species	LTS	LTS	●	▲	●
4.3-5 Conflict with Species Protection Policies or Ordinances	LTS	LTS	●	●	●
4.3-6 Cumulative Effects on Biological Resources	LTCC	LTCC	●	▲	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.4 Cultural Resources			**Greater**	**Greater**	**Lesser**
4.4-1 Archaeological Resources	LTS	LTS	▲	●	●
4.4-2 Disturbance of Human Remains	LTS	LTS	●	●	●
4.4-3 Paleontological Resource, Site, or Geologic Feature	PS	LTS	▲	●	●
4.4-4 Historical Resources	PS	SU	▲	▲	▼
4.4-5 Cumulative Effects on Archaeological Resources	CC	LTCC	▲	●	●
4.4-6 Cumulative Effects on Human Remains	CC	LTCC	●	●	●
4.4-7 Cumulative Effects on Paleontological Resources	CC	LTCC	▲	●	●
4.4-8 Cumulative Effects on Historical Resources	CC	CC/SU	▲	▲	▼
4.5 Geology and Soils			**Similar**	**Similar**	**Similar**
4.5-1 Fault Rupture and Seismic Hazards	LTS	LTS	●	●	●
4.5-2 Soil Erosion or Loss of Topsoil	LTS	LTS	●	●	●
4.5-3 Unstable and Expansive Soils	LTS	LTS	●	●	●
4.5-4 Cumulative Geologic and Soil Hazards	LTCC	LTCC	●	●	●
4.6 Greenhouse Gas Emissions			**Greater**	**Lesser**	**Greater**
4.6-1 Generate GHG Emissions	PS	LTS	▲	▼	▲
4.6-2 Conflict with an Applicable Plan, Policy, or Regulation	LTS	LTS	▲	●	●
4.7 Hazards and Hazardous Materials			**Similar**	**Similar**	**Similar**
4.7-1 Transport, Use, or Disposal of Hazardous Materials	LTS	LTS	●	●	●
4.7-2 Accidental Release of Hazardous Materials	PS	LTS	●	●	●
4.7-3 Emission or Handling of Hazardous Materials Near Schools	LTS	LTS	●	●	●
4.7-4 Adopted Emergency Response Plan	LTS	LTS	●	●	●
4.7-5 Cumulative Effects of Hazardous Materials	LTCC	LTCC	●	●	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.8 Hydrology and Water Quality			**Greater**	**Similar**	**Similar**
4.8-1 Water Quality Standards and Waste Discharge Requirements	LTS	LTS	●	●	●
4.8-2 Groundwater Supplies or Recharge	LTS	LTS	●	●	●
4.8-3 Surface Hydrology and Drainage – Off-Site Erosion or Siltation	LTS	LTS	●	●	●
4.8-4 Surface Hydrology and Drainage – On- or Off-Site Flooding	LTS	LTS	●	●	●
4.8-5 Surface Hydrology and Drainage – Water Runoff	LTS	LTS	●	●	●
4.8-6 Water Quality	LTS	LTS	●	●	●
4.8-7 Housing within Flood Hazard Area	LTS	LTS	▲	●	●
4.8-8 Impede or Redirect Flood Flows	LTS	LTS	▲	●	●
4.8-9 Risk of Loss, Injury, or Death Involving Flooding	LTS	LTS	▲	●	●
4.8-10 Inundation by Seiche, Tsunami, or Mudflow	LTS	LTS	●	●	●
4.8-11 Cumulative Effects on Water Quality Standards and Waste Discharge Requirements	LTCC	LTCC	●	●	●
4.8-12 Cumulative Effects on Groundwater Supply or Recharge	LTCC	LTCC	●	●	●
4.8-13 Cumulative Effects on Surface Hydrology and Flooding	LTCC	LTCC	●	●	●
4.8-14 Cumulative Effects on Risk of Loss, Injury, or Death Involving Flooding	LTCC	LTCC	▲	●	●
4.8-15 Cumulative Effects of Inundation by Seiche, Tsunami, or Mudflow	LTCC	LTCC	●	●	●
4.9 Land Use and Planning			**Greater**	**Similar**	**Similar**
