

## Notice of Intent

TO: Distribution List

FROM: Long Beach Development Services  
Ms. Ashley Atkinson, Analyst  
333 West Ocean Blvd., 3rd Floor  
Long Beach, CA 90802

Date Mailed: June 27, 2013

Subject: Notice of Intent to Adopt a Negative Declaration for the 2013–2021 Update to the City of Long Beach General Plan Housing Element

Long Beach Development Services proposes to adopt a Negative Declaration for the 2013–2021 Update to the City of Long Beach General Plan Housing Element (proposed project). Long Beach Development Services is seeking input from trustee agencies, responsible agencies, and other interested parties regarding the proposed adoption of the Negative Declaration. Responsible and trustee agencies will need to use the Negative Declaration by Long Beach Development Services when considering related permits or other approvals for the proposed project.

The proposed project does not contain a site that is part of the lists enumerated under Section 65962.5 of the Government Code including, but not limited to lists of hazardous waste facilities, land designated as hazardous waste property, and hazardous waste disposal sites.

The project description, location, and probable environmental effects are described in the Initial Study (Attachment 1).

Due to the time limits mandated by State law, your response must be sent at the earliest possible date *but not later than 30 days* after the date of this notice. Please send your letters of comment (including the name of the designated contact person for your agency) on the Notice of Intent to:

**Long Beach Development Services**  
**Attn: Ashley Atkinson**  
**Analyst**  
**333 West Ocean Blvd., 3rd Floor**  
**Long Beach, CA 90802**

Agencies and organizations should identify a Point-of-Contact for future coordination.

**Project Title:** 2013–2021 Update to the City of Long Beach General Plan Housing Element

Signature   
Ashley Atkinson

Date 6/25/13

Title: Analyst

Tel: (562) 570-6315

**CITY OF LONG BEACH 2013-2021 HOUSING ELEMENT**

**INITIAL STUDY**

**PREPARED FOR:**

**CITY OF LONG BEACH  
333 W. OCEAN BOULEVARD  
LONG BEACH, CA 90802**

**PREPARED BY:**

**SAPPHOS ENVIRONMENTAL, INC.  
430 NORTH HALSTEAD STREET  
PASADENA, CALIFORNIA 91107**

**JUNE 18, 2013**

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## **SECTION 1.0**

### **PROJECT DESCRIPTION**

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#### **1.1 PROJECT TITLE**

City of Long Beach 2013–2021 Housing Element

#### **1.2 LEAD AGENCY**

City of Long Beach  
333 W. Ocean Boulevard  
Long Beach, CA 90802

#### **1.3 PROJECT SPONSOR AND CONTACT PERSON**

Ashley Atkinson, Analyst  
Long Beach Development Services, Housing & Community Improvement  
333 W. Ocean Boulevard, 3rd Floor  
Long Beach, CA 90802  
(562) 570-6315

#### **1.4 PROJECT LOCATION**

The Housing Element has been prepared as an update to the General Plan to address the housing needs of the City of Long Beach (City), County of Los Angeles, California. The City is bounded on the north by the Cities of Lakewood, Hawaiian Gardens, Paramount, and Compton; on the east by the City of Seal Beach; on the south by the Pacific Ocean; and on the west by the Cities of Los Angeles and Carson and the unincorporated community of Rancho Dominguez (Figure 1.4-1, *Local Vicinity Map*). The City entirely surrounds the City of Signal Hill. Primary access to the City is via I-405, I-710, and I-605.

The City spans the U.S. Geological Survey (USGS) 7.5-minute series Long Beach, Seal Beach, Los Alamitos, and South Gate topographic quadrangles (Figure 1.4-2, *Topographic Map with USGS 7.5-Minute Quadrangle Index*).<sup>1,2,3,4</sup> The elevation of the City ranges from 0 to 225 feet above mean sea level (msl).

#### **1.5 GENERAL PLAN**

The Housing Element is one of the state-mandated elements of the City's General Plan. The Housing Element is focused on areas of the City that allow residential uses in their General Plan Land Use Designation.

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<sup>1</sup> U.S. Geological Survey. 2003. *7.5-Minute Series, Long Beach, California, Topographic Quadrangle*. Reston, VA.

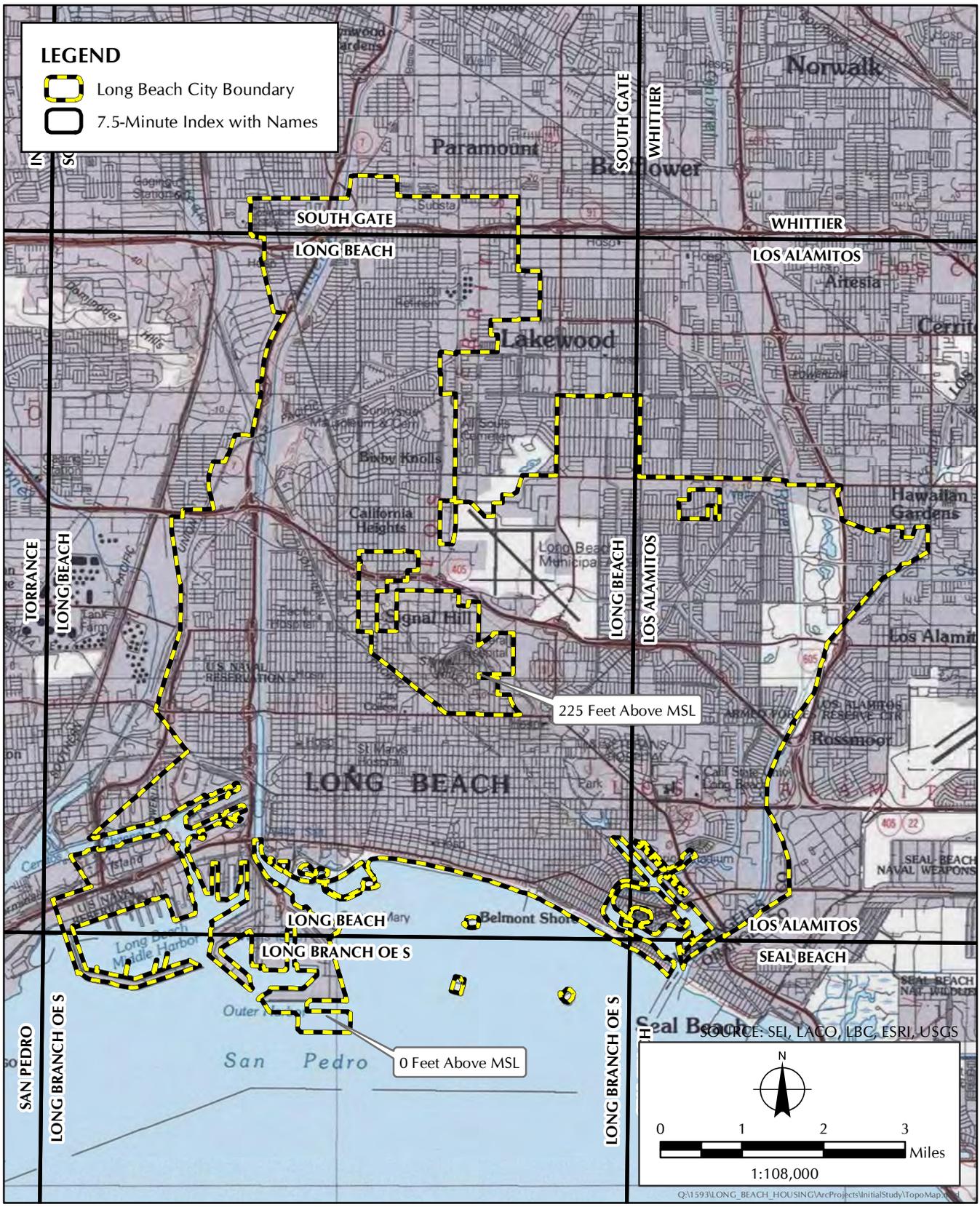
<sup>2</sup> U.S. Geological Survey. 2003. *7.5-Minute Series, Seal Beach, California, Topographic Quadrangle*. Reston, VA

<sup>3</sup> U.S. Geological Survey. 2003. *7.5-Minute Series, Los Alamitos, California, Topographic Quadrangle*. Reston, VA

<sup>4</sup> U.S. Geological Survey. 2003. *7.5-Minute Series, South Gate, California, Topographic Quadrangle*. Reston, VA.



**FIGURE 1.4-1**  
 Local Vicinity Map



**FIGURE 1.4-2**

Topographic Map with USGS 7.5-Minute Quadrangle Index

## 1.6 ZONING

The Housing Element involves all zoning districts that permit any type of residential land use.

## 1.7 EXISTING CONDITIONS

### Background

Incorporated in 1897, Long Beach today is made up of a highly diverse society of 462,257 residents, with no ethnic majority.<sup>5</sup> Located in the South Bay region of Los Angeles County adjacent to the Pacific Ocean, the City is the second largest in the county and is a fully-urbanized community with a major port; regional airport; passenger rail to Los Angeles; a branch of California State University; and over 60 residential neighborhoods, including 17 historic districts. There are 173,932 housing units in the City to house 160,972 households. For planning purposes, the City has designated 32 Planned Development districts within its general plan (Figure 1.7-1, *Planned Development Map*). The Southern California Association of Governments (SCAG) projects the 2020 population to rise to 491,000 people in 175,600 households.<sup>6</sup>

## 1.8 PROJECT DESCRIPTION

The State of California mandates that every municipality prepare and periodically update a Housing Element as part of its General Plan. The Housing Element is a comprehensive assessment of current and projected housing needs for all economic segments of a community. It is intended to embody policies for providing adequate housing and includes action programs to achieve this purpose. Unlike other mandatory General Plan Elements, the Housing Element is subject to detailed statutory requirements regarding content and is subject to mandatory review by the State housing agency.

This Housing Element, an 8-year plan extending from October 15, 2013 through October 15, 2021, is an update of the City's 2008–2014 Housing Element, which is an update of the 2000–2005 Housing Element, which updated the original 1989 Housing Element. As with previous Housing Elements, goals and policies have remained consistent with those established in 1989.

Additionally, the Housing Element is in compliance with the existing zoning code, plans no additional housing within the FEMA 100-year flood zone, and complies with SB-2.

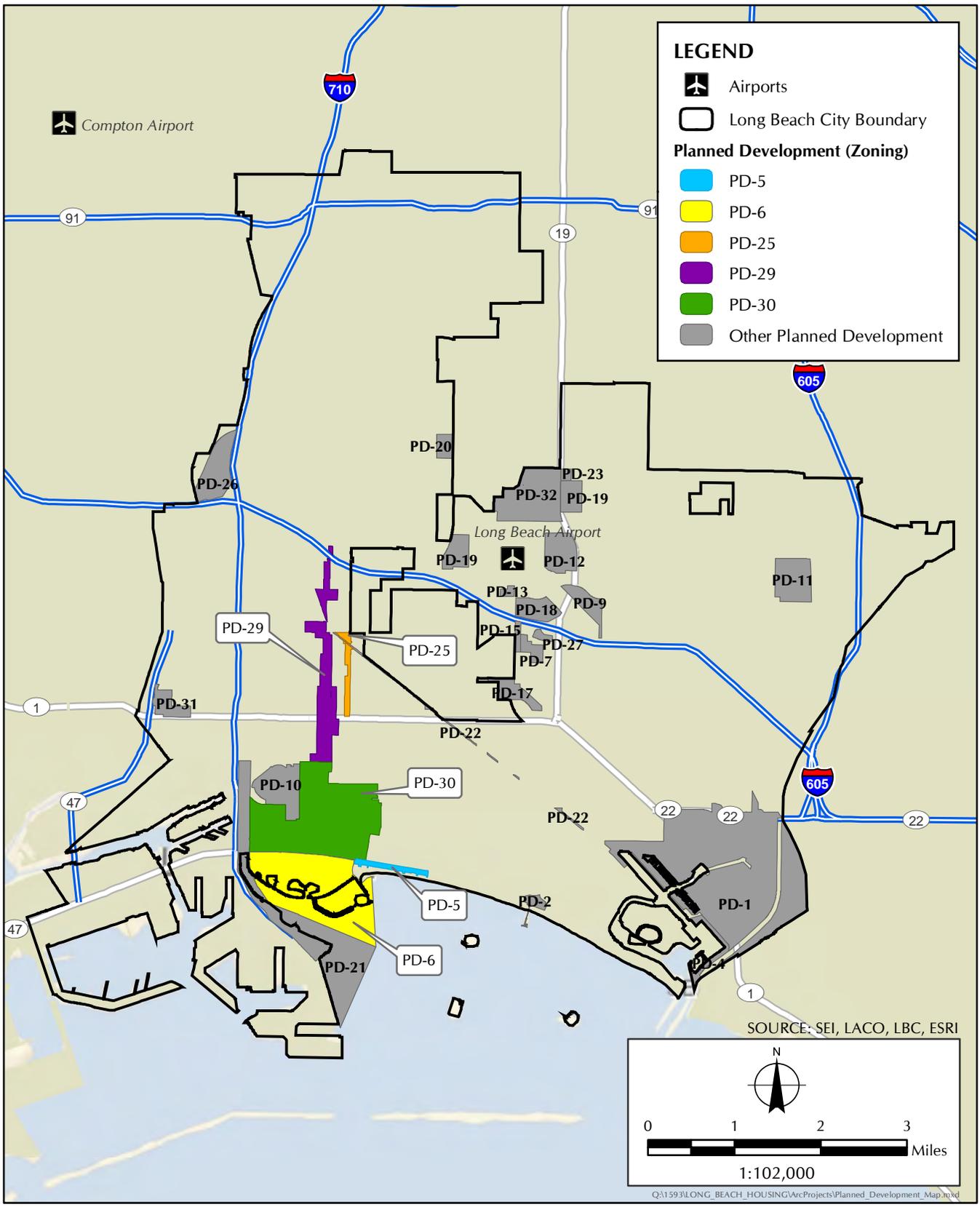
### Opportunities for Residential Development

The Southern California Association of Governments (SCAG), as the regional planning agency, is responsible for allocating the Regional Housing Needs Assessment (RHNA) to individual jurisdictions within its six-county planning region, which includes Los Angeles County. For this 2013–2021 Housing Element update, the City is allocated a RHNA of 7,048 housing units as follows:

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<sup>5</sup> U.S. Census Bureau. 2010. *2010 U.S. Census*. Washington, DC.

<sup>6</sup> Southern California Association of Governments. 2012. *Local Housing Element Assistance: Existing Housing Data Needs Report*. Los Angeles, CA.



**FIGURE 1.7-1**  
Planned Development Map

- Extremely Low Income (up to 30 percent of average median income): 886 units (12 percent)
- Very Low Income (31 to 50 percent of average median income): 887 units (13 percent)
- Low Income (51 to 80 percent of average median income): 1,066 units (15 percent)
- Moderate Income (81 to 120 percent of average median income): 1,170 units (17 percent)
- Above Moderate Income (more than 120 percent of average median income): 3,039 units (43 percent)

The RHNA for this planning period begins on January 1, 2014 and extends through October 31, 2021. Because the RHNA for the Housing Element commences on January 1, 2014, housing developments that have been entitled but are not expected to issue building permits until January 2014 can be credited toward the RHNA. Two affordable housing projects have been entitled to provide a total of 66 very low-income units. Two other apartment-building projects have been entitled that are expected to provide 289 moderate-income units. Additionally, another 2,096 upper-income units have been entitled and another 194 upper-income units have been proposed. Therefore, 2,645 units in the City qualify for the RHNA credit.

## 1.9 STATEMENT OF OBJECTIVES

### Goals and Objectives

The City has identified seven goals related to the proposed project.

The Housing Element identifies policies, programs, and objectives that focus on the following:

1. Provide housing assistance and preserve publicly assisted units
2. Address the unique housing needs of special needs residents
3. Retain and improve the quality of existing housing and neighborhoods
4. Provide increased opportunities for the construction of high quality housing
5. Mitigate government constraints to housing investment and affordability
6. Provide increased opportunities for home ownership
7. Ensure fair and equal housing opportunity

The objectives of the Housing Element for 2013–2021 are summarized below:

1. **Policy:** By 2014, identify additional opportunities for housing through updates to the Land Use Element and PD-29. In 2014, pursue policy change in adaptive reuse. By the end of 2014, amend the Zoning Code to incorporate Single-Room Occupancy (SRO) Housing. In 2015, explore the feasibility of rental escrow as a mechanism to ensure the maintenance of rental properties. Evaluate the feasibility of providing additional density bonuses or other incentives for new developments that include universal design (beyond required ADA standards) by 2017 as part of the tri-annual update of the Building Code. By 2017, explore local options to extend first right of refusal to lower-income households displaced by private development. Inspect an average of 5,500 multi-family units annually to correct code violations and connect City housing rehabilitation programs with code enforcement efforts to ensure assistance is provided to lower-income households in

making the code corrections and improvements. Continue to provide funding to help gap-finance affordable housing, with priority funding granted to special needs groups and enriched with supportive services such as childcare, health programs, job training, and financial and legal counseling. Continue to offer regulatory incentives to accommodate the development of accessible and affordable housing. Provide technical and financial assistance to developers of low- and moderate-income housing. Annually monitor availability of State and federal funding; partner with affordable housing developers, if necessary, in applying for additional funds. Identify qualified nonprofit developers for partnership in affordable housing construction and acquisition/rehabilitation projects.

2. **New Construction:** To accommodate the projected 5 percent population growth for the City during the next 8 years through 2021, maintain an adequate sites inventory for the remaining RHNA, provide sites inventory to interested developers, and assist in identifying additional opportunities for residential development. Monitor development trends to ensure availability of sites for residential uses.
3. **Preservation of At-Risk Housing:** Preserve 1,726 affordable housing units for extremely low income and very low income households.
4. **Housing Improvement:** Provide rehabilitation assistance to 3,032 households. By 2015, enroll 205 housing units in the Lead Hazard Control Program (LHC) and obtain owner consent to inspect housing units for lead-based paint hazards, conduct assessment on 195 units, complete abatement for 185 units, and conduct 20 outreach events.
5. **Rental Assistance:** Provide rental assistance for extremely low and very low income housing, supporting 7,000 households through Housing Choice Vouchers, 854 through Family Self-Sufficiency, 350 through HOME Security Deposit, and 13 through Palace Apartments. Continue to provide assistance to 108 households through the HOPWA Long-Term Tenant-Based Rental Assistance and 120 households through the Short-Term Assistance Program). Lease all 375 allocated Veterans Affairs Supportive Housing vouchers by the second quarter of 2013.
6. **Homebuyer Assistance:** Assist 25 lower income households with homebuyer assistance.
7. **Programs:** Continue to implement various neighborhood improvement programs, such as Neighborhood Partners, Urban Forestry, Home Improvement Rebates, Neighborhood Clean Up, and Neighborhood Leadership. Continue to participate in fair housing programs and support fair housing services and tenant/landlord counseling services. As funding permits, continue to support neighborhood and community groups with services and technical support.