4.9-1 Physically Divide an Established Community	LTS	LTS	●	●	●
4.9-2 Conflict with an Applicable Plan, Policy, or Regulation	LTS	LTS	▲	●	●
4.9-3 Cumulative Impact on Dividing a Community or Conflicting with a Plan	LTCC	LTCC	●	●	●
4.10 Mineral Resources			**Similar**	**Similar**	**Similar**
4.10-1 Result in the Loss of Availability of Mineral Resources	NI	NI	●	●	●
4.11 Noise and Vibration			**Greater**	**Lesser**	**Lesser**
4.11-1 Noise Levels in Excess of Standards	LTS	LTS	▲	▼	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.11-2 Groundborne Vibration or Groundborne Noise Levels	PS	LTS	▲	●	▼
4.11-3 Permanent Increase in Ambient Noise Levels	LTS	LTS	▲	▼	●
4.11-4 Temporary or Periodic Increase in Ambient Noise Levels	LTS	LTS	●	●	▼
4.11-5 Cumulative Effects of Noise Sources	LTCC	LTCC	▲	▼	●
4.12 Population and Housing			**Similar**	**Similar**	**Similar**
4.12-1 Induce Substantial Population Growth	LTS	LTS	●	●	●
4.12-2 Displace People or Housing	LTS	LTS	●	●	●
4.12-3 Cumulative Inducement of Population Growth	LTCC	LTCC	●	●	●
4.12-4 Cumulative Impacts on Displacing People or Housing	LTCC	LTCC	●	●	●
4.13 Public Services			**Greater**	**Similar**	**Similar**
4.13.2-1 Demand for Fire Protection Services	LTS	LTS	●	●	●
4.13.2-2 Cumulative Demand for Fire Protection Services	LTCC	LTCC	●	●	●
4.13.3-1 Demand for Law Enforcement Services	LTS	LTS	●	●	●
4.13.3-2 Cumulative Demand for Law Enforcement Services	LTCC	LTCC	●	●	●
4.13.4-1 Demand for Additional School Facilities	LTS	LTS	●	●	●
4.13.4-2 Cumulative Demand for Additional School Facilities	LTCC	LTCC	●	●	●
4.13.5-1 Demand for Additional Park Facilities	LTS	LTS	●	●	●
4.13.5-2 Cumulative Demand for Parks and Recreation Facilities	LTCC	LTCC	●	●	●
4.13.6-1 Demand for Additional Library Facilities	LTS	LTS	●	●	●
4.13.6-2 Cumulative Demand for Library Facilities	LTCC	LTCC	●	●	●
4.13.7-1 Wastewater Treatment Facilities Exceeding Influent Flows Beyond Permitted Capacity	LTS	LTS	▲	▼	●
4.13.7-2 Demand for New or Expanded Water or Wastewater Treatment Facilities	LTS	LTS	▲	▼	●
4.13.7-3 Demand for Stormwater Drainage Facilities	LTS	LTS	●	▼	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.13.7-4 Demand for Water Supplies Beyond Projections	LTS	LTS	▲	▼	●
4.13.7-5 Exceed Capacity for Wastewater Treatment	LTS	LTS	▲	▼	●
4.13.7-6 Cumulative Water Supply Impacts	LTCC	LTCC	▲	▼	●
4.13.7-7 Cumulative Wastewater Impacts	LTCC	LTCC	▲	▼	●
4.13.8-1 Demand for Solid Waste Disposal	LTS	LTS	▲	▼	●
4.13.8-2 Compliance with Solid Waste Disposal Regulations	LTS	LTS	▲	▼	●
4.13.8-3 Cumulative Solid Waste Impacts	LTCC	LTCC	▲	▼	●
4.13.9-1 Demand for Additional Energy Resources	LTS	LTS	▲	▼	●
4.13.9-2 Cumulative Energy Consumption Impacts	LTCC	LTCC	▲	▼	●
4.14 Transportation			**Greater**	**Lesser**	**Similar**
4.14-1 Exceedance of LOS Performance Standards			▲		▲