## **SECTION 2.0 ENVIRONMENTAL CHECKLIST**

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This section contains a copy of the Environmental Checklist prepared for the 2013–2021 update to the City of Long Beach Housing Element (proposed project). The checklist used is consistent with Appendix G to the State CEQA Guidelines. A summary of the substantial evidence that was used to support the responses in the Environmental Checklist is contained in Section 3. The answers contained in this Environmental Checklist are based on reviews of relevant literature and technical reports.

**DETERMINATION**

On the basis of this initial evaluation:

- ✓ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ❑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ❑ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ❑ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ❑ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Ashley Atkinson  
Signature

6/25/13  
Date

Ashley Atkinson  
Printed Name

City of Long Beach  
For

## ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>2.1. AESTHETICS:</b> Would the proposed project:				
a) Have a substantial adverse effect on a scenic vista?	_____	_____	_____	_____X_____
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	_____	_____	_____	_____X_____
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	_____	_____	_____	_____X_____
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	_____	_____	_____	_____X_____
<b>2.2. AGRICULTURE RESOURCES:</b> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the proposed project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	_____	_____	_____	_____X_____
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	_____	_____	_____	_____X_____

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	_____	_____	_____	<u>  X  </u>

**2.3. AIR QUALITY:** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the proposed project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	_____	_____	_____	<u>  X  </u>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	_____	_____	<u>  X  </u>	_____
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the proposed project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	_____	_____	<u>  X  </u>	_____
d) Expose sensitive receptors to substantial pollutant concentrations?	_____	_____	<u>  X  </u>	_____
e) Create objectionable odors affecting a substantial number of people?	_____	_____	_____	<u>  X  </u>

**2.4. BIOLOGICAL RESOURCES:** Would the proposed project:

a) 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?	_____	_____	<u>  X  </u>	_____
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	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	_____	_____	<u>  X  </u>	_____
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	_____	_____	<u>  X  </u>	_____
d) 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?	_____	_____	<u>  X  </u>	_____
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	_____	_____	_____	<u>  X  </u>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	_____	_____	_____	<u>  X  </u>

**2.5. CULTURAL RESOURCES:** Would the proposed project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	_____	_____	_____	<u>  X  </u>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	_____	_____	_____	<u>  X  </u>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	_____	_____	_____	<u>  X  </u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?	_____	_____	_____	<u>  X  </u>

**2.6. GEOLOGY AND SOILS:** Would the proposed project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) 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 Division of Mines and Geology Special Publication 42.	_____	_____	<u>  X  </u>	_____
ii) Strong seismic ground shaking?	_____	_____	_____	<u>  X  </u>
iii) Seismic-related ground failure, including liquefaction?	_____	_____	_____	<u>  X  </u>
iv) Landslides?	_____	_____	_____	<u>  X  </u>
b) Result in substantial soil erosion or the loss of topsoil?	_____	_____	_____	<u>  X  </u>
c) 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?	_____	_____	_____	<u>  X  </u>
d) 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?	_____	_____	<u>  X  </u>	_____
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	_____	_____	_____	<u>  X  </u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>2.7. GREENHOUSE GAS EMISSIONS:</b>				
Would the proposed project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	_____	_____	<u>  X  </u>	_____
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	_____	_____	_____	<u>  X  </u>
<b>2.8. HAZARDS AND HAZARDOUS MATERIALS:</b> Would the proposed project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	_____	_____	_____	<u>  X  </u>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	_____	_____	_____	<u>  X  </u>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	_____	_____	_____	<u>  X  </u>
d) 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, would it create a significant hazard to the public or the environment?	_____	_____	_____	<u>  X  </u>
e) For a proposed project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the proposed project area?	_____	_____	_____	<u>  X  </u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a proposed project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the proposed project area?	_____	_____	_____	<u>  X  </u>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	_____	_____	_____	<u>  X  </u>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	_____	_____	_____	<u>  X  </u>

**2.9. HYDROLOGY AND WATER**

**QUALITY:** Would the proposed project:

a) Violate any water quality standards or waste discharge requirements?	_____	_____	_____	<u>  X  </u>
b) 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 which would not support existing land uses or planned uses for which permits have been granted)?	_____	_____	_____	<u>  X  </u>
c) 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 erosion or siltation on- or off-site?	_____	_____	_____	<u>  X  </u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) 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 flooding on- or off-site?	_____	_____	_____	<u>  X  </u>
e) 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?	_____	_____	_____	<u>  X  </u>
f) Otherwise substantially degrade water quality?	_____	_____	_____	<u>  X  </u>
g) 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?	_____	_____	_____	<u>  X  </u>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	_____	_____	_____	<u>  X  </u>
i) 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?	_____	_____	_____	<u>  X  </u>
j) Inundation by seiche, tsunami, or mudflow?	_____	_____	<u>  X  </u>	_____

**2.10. LAND USE AND PLANNING:**

Would the proposed project:

a) Physically divide an established community?	_____	_____	_____	<u>  X  </u>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or	_____	_____	_____	<u>  X  </u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
mitigating an environmental effect?				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	_____	_____	_____	<u>X</u>

**2.11. MINERAL RESOURCES:** Would the proposed project:

a) 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?	_____	_____	_____	<u>X</u>
b) 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?	_____	_____	_____	<u>X</u>

**2.12. NOISE:** Would the proposed project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	_____	_____	<u>X</u>	_____
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	_____	_____	<u>X</u>	_____
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	_____	_____	<u>X</u>	_____
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	_____	_____	<u>X</u>	_____
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the proposed project expose people residing or working in the proposed project area to excessive	_____	_____	_____	<u>X</u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
noise levels?				
f) For a project within the vicinity of a private airstrip, would the proposed project expose people residing or working in the proposed project area to excessive noise levels?	_____	_____	_____	<u>  X  </u>

**2.13. POPULATION AND HOUSING:**

Would the proposed project:

a) 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)?	_____	_____	_____	<u>  X  </u>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	_____	_____	_____	<u>  X  </u>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	_____	_____	_____	<u>  X  </u>

**2.14. PUBLIC SERVICES:** Would the proposed project result in:

a) Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for 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 any of the public services:				
Fire protection?	_____	_____	<u>  X  </u>	_____
Police protection?	_____	_____	<u>  X  </u>	_____
Schools?	_____	_____	<u>  X  </u>	_____
Parks?	_____	_____	<u>  X  </u>	_____

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Other public facilities?	_____	_____	_____	<u>  X  </u>
<b>2.15. RECREATION:</b>				
a) Would the proposed project 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?	_____	_____	<u>  X  </u>	_____
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	_____	_____	_____	<u>  X  </u>
<b>2.16. TRANSPORTATION/TRAFFIC:</b>				
Would the proposed project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	_____	_____	<u>  X  </u>	_____
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	_____	_____	<u>  X  </u>	_____
c) 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?	_____	_____	_____	<u>  X  </u>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	_____	_____	_____	<u>  X  </u>
e) Result in inadequate emergency access?	_____	_____	_____	<u>  X  </u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Result in inadequate parking capacity?	_____	_____	_____	<u>  X  </u>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	_____	_____	_____	<u>  X  </u>

**2.17. UTILITIES AND SERVICE SYSTEMS:**

Would the proposed project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	_____	_____	_____	<u>  X  </u>
b) 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?	_____	_____	_____	<u>  X  </u>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	_____	_____	_____	<u>  X  </u>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	_____	_____	_____	<u>  X  </u>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	_____	_____	_____	<u>  X  </u>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	_____	_____	_____	<u>  X  </u>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	_____	_____	_____	<u>  X  </u>

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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**2.18. MANDATORY FINDINGS OF SIGNIFICANCE:**

- |  |       |       |       |              |
|--|-------|-------|-------|--------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | _____ | _____ | _____ | <u>  X  </u> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? (Cumulatively considerable means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?   | _____ | _____ | _____ | <u>  X  </u> |
| c) Does the proposed project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?   | _____ | _____ | _____ | <u>  X  </u> |

## **SECTION 3.0**

### **ENVIRONMENTAL ANALYSIS**

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The environmental analysis provided in this section describes the information that was considered in evaluating the questions in Section 2.0, *Environmental Checklist*. The information used in this evaluation is based on a review of relevant literature and technical reports (see Section 4.0, *References*, for a list of reference material consulted).

### 3.1 AESTHETICS

This analysis is undertaken to determine if the 2013–2021 Housing Element update to the City of Long Beach (City) General Plan (proposed project) may have a significant impact to aesthetics that would require the consideration of mitigation measures or alternatives in accordance with Section 15063 of the State of California Environmental Quality Act (CEQA) Guidelines.<sup>1</sup> Aesthetics within the proposed project area were evaluated with regard to the City's General Plan and California Department of Transportation's (Caltrans) Scenic Highway System<sup>2</sup> designations.

#### 3.1.1 Affected Environment

As described in Section 1.0, the City was incorporated into Los Angeles County in 1897 and is a highly diverse community of 462,257 residents with no ethnic majority. Located in the South Bay region of Los Angeles County, adjacent to the Pacific Ocean, the City encompasses approximately 51 square miles and is a fully urbanized community with a major port; regional airport; passenger rail to Los Angeles; a branch of California State University; and over 60 residential neighborhoods, including 17 historic districts. There are 173,932 housing units in the City to house 160,972 households. The Land Use Element of the City's General Plan was last revised in 1997, and the Housing Element was last updated in 2009. There are no designated or proposed scenic highways in the City.<sup>3</sup> The City's Scenic Routes Element of the General Plan was adopted in 1975. The City has one local scenic route, which is Ocean Boulevard between the Los Angeles River and Livingston Drive.<sup>4</sup>

#### 3.1.2 Impact Analysis

State CEQA Guidelines recommend the consideration of four questions when addressing the potential for significant impacts to aesthetics.

Would the proposed project have any of the following effects:

- (a) Have a substantial adverse effect on a scenic vista?

The proposed project would not be expected to result in impacts to aesthetics in relation to scenic vistas. The City's topography is relatively flat with vistas of the ocean to the south and Palos Verdes to the west. Distant views of the San Gabriel and San Bernardino Mountains to the north and the Santa Ana Mountains to the east are sometimes available on days of clear visibility (primarily in the winter). The Housing Element is a policy document that conforms to the City's General Plan and does not propose any specific development projects. Any future housing developments resulting from the implementation of the Housing Element will undergo environmental review. Therefore, there would be no expected impacts to aesthetics related to scenic vistas. No further analysis is warranted.

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<sup>1</sup> California Code of Regulations. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> California Department of Transportation. 23 April 2013. *The California Scenic Highway System: Eligible (E) and Officially Designated (OD) Routes*. Available at: <http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm>

<sup>3</sup> California Department of Transportation. 23 April 2013. *The California Scenic Highway System: Eligible (E) and Officially Designated (OD) Routes*. Available at: <http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm>

<sup>4</sup> AECOM. December 2010. *City of Long Beach Downtown Plan Program Environment Impact Report*. Prepared for: City of Long Beach, Development Services Department, Long Beach, CA. Prepared by: AECOM, Los Angeles, CA.

- (b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

The proposed project would not be expected to result in impacts to aesthetics in relation to substantial damage to scenic resources within a state scenic highway. There are no designated or proposed scenic highways in the City. While portions of the Pacific Coast Highway are designated, the segment in the City is not.<sup>5</sup> No scenic resources, trees, or rock outcroppings would be damaged by the implementation of the proposed project. As the Housing Element is in conformance with the General Plan, including the Historic Preservation Element adopted in 2010, any future development impacting historic resources will be subject to environmental review. Therefore, there would be no expected impacts to aesthetics related to substantial damage to scenic resources within a state scenic highway. No further analysis is warranted.

- (c) Substantially degrade the existing visual character or quality of the site and its surroundings?

The proposed project would not be expected to result in impacts to aesthetics in relation to the substantial degradation of the existing visual character of the site and its surroundings. The Housing Element is a policy document that conforms to the City's General Plan, including prescribed housing densities that range from 7 to 249 units per acre, and does not propose any specific development projects.<sup>6</sup> Any future housing developments resulting from the implementation of the Housing Element will undergo environmental review. Therefore, there would be no expected significant impacts to aesthetics related to degradation of the existing visual character of the site and its surroundings. No further analysis is warranted.

- (d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

The proposed project would not be expected to result in impacts to aesthetics related to the creation of a new source of substantial light or glare that would adversely affect daytime or nighttime views in the proposed project area. The Housing Element is a policy document that conforms to the City's General Plan and does not propose any specific development projects. There are 173,932 housing units in the City to house 160,972 households. The proposed project provides for the addition of 7,048 housing units, which is a 4.1 percent increase.<sup>7</sup> The Housing Element identifies 31 sites within 5 planning districts (PD-6, PD-25, PD-29, PD-30, and PD-31), which are all currently served by roads and street lighting. Any future housing developments resulting from the implementation of the proposed project will undergo environmental review. Therefore, there would be no expected significant impacts to aesthetics related to creation of a new source of light or glare. No further analysis is warranted.

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<sup>5</sup> California Department of Transportation. 23 April 2013. *The California Scenic Highway System: Eligible (E) and Officially Designated (OD) Routes*. Available at: <http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm>

<sup>6</sup> City of Long Beach Department of Planning and Building. April 1997. *Land Use Element of the City of Long Beach General Plan*. Long Beach, CA.

<sup>7</sup> Southern California Association of Governments. 2012. *Local Housing Element Assistance: Existing Housing Data Needs Report*. Los Angeles, CA.

## 3.2 AGRICULTURE RESOURCES

This analysis is undertaken to determine if the 2013–2021 Housing Element update (proposed project) to the City of Long Beach (City) General Plan would have a significant impact to agriculture resources, thus requiring the consideration of mitigation measures or alternatives in accordance with Section 15063 of the State of California Environmental Quality Act (CEQA) Guidelines.<sup>1</sup> Agriculture resources at the proposed project site were evaluated with regard to the California Department of Conservation (CDC) Farmland Mapping and Monitoring Program (FMMP)<sup>2</sup> and the City General Plan.<sup>3</sup>

State CEQA Statutes, §21060.1(a) Public Resources Code 21000-21177, define agricultural land to mean “prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture (USDA) land inventory and monitoring criteria, as modified for California,” and is herein collectively referred to as “Farmland.” State CEQA Guidelines recommend the consideration of three questions when addressing the potential for significant impacts to agriculture resources.

### 3.2.1 Affected Environment

#### ***Prime Farmland, Unique Farmland, or Farmland of Statewide Importance***

The CDC FMMP does not designate any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance in the City.<sup>4</sup>

#### ***Williamson Act Preserves***

There are no Williamson Act Preserves designated within the City.<sup>5</sup>

#### ***Farmlands***

There are no existing farmlands and lands designated for agricultural uses within the City.

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. 2004. *Important Farmland in California, 2002*. Sacramento, CA.

<sup>3</sup> City of Long Beach, Department of Planning and Building. July 1991. *General Plan Maps and Descriptions of Land Use Districts*. Long Beach, CA.

<sup>4</sup> California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. 2010. *Important Farmland in California, 2010*. Sacramento, CA.

<sup>5</sup> Anderson, Heather, State of California Department of Conservation, Sacramento, CA. 17 May 2013. Personal communication to Adam Furman, Sapphos Environmental, Inc., Pasadena, CA.

### 3.2.2 Impact Analysis

Would the proposed project have any of the following effects:

- (a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

The proposed project would not result in impacts to agriculture resources in relation to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The CDC FMMP does not designate any Prime or Unique Farmlands or Farmlands of Statewide Importance in the City.<sup>6</sup> The Housing Element update is a policy document and does not propose any specific development projects; however, the Housing Element update has determined the feasibility of accommodating the RHNA allocation for the City of 7,048 housing units in five Planned Development (PD) districts (PD-5, PD-6, PD-25, PD-29, PD-30), or other PD districts, in compliance with the housing densities that are currently allowed by the land use designations in the Land Use Element of the City of Long Beach General Plan and the Zoning Ordinance. The areas that are designated for residential land uses in the Land Use Element of the City of Long Beach General Plan are largely within existing developed area and are not suitable for designation as Prime or Unique Farmlands, or Farmlands of Statewide Importance. Therefore, there would be no expected impacts to agriculture resources related to the conversion of Farmland. No further analysis is warranted.

- (b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

The proposed project would not be expected to result in impacts to agriculture resources in relation to a conflict with existing zoning for agricultural use, or a Williamson Act contract. There are no areas zoned for agricultural land use in the City.<sup>7</sup> There are no Williamson Act contracts located in the City.<sup>8</sup> Based on the review of the City's zoning and status of Williamson Act contracts, there would be no impacts to agriculture resources related to a conflict with existing zoning for agricultural use or a Williamson Act contract. No further analysis is warranted.

- (c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

The Housing Element Update would not be expected to result in impacts to agriculture resources in relation to changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use. The Housing Element encourages future housing development in PD districts that have been identified for their capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City of Long Beach General Plan and the Zoning Ordinance. As the PD

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<sup>6</sup> California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. 2010. *Important Farmland in California, 2010*. Sacramento, CA.

<sup>7</sup> City of Long Beach, Department of Development Services. 1991. *Land Use Element of the Long Beach General Plan*. Long Beach, CA.

<sup>8</sup> Anderson, Heather, State of California Department of Conservation, Sacramento, CA. 17 May 2013. Personal communication to Adam Furman, Sapphos Environmental, Inc., Pasadena, CA.

districts are located in existing urbanized areas of the City, adjacent to other urban land use designations, the Housing Element Update does not include any existing agricultural land uses, areas suitable for agriculture, nor is it located adjacent to areas that are suitable for agricultural development. Therefore, there would be no expected impacts to agriculture resources related to changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use. No further analysis is warranted.

### 3.3 AIR QUALITY

This analysis was undertaken to determine if the 2013–2021 Housing Element update to the City of Long Beach General Plan (proposed project) may have a significant impact to air quality, thus requiring the consideration of mitigation measures or alternatives in accordance with Section 15063 of the State CEQA Guidelines.<sup>1</sup> Air quality at the proposed project site was evaluated with regard to the City of Long Beach General Plan,<sup>2</sup> the National Ambient Air Quality Standards (NAAQS), the California Ambient Air Quality Standards (CAAQS), the Clean Air Act (CAA), and the *South Coast Air Quality Management District Handbook*.<sup>3</sup>

Data on existing air quality in the South Coast Air Basin (Basin), in which the proposed project site is located, is monitored by a network of air monitoring stations operated by the California Environmental Protection Agency (EPA), California Air Resources Board (ARB), and the South Coast Air Quality Management District (SCAQMD). The air quality assessment considers all phases of project planning, construction, and operation. The analysis of construction impacts was based on a construction scenario for a building of comparable size and a construction schedule of comparable duration.