4.14-1a Intersections	10/13 LTS	10/13 LTS	▲	▼	●
1. Hermosa Ave & 13th St	LTS	LTS	●	●	●
2. Hermosa Ave & Pier Ave	LTS	LTS	●	●	●
3. Pacific Coast Hwy & Artesia Blvd	PS	SU	▲	▼	●
4. Pacific Coast Hwy & Aviation Blvd	PS	SU	▲	▼	●
5. Pacific Coast Hwy & Pier Ave	LTS	LTS	▲	●	●
6. Pacific Coast Hwy & 2nd St	LTS	LTS	▲	●	●
7. Pacific Coast Hwy & 16th St	LTS	LTS	●	●	●
8. Pacific Coast Hwy & 21st St	LTS	LTS	▲	●	●
9. Prospect Ave & Artesia Blvd	LTS	LTS	▲	●	●
10. Prospect Ave & Aviation Blvd	LTS	LTS	▲	●	●
11. Prospect Ave & Anita St	LTS	LTS	●	●	●
12. Manhattan Ave & 27th St	PS	SU	▲	▼	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
13. Valley Drive & Gould Ave	LTS	LTS	▲	●	●
4.14-1b Roadway Segments	19/20 LTS	19/20 LTS	▲	▼	●
1. Hermosa Avenue (27th Street to 22nd Street)	LTS	LTS	●	●	●
2. Hermosa Avenue (22nd Street to 16th Street)	LTS	LTS	●	●	●
3. Hermosa Avenue (16th Street to 8th Street)	LTS	LTS	●	●	●
4. Hermosa Avenue (8th Street to Herondo Street)	LTS	LTS	●	●	●
5. Valley Drive (Gould Avenue to Pier Avenue)	LTS	LTS	●	●	●
6. Valley Drive (Pier Avenue to 8th Street)	LTS	LTS	●	●	●
7. Ardmore Avenue (16th Street to 11th Street)	LTS	LTS	●	●	●
8. Ardmore Avenue (8th Street to 2nd Street)	LTS	LTS	●	●	●
9. Pacific Coast Highway (Artesia Boulevard to Aviation Boulevard)	LTS	LTS	▲	▼	●
10. Pacific Coast Highway (Aviation Boulevard to 2nd Street)	LTS	LTS	●	▼	●
11. Prospect Avenue (Artesia Boulevard to Aviation Boulevard)	LTS	LTS	●	●	●
12. Prospect Avenue (Aviation Boulevard to 2nd Street)	PS	SU	▲	▼	●
13. Artesia Blvd (Pacific Coast Highway to Prospect Avenue)	LTS	LTS	▲	▼	●
14. Aviation Blvd (Pacific Coast Highway to Prospect Avenue)	LTS	LTS	▲	●	●
15. Pier Avenue (Hermosa Avenue to Valley Drive)	LTS	LTS	●	●	●
16. Pier Avenue (Ardmore Avenue to Pacific Coast Highway)	LTS	LTS	●	●	●
17. Gould Avenue (Ardmore Avenue to Pacific Coast Highway)	LTS	LTS	●	●	●
18. 8th Street (Hermosa Avenue to Valley Drive)	LTS	LTS	●	●	●
19. 8th Street (Pacific Coast Highway to Prospect Avenue)	LTS	LTS	●	●	●
20. Herondo Street (Hermosa Avenue to Valley Drive)	LTS	LTS	▲	●	●
4.14-2 Conflict with the LA County Congestion Management Program	LTS	LTS	▲	●	●
4.14-3 Air Traffic Patterns	LTS	LTS	●	●	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.14-4 Roadway Design Hazards	LTS	LTS	▲	●	●
4.14-5 Adequate Emergency Access	LTS	LTS	▲	●	●
4.14-6 Public Transit, Bicycle, and Pedestrian Facilities	LTS	LTS	▲	▼	●
4.14-7 Cumulative Exceedance of LOS Performance Standards	CC	CC	▲	▼	●
4.14-8 Cumulative Impact on LA County Congestion Management Program	LTCC	LTCC	▲	●	●
4.14-9 Cumulative Effect on Air Traffic Patterns	LTCC	LTCC	●	●	●
4.14-10 Cumulative Roadway Design Hazards	LTCC	LTCC	▲	●	●
4.14-11 Cumulative Effect on Emergency Access	LTCC	LTCC	▲	●	●
4.14-12 Cumulative Effect on Public Transit, Bicycle, and Pedestrian Facilities	LTCC	LTCC	▲	▼	●