#### 3.3.1 Affected Environment

##### ***National Ambient Air Quality Standards (NAAQS)***

Under the CAA (last amended in 1990), the U.S. EPA established NAAQS for pollutants considered harmful to public health and the environment.<sup>4</sup> The CAA identifies two types of NAAQS. Primary standards provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

The U.S. EPA has set NAAQS for six principal pollutants, which are called “criteria” pollutants. Table 3.3.1-1, *NAAQS for Criteria Pollutants*, lists the following criteria pollutants in parts per million (ppm) by volume, parts per billion (ppb) by volume, and micrograms per cubic meter of air ( $\mu\text{g}/\text{m}^3$ ).

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> City of Long Beach, Department of Development Services. 1996. *Air Quality Element of the Long Beach General Plan*. Long Beach, CA.

<sup>3</sup> U.S. Environmental Protection Agency. 2005. *Federal Clean Air Act, “Title I Air Pollution Prevention and Control.”* Available at: <http://www.epa.gov/oar/caa/contents.html>.

<sup>4</sup> *Code of Federal Regulations*, Title 40, Chapter 1, Part 50, “National Primary and Secondary Ambient Air Quality Standards.” Available at: <http://www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR>

**TABLE 3.3.1-1  
NAAQS FOR CRITERIA POLLUTANTS**

Pollutant		Primary/Secondary	Averaging Time	Level
Carbon Monoxide		Primary	8-hour	9 ppm
			1-hour	35 ppm
Lead		Primary and secondary	Rolling 3 month average	0.15 µg/m <sup>3</sup>
Nitrogen Dioxide		Primary	1-hour	100 ppb
		Primary and secondary	Annual	53 ppb
Ozone		Primary and secondary	8-hour	0.075 ppm
Particle Pollution	PM <sub>2.5</sub>	Primary	Annual	12 µg/m <sup>3</sup>
		Secondary	Annual	15 µg/m <sup>3</sup>
		Primary and secondary	24-hour	35 µg/m <sup>3</sup>
	PM <sub>10</sub>	Primary and secondary	24-hour	150 µg/m <sup>3</sup>
Sulfur Dioxide		Primary	1-hour	75 ppb
		Secondary	3-hour	0.5 ppm

**NOTE:** As of October 2011.

**SOURCE:** U.S. Environmental Protection Agency. December 2012. *National Ambient Air Quality Standards (NAAQS)*. Available at: <http://www.epa.gov/air/criteria.html>

### **California Ambient Air Quality Standards**

Similar to the standards set forth for the NAAQS, the State of California has developed its own standards for pollutants summarized in Table 3.3.1-2, *CAAQS for Criteria Pollutants*.

**TABLE 3.3.1-2  
CAAQS FOR CRITERIA POLLUTANTS**

Pollutant		Averaging Time	Level
Carbon Monoxide		8-hour	9 ppm
		1-hour	20 ppm
Lead		30 day average	1.5 µg/m <sup>3</sup>
Nitrogen Dioxide		1-hour	0.18 ppm
		Annual	0.03 ppm
Ozone		8-hour	0.07 ppm
		1-hour	20 ppm
Particle Matter	PM <sub>2.5</sub>	Annual	12 µg/m <sup>3</sup>
	PM <sub>10</sub>	24-hour	50 µg/m <sup>3</sup>
		Annual	20 µg/m <sup>3</sup>
Sulfur Dioxide		1-hour	0.25 ppm
		24-hour	0.04 ppm
Sulfates		24-hour	25 µg/m <sup>3</sup>
Hydrogen Sulfide		1-hour	0.03 ppm
Vinyl Chloride		24-hour	0.01 ppm

**NOTE:** As of June, 2012

**SOURCE:** California Air Resources Board. November 2009. *California Ambient Air Quality Standards*. Available at: <http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm>

### ***State Implementation Plan***

Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop plans, known as State Implementation Plans (SIPs). SIPs are comprehensive plans that describe how an area will attain NAAQS. The 1990 amendments to the federal CAA set deadlines for attainment based on the severity of an area's air pollution problem.

SIPs are a compilation of new and previously submitted plans, programs (such as monitoring, modeling, permitting, etc.), district rules, state regulations and federal controls. Many of California's SIPs rely on the same core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations, and limits on emissions from consumer products. State law makes ARB the lead agency for all purposes related to the SIP. ARB forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. The Code of Federal Regulations Title 40, Chapter I, Part 52, Subpart F, Section 52.220, lists all of the items which are included in the California SIP.

### ***Air Quality Management Plan***

The most recent update to the SCAQMD Air Quality Management Plan (AQMP) was adopted in 2012 by the SCAQMD Board and the California ARB<sup>5</sup>. The AQMP demonstrates attainment of the federal 24-hour PM<sub>2.5</sub> standard by 2014 in the Basin through adoption of all feasible measures. The current AQMP also updates the U.S. EPA approved 8-hour ozone control plan with new measures designed to reduce reliance on the CAA Section 182(e)(5) long-term measures for NO<sub>x</sub> and volatile organic compound (VOC) reductions. In addition, the AQMP addresses several state and federal planning requirements, incorporating new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models.

The California ARB establishes state ambient air quality standards to identify outdoor pollutant levels considered safe for the public. State law requires the California ARB to designate areas within its jurisdiction as attainment, nonattainment, or unclassified for each standard set forth. There are area designations in Los Angeles County for the ten pollutants pursuant to the California Health and Safety Code Section 39608 (Table 3.3.1-3, *Area Designations for Los Angeles County*).

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<sup>5</sup> South Coast Air Quality Management District. 2012. *Final 2012 Air Quality Management Plan*. Diamond Bar, CA.

**TABLE 3.3.1-3  
AREA DESIGNATIONS FOR LOS ANGELES COUNTY**

<b>Pollutant</b>	<b>Designation</b>
Ozone	Nonattainment
PM <sub>2.5</sub>	Nonattainment
PM <sub>10</sub>	Nonattainment
Carbon Monoxide	Attainment
Nitrogen Dioxide	Nonattainment
Sulfur Dioxide	Attainment
Sulfates	Attainment
Lead	Nonattainment
Hydrogen Sulfide	Unclassified
Visibility Reducing Particles	Unclassified

**SOURCE:** California Environmental Protection Agency, Air Resources Board. 2013. *2012 State Area Designations*. Available at: <http://www.arb.ca.gov/desig/adm/adm.htm>

***Assembly Bill 32***

Assembly Bill 32 (AB 32), also known as the Global Warming Solutions Act of 2006, is a California State Law that addresses climate change by establishing a comprehensive program to reduce greenhouse gas (GHG) emissions from all sources throughout the state. AB 32 requires that the California ARB develop regulations and market mechanisms to reduce California’s GHG emissions to 1990 levels by 2020. To achieve this goal, AB 32 mandates that CARB establish a quantified emissions cap, institute a schedule to meet the cap, implement regulations to reduce statewide GHG emissions from stationary sources, and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved.

***Senate Bill 375***

Senate Bill 375 (SB 375), also known as the Sustainable Communities Protection Act of 2008, outlines strategies for achieving the goals set forth in AB 32. Pursuant to SB 375, SCAG developed a Regional Transportation Plan (RTP) as part of its Sustainable Communities Strategy. As a way to significantly reduce greenhouse gas emissions in the future, the RTP strategy focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development.

***Regional Comprehensive Plan***

In 2008, SCAG released its Regional Comprehensive Plan (RCP). The RCP is a major advisory plan prepared by SCAG that addresses important regional issues like housing, traffic/transportation, water, and air quality. The RCP contains an Air Quality chapter that emphasized the importance of land use and transportation planning, which heavily influence the emissions inventory from the transportation sectors of the economy. The RCP outlines the following air quality goals:

- Reduce emissions of criteria pollutants to attain federal air quality standards by prescribed dates and state ambient air quality standards as soon as practicable
- Reverse current trends in greenhouse gas emissions to support sustainability goals for energy, water supply, agriculture, and other resource areas

- Minimize land uses that increase the risk of adverse air pollution-related health impacts from exposure to toxic air contaminants, particulates (PM<sub>10</sub>, PM<sub>2.5</sub>, ultrafine), and carbon monoxide
- Expand green building practices to reduce energy-related emissions from developments to increase economic benefits to business and residents

In addition, the RCP contains a Land Use and Housing chapter that outlines the following goals:

- Focus growth in existing and emerging centers and along major transportation corridors
- Create significant areas of mixed-use development and walkable, “people-scaled” communities
- Provide new housing opportunities, with building types and locations that respond to the region’s changing demographics
- Target growth in housing, employment and commercial development within walking distance and existing and planned transit stations.
- Inject new life into under-used areas by creating vibrant new business districts, redeveloping old buildings and building new business and housing on vacant lots
- Preserve existing, stable, single-family neighborhoods
- Protect important open space, environmentally sensitive areas and agricultural land from development

### ***Regional Housing Needs Assessment***

In 2012, SCAG updated its RHNA based on forecasts contained in its Regional Transportation Plan (RTP). The RHNA is mandated by State Housing Law as part of the periodic process of updating local housing elements of the General Plan. For the 2013 Housing Element update, the City of Long Beach (City) is allocated a RHNA of 7,048 units. The RHNA for this planning period commences on January 1, 2014 and covers through October 31, 2021.

### ***Air Quality Plan***

The proposed project area is in the City of Long Beach, Los Angeles County, within the SCAQMD portion of the South Coast Air Basin (SCAB).

### ***Air Quality Standards***

The SCAQMD has divided the SCAB into Source Receptor Areas (SRAs) based on similar meteorological and topographical features. The City is located in SCAQMD’s SRA 4, South Los Angeles County Coastal,<sup>6</sup> which is served by the South Long Beach Monitoring Station (Station No. 077) located at 1305 East Pacific Coast Highway, Long Beach, California, and the North Long Beach Monitoring Station (Station No. 072) located at 3648 North Long Beach Boulevard, Long Beach, California. Criteria pollutants monitored at both stations include PM<sub>10</sub>, PM<sub>2.5</sub>, and lead (Pb). In addition, the North Long Beach Monitoring Station monitors CO, O<sub>3</sub>, NO<sub>2</sub>, and SO<sub>2</sub>. A summary of the ambient air quality data in the proposed project vicinity recorded at the North Long Beach Monitoring Station from 2005 to 2007 and the applicable state standards are shown in

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<sup>6</sup>South Coast Air Quality Management District. 1999. Map-Monitoring Station. Available at: <http://www.aqmd.gov/map/MapAQMD2.pdf>

Table 3.3.1-4, *Summary of 2005–2007 Ambient Air Quality Data in the Proposed Project Vicinity*. Background CO concentration in the City is established because CO concentrations are typically used as an indicator of the conformity with CAAQS and estimated changes in CO concentrations generally reflect operational air quality impacts associated with the project. The highest reading of the CO concentrations over the past three years is defined by SCAQMD as the background level. A review of data from the North Long Beach Monitoring Station from the 2005 to 2007 period indicates that the highest readings of 1- and 8-hour background CO concentrations are approximately 4 and 3.5 ppm, respectively. The existing 1- and 8-hour background concentrations do not exceed the state CO standards of 20 ppm and 9 ppm, respectively. In addition, criteria pollutants NO<sub>2</sub> and SO<sub>2</sub> did not exceed the CAAQS during the 2005 through 2007 period. The 1- and 8- hour state standards of O<sub>3</sub> were not exceeded during 2005 and 2006, but were exceeded once in 2007. The annual state standards for PM<sub>10</sub> and PM<sub>2.5</sub> were exceeded numerous times during the 2005 to 2007 time period.<sup>7</sup>

**TABLE 3.3.1-4  
SUMMARY OF 2005–2007 AMBIENT AIR QUALITY DATA IN THE  
PROPOSED PROJECT VICINITY**

Pollutants	Pollutant Concentration and Standards	Number of Days Above State Standard		
		2005	2006	2007
Ozone	Maximum 1-hr Concentration (ppm) Days > 0.09 ppm (State 1-hr standard)	0.09 0	0.08 0	0.10 1
	Maximum 8-hr Concentration (ppm) Days > 0.07 ppm (State 8-hr standard)	0.07 0	0.06 0	0.07 1
Carbon Monoxide	Maximum 1-hr Concentration (ppm) Days > 20 ppm (State 1-hour standard)	4 0	4 0	3 0
	Maximum 8-hr Concentration (ppm) Days > 9.0 ppm (State 8-hr standard)	3.5 0	3.4 0	2.6 0
Nitrogen Dioxide	Maximum 1-hr Concentration (ppm) Days > 0.18 ppm (State 1-hr standard)	0.14 0	0.10 0	0.11 0
PM <sub>10</sub>	Maximum 24-hr Concentration (µg/m <sup>3</sup> ) Days > 50 µg/m <sup>3</sup> (State 24-hr standard)	66 5	78 6	75 5
PM <sub>2.5</sub>	Maximum 24-hr Concentration (µg/m <sup>3</sup> ) Exceed State Standard (12 µg/m <sup>3</sup> Annual Arithmetic Mean)?	54 Yes	59 Yes	83 Yes
Sulfur Dioxide	Maximum 24-hr Concentration (ppm) Days > 0.25 ppm (State 24-hr standard)	0.01 0	0.01 0	0.01 0

**SOURCE:** South Coast Air Quality Management District. Accessed 19 September 2008. *Historical Data by Year*. Available at: <http://www.aqmd.gov/smog/historicaldata.htm>

<sup>7</sup> South Coast Air Quality Management District. Accessed 19 September 2008. *Historical Data by Year*. Available at: <http://www.aqmd.gov/smog/historicaldata.htm>

### **Criteria Pollutants**

Existing air quality within the Long Beach vicinity is characterized by a mix of local emission sources that include stationary activities, such as space and water heating, landscape maintenance, consumer products and mobile sources, which include primarily automobile and truck traffic. Motor vehicles are the primary source of pollutants within the proposed project vicinity, because they have the potential to generate elevated localized levels of CO, termed as CO hotspots. Section 9.4 of SCAQMD's *CEQA Air Quality Handbook* identifies CO as a localized problem requiring additional analysis when a proposed project is likely to expose sensitive receptors to CO hotspots.<sup>8</sup>

### **Sensitive Receptors**

Some people are especially sensitive to air pollution and should be given special consideration when evaluating air quality impacts from projects. According to the *CEQA Air Quality Handbook*<sup>9</sup>, these persons include children, the elderly, persons with preexisting respiratory or cardiovascular illness, and athletes and other who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as sensitive receptors, and are located throughout the City.

### **Odors**

The City generally enjoys good air quality. There are occasional intermittent complaints related to sulfur odors that are expected to be related to offshore oil islands and burn off at regional refineries.

### **3.3.2 Impact Analysis**

State CEQA Guidelines recommend the consideration of five questions when addressing the potential for significant impacts to air quality.

Would the proposed project have any of the following effects:

- (a) Conflict with or obstruct implementation of the applicable air quality plan?

The proposed project would not be expected to result in impacts to air quality in relation to a conflict with or obstruction of implementation of the applicable air quality plan. The Housing Element would be consistent with all chapters of the Long Beach General Plan, including the Air Quality Element last updated in 1996. In addition, SCAG has determined that if a proposed project is consistent with the growth forecast for the subregion in which it is located and regional emissions are mitigated through the AQMP strategies, then the proposed project is consistent with the SCAQMD AQMP.

The Housing Element plans for the anticipated future housing needs set forth in the City RHNA allocation, which are within the SCAG growth forecasts established for the City. Since the Housing Element would be consistent with the SCAG growth forecasts, it would also be consistent with the SCAQMD AQMP and, therefore, there would be no expected impacts to air quality related to the attainment of the AQMP. No further analysis is warranted.

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<sup>8</sup> South Coast Air Quality Management District. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA.

<sup>9</sup> South Coast Air Quality Management District. 1993. *CEQA Air Quality Handbook*. Diamond Bar, CA.

- (b) Violate any air quality standard or contribute substantially to existing or projected air violations?

The proposed project would be expected to result in less than significant impacts to air quality in relation to violation of any air quality standard or substantial contribution to an existing or projected air quality violation. While the Housing Element is a policy document that does not propose any specific development projects, it does establish goals and policies to provide housing assistance and preserve affordability, address unique local housing needs, retain and improve existing housing and neighborhoods, increase the opportunities for new housing construction, mitigate governments constraints to housing investment and affordability, increase opportunities for home ownership, and ensure fair and equal housing opportunities. The creation of new housing units in conformity with the City RHNA allocation target could result in some short term air quality construction impacts.

As a way to mitigate potential air quality impacts, the RTP developed by SCAG pursuant of SB 375, focuses on reducing vehicle miles traveled by concentrating new housing developments in highly developed areas serviced by public transit. The proposed project demonstrates the feasibility of achieving the housing inventory objectives through evaluation of five Planned Development (PD) Districts, PD-5 (Ocean Boulevard), PD-6 (Downtown Shoreline), PD-25 (Atlantic Boulevard), PD-29 (Long Beach Boulevard), and PD-30 (Downtown), which were established to allow flexible development plans to be prepared for areas within the City. Each of the PD districts targeted by the Housing Element are located in areas serviced by several means of public transit including multiple bus routes and a Metro light rail along Long Beach Boulevard that can transport passengers to Los Angeles, El Segundo, and Norwalk, as well as connect passengers to the neighboring cities of Carson, Compton, Paramount, Bellflower, Artesia, Cerritos, Hawaiian Gardens, and Norwalk. By concentrating efforts in the PD districts mentioned above, the proposed project will offset potential air quality impacts by reducing vehicle miles traveled through the utilization of existing public transit and concentrating development in existing dense communities.

Implementation of the proposed project will be consistent with both the AQMP and the City Air Quality Element, and would not result in air quality impacts beyond what is typically associated with residential construction activities. In addition, all future housing development projects will be subject to separate environmental review in accordance with CEQA. Therefore, the proposed project would not be expected to result in significant impacts to air quality. No further analysis warranted.

- (c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

The proposed project would be expected to result in less than significant impacts to air quality in relation to criteria pollutants. The County of Los Angeles is currently in nonattainment for ozone, PM<sub>2.5</sub>, PM<sub>10</sub>, Nitrogen Dioxide, and Pb. As was discussed in Sections 3.3.29(b), the Housing Element does not propose any specific development projects, and the creation of new housing units in conformity with the City RHNA allocation target could result in some short term air quality impacts for criteria pollutants. However, the proposed increase in housing stock proposed in the Housing Element is consistent with the designation for residential land uses in the adopted City of Long Beach General Plan and zoning ordinance; therefore, the increases do not constitute

significant impacts in relation to the adopted AQMP. In addition, although there may be net increases in criteria pollutants, the per capita level of criteria pollutants is likely be minimized due reduced vehicle miles traveled through the utilization of existing public transit and concentrating development in existing dense communities, consistent with the goals and objectives to the *Regional Comprehensive Plan*. All future housing development projects will be subject to separate environmental review in accordance with CEQA. Therefore, the proposed project would not be expected to result in significant impacts to air quality related to criteria pollutants. No further analysis is warranted.

(d) Expose sensitive receptors to substantial pollutant concentrations?