Symbol	Definition
LTS	*Less Than Significant – if impacts were identified as less than significant in the technical analysis*
PS	*Potentially Significant – if impacts were identified as potentially significant*
NI	*No Impact – if no impacts were identified in the technical analysis*
CC	*Cumulatively Considerable – if impacts, cumulative in nature, were determined to be significant*
LTCC	*Less Than Cumulatively Considerable – if impacts, cumulative in nature, were determined to be less than significant*
SU	*Significant and Unavoidable – if impacts, after feasible mitigation measures were identified, remained a significant impact and determined unavoidable in the technical analysis*
▲	*Greater = impacts are greater than PLAN Hermosa*
●	*Similar = impacts are similar to PLAN Hermosa*
▼	*Lesser = level of significance is less than PLAN Hermosa, but the impact is not necessarily reduced to a less than significant level*

No Project Alternative

Project Objectives

The No Project Alternative would only partially meet the project objectives established for PLAN Hermosa. The existing General Plan and Coastal Land Use Plan can reasonably achieve project objectives to enhance and support a strong, diverse, and vibrant local economy (Objective 2) and provide a safe and clean natural environment (Objective 4) by relying on the existing policies and programs related to economic development and resource conservation. Additionally, the existing General Plan contains an Urban Design Element; however, it fails to establish various character areas and identify the unique characteristics of each area, making it difficult to effectively achieve project Objective 1, to preserve the city's small beach town character. Finally, while the existing General Plan and Coastal Land Use Plan contain policies and programs to reduce vehicle miles traveled and expand alternative modes of transportation, these documents do not identify promoting healthy and active lifestyles (Objective 3) and achieving a low or no carbon future (Objective 5) as the primary motivation for including such policies, nor do the mobility policies and programs contained in the existing General Plan advance the reduction in VMT sufficiently to claim that they can effectively achieve Objectives 3 and 5.

Comparison of Environmental Impacts

The No Project Alternative would not lessen any environmental impacts compared to PLAN Hermosa. Instead, it would have greater impacts to aesthetics and visual resources, air quality, greenhouse gas emissions, hydrology and water quality, land use and planning, noise and vibration, public services, community facilities, and utilities, and transportation.

Carbon Neutral by 2030

Project Objectives

The 2030 Carbon Neutral Alternative has the ability to substantially support each of the project objectives. Implementation of this alternative would prioritize the achievement of a low or no carbon future (Objective 5), while also providing a safe and clean natural environment (Objective 4) and promoting healthy and active lifestyles through land use and transportation investments (Objective 3) by reducing air quality and transportation impacts compared to PLAN Hermosa. This alternative would also meet Objective 2, to enhance and support a strong, diverse, and vibrant local economy, as many of the land use and transportation policies that reduce vehicle miles traveled do so by providing a greater range of daily services and employment opportunities in closer proximity so that residents may reasonably choose alternative modes of transportation.

While this alternative could cause greater impacts to cultural resources, and thereby potentially conflict with Objective 1, to preserve the city's small beach town character, additional mitigation measures and design standards could provide direction that minimizes the impacts associated with this alternative on cultural resources and aesthetics.