The proposed project would be expected to result in less than significant impacts to air quality in relation to exposure of sensitive receptors to substantial pollutant concentrations. The SCAQMD Guidance Document states that local jurisdictions have the responsibility for determining land use compatibility for sensitive receptors. Fugitive dust in particular may pose significant impacts to sensitive receptors. The SCAQMD regulates fugitive dust via several district rules. Rule 403, Fugitive Dust, requires all projects and activities in the SCAB to control dust generation, with specific control measures for large operations of 50 acres or more<sup>10</sup>. Common measures include, but are not limited to, applying control blankets, spraying water on loose dirt, lying down crushed rock or gravel, setting up blockades such as silt fences, and establishing a mix of native vegetation.

As discussed above, the Housing Element does not propose any specific development projects or operations, and the creation of new housing units in conformity with the City RHNA allocation target could result in some short term air quality impacts to sensitive receptors. Implementation of the Housing Element will be consistent with both the AQMP and the City Air Quality Element and would not result in air quality impacts beyond what is typically associated with residential construction activities. In addition, all future housing development projects will be subject to separate environmental review in accordance with CEQA. Therefore, the proposed project would not be expected to result in significant impacts to air quality related to criteria pollutants. No further analysis is warranted.

(e) Create objectionable odors affecting a substantial number of people?

The proposed project would not be expected to result in impacts to air quality in relation to objectionable odors. Residential housing land uses in the City have not been the source of complaints regarding objectionable odors. Potential sources of objectionable odors during residential construction include use of architectural coatings and solvents, and diesel-powered construction equipment. SCAQMD Rule 1113 limits the amount of VOCs from architectural coating and solvents, which lowers odorous emissions.<sup>11</sup>

The Housing Element is a policy document that does not propose any specific development projects and would not result in any new odors or intensification of odors typically associated with construction activities or housing maintenance and improvements (i.e. exterior painting). All future housing development projects will be subject to separate environmental review in accordance with CEQA. No further analysis is warranted.

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<sup>10</sup> South Coast Air Quality Management District. May 2005. *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, Chapter 2: "Air Quality Issues Regarding Land Use." Diamond Bar, CA.

<sup>11</sup> South Coast Air Quality Management District. Amended June 2011. *Rules and Regulations*. Chapter XI, Rule 1113: Architectural Coatings. Diamond Bar, CA.

### 3.4 BIOLOGICAL RESOURCES

This analysis is undertaken to determine if the City of Long Beach 2013–2021 Housing Element (proposed project) may have a significant impact on biological resources, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State CEQA Guidelines.<sup>1</sup> Biological resources at the proposed project site were evaluated with regard to County and/or the City of Long Beach General Plan, in consultation with resource agency personnel at U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW); a query of the California Natural Diversity Database (CNDDB)<sup>2</sup> for the USGS 7.5-minute series Long Beach, Long Beach OE, Seal Beach, Los Alamitos, and South Gate topographic quadrangles where the project is located, and all surrounding USGS 7.5-minute series topographic quadrangles (San Pedro, Torrance, Inglewood, Hollywood, Los Angeles, El Monte, Whittier, La Habra, Anaheim, Newport Beach); and a review of published and unpublished literature germane to the proposed project.

#### 3.4.1 Affected Environment

Although the City of Long Beach (City) is a largely urbanized area, there are urban natural areas including parks, trees, open space, community gardens, wetlands, rivers, and the Pacific Ocean. These natural provide habitat for local wildlife.

##### **Listed Species**

Most of the plant and wildlife species listed as rare, threatened, or endangered pursuant to the Federal and State Endangered Species Acts (ESAs) that have the potential to be present in the City are associated with extant marine and freshwater areas and limited area of extant terrestrial upland plant communities. These habitats have been largely eliminated within areas that have been developed or zoned for development or residential land uses.

##### **State-Designated Sensitive Habitats**

The area that is now the City historically included several ecological communities, with coastal scrub dominating. A handful of the native plants of the region can still be found in the city. These include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), and California poppy (*Eschscholzia californica*). Some stands of coast live oak (*Quercus agrifolia*) still remain in the El Dorado Nature Center. California fan palm (*Washingtonia filifera*), a plant that is native further inland, was introduced to the City as a garden ornamental and is now naturalized. The areas that have been identified with the capacity to absorb additional residential density within the City are located within existing developed areas of the City that are not likely to support State-designated sensitive habitats.

##### **Riparian and Wetland Habitats**

Because of the coastal setting of the City, the open space resources include both land and water areas. There are approximately 11,600 water (surface) acres that are subject to the jurisdiction of the U.S. Army Corps of Engineers (USACOE) pursuant to Section 404 of the Clean Water Act, most

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<sup>1</sup> California Code of Regulations. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> California Department of Fish and Game. 2002. *Rarefind 2: A Database Application for the Use of the California Department of Fish and Game Natural Diversity Data Base*. Sacramento, CA.

of which would also be subject to the jurisdiction of the CDFW pursuant to Section 1600 of the State Fish and Game Code. Wetland and riparian resources within the City include bays, rivers, creeks, channels and canals, lagoons, lakes and ponds, and wetlands. Of these acres, all but 1,000 acres are also considered areas for fishing and marine life production.

### ***Wildlife Movement Corridors***

Extant aquatic and upland habitats within natural areas and parks within the City may provide resting and roosting habitat for migratory birds as part of their larger journey along the Pacific Flyway.

### ***Local Ordinances for Biological Resources***

The Open Space and Recreation Element of the City of Long Beach General Plan identifies four policies related to open space for the preservation of natural resources:

- 1.1 Promote the creation of new and reestablished natural habitats and ecological preserves including wetlands, woodlands, native plant communities and artificial reefs
- 1.2 Protect and improve the community's natural resources, amenities and scenic values including nature centers, beaches, bluffs, wetlands and water bodies
- 1.3 Incorporate environmentally sustainable practices in City programs and projects
- 1.4 Promote and assist with the remediation of contaminated sites

### ***Habitat Conservation Plans***

CDFW has not designated any Natural Community Conservation Planning Areas in the City.<sup>3</sup> USFWS has not designated any Habitat Conservation Plan areas in the City.<sup>4</sup>

### **3.4.2 Impact Analysis**

State CEQA Guidelines recommend the consideration of the following six questions when addressing the potential for significant impacts to biological resources:

Would the project have any of the following effects:

- (a) Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

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<sup>3</sup> California Department of Fish and Wildlife. n.d. *Natural Community Conservation Planning*. Available at: <http://www.dfg.ca.gov/habcon/nccp/>

<sup>4</sup> U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office. n.d. *Conservation Partnerships Program*. Available at: <http://www.fws.gov/carlsbad/ConsVPartners.html>

The proposed project would be expected to result in less than significant impacts to biological resources in relation to species listed as rare, threatened, or endangered pursuant to the Federal and State Endangered Species Acts. Areas that have the capacity to absorb additional residential development area are largely associated with existing developed areas within the City. The Housing Element limits the consideration of increased residential density to existing areas designated for such use in the Land Use Element of the City General Plan and in the Zoning Ordinance. Areas that provide suitable habitat for federally- and state-listed species are largely associated with extant natural habitats designated as Open Space in the Open Space and Recreation Element of the City of Long Beach General Plan. The Housing Element is a policy document that conforms to the Land Use and Open Space and Recreation Elements of the City of Long Beach General Plan and does not propose any specific development projects. Any future housing developments resulting from the implementation of the Housing Element would be subject to environmental review under CEQA and would be required to evaluate any potential effects to species listed or under consideration for listing pursuant to the Federal and State ESAs. The City of Long Beach Open Space and Recreation Element of the General Plan does not designate any locally sensitive populations of plants or wildlife. Therefore, the proposed project would not be expected to result in significant impacts to biological resources related to species listed as rare, threatened, or endangered pursuant to the Federal and State ESAs. No further analysis is warranted.

- (b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or the U. S. Fish and Wildlife Service?

The proposed project is expected to result in less than significant impacts to biological resources in relation to riparian habitat or other sensitive natural communities. Nearly the entire City is developed with urban uses. Areas that support extant natural habitats are largely designated as Open Space in the Open Space and Recreation Element of the City of Long Beach General Plan. The Housing Element is a policy document that conforms to the Land Use and Open Space and Recreation Elements of the City of Long Beach General Plan and does not propose any specific development projects. Any future housing developments resulting from the implementation of the Housing Element would be subject to environmental review under CEQA and would be required to evaluate any potential effects to state-designated sensitive habitats. Therefore, the proposed project is not expected to result in significant impacts to biological resources, and no further analysis related to riparian habitat or other sensitive natural communities is warranted.

- (c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) Through direct removal, filling, hydrological interruption, or other means?

The proposed project is expected to result in less than significant impacts to biological resources in relation to federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means. The majority of the over 11,000 acres of aquatic and wetland resources within the City are designated as Open Space in the Open Space and Recreation Element of the City of Long Beach General Plan. The Housing Element is a policy document that conforms to the Land Use and Open Space and Recreation Elements of the City of Long Beach General Plan and does not propose any specific development projects. Any future housing developments resulting from the implementation of the Housing Element would be subject to environmental review under the CEQA and would be required to evaluate any potential effects to waters of the United States or waters of the State. Therefore, the proposed project is not

expected to result in significant impacts to biological resources and no further analysis related to federally protected wetlands as defined by Section 404 of the Clean Water Act is warranted.

- (d) 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?