Comparison of Environmental Impacts

Alternative 2 could pose greater impacts to aesthetics and biological resources due to increased use of renewable energy systems such as solar, wind, or ocean-based renewable energy sources, and greater impacts to cultural resources due to greater alteration or demolition of designated or potentially eligible historic resources to construct high energy performance buildings. While the impacts to aesthetics, biological resources, and cultural resources may be greater than with PLAN Hermosa, it is unknown whether they would rise to the level of being considered a significant impact, because the specific design and location of additional renewable energy projects cannot be determined at this time.

This alternative would also have far-reaching environmental benefits for Hermosa Beach by decreasing impacts related to air quality, greenhouse gas emissions, noise and vibration, and transportation. Air pollutants associated with the burning of fuel for building energy and transportation uses would be reduced. Noise levels would likely be somewhat lower, as the primary source of noise in Hermosa Beach is automobile use. Reduced automobile use and an increase in electric vehicles, which are quieter than gasoline- and diesel-powered vehicles, would reduce noise levels. Transportation impacts would also likely be decreased because this alternative would result in a reduction in vehicle trips and vehicle miles traveled.

Character Retention Alternative

Project Objectives

The Character Retention Alternative prioritizes achievement of Objective 1, to preserve the city's small beach town character, and Objective 2, to enhance and support a strong, diverse, and vibrant local economy through safe and beautiful commercial corridors, but would not conflict or prevent the achievement of the other project objectives. This alternative would provide similar policies and implementation actions to PLAN Hermosa related to the mobility network, transportation enhancements, and resource conservation, meaning it would equally achieve project Objective 3, to promote healthy and active lifestyles, and Objective 4, to provide a safe and clean environment including clean air and water.

While this alternative may have a slightly greater impact on greenhouse gas emissions, it would carry forward similar policies to PLAN Hermosa related to reducing emissions from transportation sources, water conservation, and diverting solid waste from landfills to support a reduction in greenhouse gas emissions partially consistent with Objective 5, to achieve a low or no carbon future. Additional mitigation measures and design standards could provide direction to implement energy efficiency and renewable energy projects consistent with standards for the treatment of historical resources to minimize the impacts associated with this alternative on greenhouse gas emissions while retaining the historical significance of designated landmarks and the eligibility of potentially historic resources.

Comparison of Environmental Impacts

This Character Retention Alternative would pose greater impacts to greenhouse gas emissions compared to PLAN Hermosa. The challenge of renovating or constructing high energy performance buildings in a manner that does not diminish the significance of a historical resource or cause potentially eligible historic resources to become ineligible due to alterations that are inconsistent with standards for the treatment of historical resources is presented in this alternative.

This alternative would also reduce impacts associated with aesthetics and visual resources, air quality, and cultural resources, where construction-related air quality impacts and the significance of a historical resource are both considered significant and unavoidable impacts under implementation of PLAN Hermosa. However, it is unknown whether this alternative would lessen these impacts to levels that are considered less than significant.

6.0.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

- CEQA requires a lead agency to identify the "environmentally superior alternative." Based on the alternative analysis, both the 2030 Carbon Neutral Alternative and the Character Retention Alternative would reduce several of the categories listed as potentially significant or significant and unavoidable under PLAN Hermosa. The No Project Alternative would have potentially greater impacts to several categories, including aesthetics and visual resources, air quality, cultural resources, greenhouse gas emissions, hydrology and water quality, land use and planning, noise and vibration, public services, and

transportation. The 2030 Carbon Neutrality Alternative would also have potentially greater impacts to aesthetics and visual resources, biological resources, and cultural resources, while the Character Retention Alternative would only cause potentially greater impacts to one category, greenhouse gas emissions. For this reason, the Character Retention Alternative is considered the environmentally superior alternative.

6.0.6 REFERENCES

City of Hermosa Beach. 2015. *PLAN Hermosa* (public review draft).

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