The proposed project is expected to result in less than significant impacts to biological resources in relation to movement of any migratory fish or wildlife species or with an established wildlife corridor. The majority of the extant natural habitats within the City are designated as Open Space in the Open Space and Recreation Element of the City of Long Beach General Plan. Housing Element is a policy document that conforms to the Land Use and Open Space and Recreation Elements of the City of Long Beach General Plan and does not propose any specific development projects. Any future housing developments resulting from the implementation of the Housing Element would be subject to environmental review under the CEQA and would be required to evaluate any potential effects to wildlife movement corridors. Therefore, the proposed project is not expected to result in significant impacts to biological resources and no further analysis related to movement of any migratory fish or wildlife species or with an established wildlife corridor or nursery sites is warranted.

- (e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The proposed project is not expected to result in impacts to biological resources in relation to conflicts with any local policies or ordinances protecting biological resources. As proposed opportunities to accommodate increased residential density are limited to existing area designated for such purposes, there are no anticipated conflicts with local policies or ordinances related to management of open space for the preservation of natural resources as articulated in the Open Space and Recreation Element of the City of Long Beach General Plan. Therefore, there are no expected impacts to biological resources related to conflicts with any local policies or ordinances protecting biological resources and no further analysis is warranted.

- (f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The proposed project is not expected to result in impacts to biological resources in relation to conflicts with the provisions of any adopted Habitat Conservation Plan or Natural Community Conservation Plans. There is no known Habitat Conservation Plan or Natural Community Conservation Plan within the City as verified from USFWS and CDFW data.<sup>5, 6</sup> Therefore, there are no expected impacts to biological resources related to conflicts with the provisions of any adopted Habitat Conservation Plan or Natural Community Conservation Plans and no further analysis is warranted.

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<sup>5</sup> U.S. Fish and Wildlife Service. n.d. *Conservation Plans and Agreements*. Available at: [http://ecos.fws.gov/conserv\\_plans/PlanReport](http://ecos.fws.gov/conserv_plans/PlanReport)

<sup>6</sup> California Department of Fish and Wildlife. n.d. *Natural Community Conservation Planning*. Available at: <http://www.dfg.ca.gov/habcon/nccp/>

## 3.5 CULTURAL RESOURCES

This analysis is undertaken to determine if the City of Long Beach 2013–2021 Housing Element (proposed project) may have a significant impact to cultural resources, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).

### 3.5.1 Affected Environment

#### ***Archaeological Resources***

The City of Long Beach (City) is an urbanized city. Archaeological evidence suggests that indigenous people inhabited portions of the City as early as 5,000 to 2,000 B.C.E. Much of those artifacts were destroyed in the first century of Long Beach’s development.<sup>1</sup> Archaeological evidence suggests that several Gabrielino communities may have been present in the City area prior to Spanish contact and that each community may have controlled an area up to 10 square miles in size.<sup>2</sup> Among the best-researched Gabrielino communities in the City was Puvungna, a large settlement and important ceremonial site that was probably located in the area historically occupied by Rancho Los Alamitos and currently occupied by California State University, Long Beach.<sup>3</sup>

#### ***Paleontological Resources***

Previous paleontological analysis indicates that the City of Long Beach’s bedrock is made up of Quaternary (recent) Alluvium and Quaternary (Pleistocene) nonmarine terrace deposits. Beneath the soil and thin veneer of Quaternary Alluvium, areas contain surficial deposits of older Quaternary terrace deposits, which are terrestrial and marine.<sup>4</sup>

#### ***Historic Resources***

The City of Long Beach adopted a Historic Preservation Element of the General Plan on June 22, 2010, which promotes the preservation and rehabilitation of historic resources in the City.<sup>5</sup> Previously, a Historic Context Statement for the City was written, which aided the development of the Historic Preservation Element.<sup>6</sup>

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<sup>1</sup> Sapphos Environmental, Inc. 2009. *Long Beach Historic Context Statement*. Prepared for: City of Long Beach, CA. Pasadena, CA.

<sup>2</sup> Grenda, D.R., and J.H. Atschul. 2002. “A Moveable Feast: Isolation and Mobility among Southern California Hunter Gatherers.” In *Islands and Mainlanders: Prehistoric Context for the Southern California Bight*, eds. J.H. Atschul and D.R. Grenda. Tucson, AZ: SRI Press, pp. 143–144.

<sup>3</sup> McCawley, William. 1996. *The First Angelinos: The Gabrielino Indians of Los Angeles*. Banning, CA: Malki Museum Press, p. 71.

<sup>4</sup> Sapphos Environmental, Inc. 20 August 2004. *Initial Study: Long Beach Memorial Medical Center Expansion*. Prepared for: City of Long Beach, Department of Planning and Building, Long Beach, CA. Pasadena, CA.

<sup>5</sup> City of Long Beach, Department of Development Services. June 2010. *Historic Preservation Element*. Long Beach, CA.

<sup>6</sup> Sapphos Environmental, Inc. 2009. *Long Beach Historic Context Statement*. Prepared for: City of Long Beach, CA. Pasadena, CA.

### 3.5.2 Impact Analysis

State CEQA Guidelines recommend the consideration of four questions when addressing the potential for significant impacts to cultural resources:

Would the project have any of the following effects:

- (a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

The proposed project is not expected to result in impacts to cultural resources related to a substantial adverse change in the significance of a historical resource. The proposed project is a policy document that does not propose any specific development projects or alterations to any specific properties. Future development proposals consistent with the Housing Element will be subject to environmental review in accordance with CEQA. Therefore, there are no expected impacts to cultural resources related to a substantial adverse change in the significance of a historical resource, and no further analysis is warranted.

- (b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?

The proposed project is not expected to result in impacts to cultural resources related to a substantial adverse change in the significance of an archeological resource. The proposed project is a policy document that does not propose any specific development projects or alterations to any specific properties. Future development proposals consistent with the Housing Element will be subject to environmental review in accordance with CEQA. Therefore, there are no expected impacts to cultural resources related to a substantial adverse change in the significance of an archeological resource, and no further analysis is warranted.

- (c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The proposed project is not expected to result in impacts to cultural resources related directly or indirectly to the destruction of a unique paleontological resource or unique geologic feature. The proposed project is a policy document that does not propose any specific development projects or alterations to any specific properties. Future development proposals consistent with the Housing Element will be subject to environmental review in accordance with CEQA. Therefore, there are no expected impacts to cultural resources related to the destruction of a unique paleontological resource or unique geologic feature, and no further analysis is warranted.

- (d) Disturb any human remains, including those interred outside of formal cemeteries?

The proposed project is not expected to disturb any human remains, including those interred outside of formal cemeteries. The proposed project is a policy document that does not propose any specific development projects or alterations to any specific properties. Future development proposals consistent with the Housing Element will be subject to environmental review in accordance with CEQA. Therefore, the proposed project is not expected to disturb any human remains, including those interred outside of formal cemeteries, and no further analysis is warranted.

## 3.6 GEOLOGY AND SOILS

This analysis was undertaken to determine if the 2013–2021 Housing Element update (proposed project) to the City of Long Beach (City) General Plan would have a significant impact to geology and soils, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act (CEQA) Guidelines.<sup>1</sup> The assessment of geology and soils considers all phases of the project planning, implementation, and operation in addressing the environmental checklist form. The conclusions rely on expert opinion supported by facts, published maps and studies,<sup>2,3,4,5,6,7</sup> the General Plan Safety Element,<sup>8</sup> and the General Plan Seismic Safety Element.<sup>9</sup> Information obtained from these sources address whether the proposed project would result in potential environmental impacts for the technical areas discussed below.

### 3.6.1 Affected Environment

#### ***Fault Rupture***

Where earthquakes are large enough, or shallow enough, surface rupture can occur along a fault plane where it intersects the earth's surface. The City is crossed by one known Alquist-Priolo Earthquake Fault Zoning Act (APEFZ) fault.<sup>10</sup> The Newport-Inglewood fault trends northwest through the center of the city, and is responsible for creating topographic features such as Signal Hill.<sup>11</sup> Other potentially active faults may extend beneath the City and could pose a substantial threat.

#### ***Ground Shaking***

Ground shaking is a potential seismic danger resulting from earthquakes that may occur in the region. Several factors contribute to the significance of ground shaking during an earthquake, including the proximity of the area to a fault or fault system, the depth of earthquake, the location of the epicenter, and the magnitude of the earthquake. There are areas within the City that are

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> California Geological Survey. 1986. *State of California Special Studies Zones, Long Beach Quadrangle*. Sacramento, CA.

<sup>3</sup> California Geological Survey. 1998. *Seismic Hazard Zone Report for the Long Beach 7.5-Minute Quadrangle, Los Angeles County, California*. Sacramento, CA.

<sup>4</sup> California Geological Survey. Revised 1999. *Fault-Rupture Hazard Zones in California*. Special Publication 42. Sacramento, CA.

<sup>5</sup> California Geological Survey. 1999. *Seismic Shaking Hazard Maps of California*. Map Sheet 48. Sacramento, CA.

<sup>6</sup> California Geological Survey. 1999. *State of California Seismic Hazard Zones, Long Beach Quadrangle*. Sacramento, CA.

<sup>7</sup> U.S. Geological Survey. 1989. *Map Showing Late Quaternary Faults and 1978–84 Seismicity of the Los Angeles Region, California*. Reston, VA.

<sup>8</sup> City of Long Beach, City Planning Department. 1975. *General Plan Program, Safety Element*. Long Beach, CA.

<sup>9</sup> City of Long Beach, Department of Planning and Building. 1988. *General Plan Program, Safety Element*. Long Beach, CA.

<sup>10</sup> California Geological Survey. 1986. *State of California Special Studies Zones, Long Beach Quadrangle*. Sacramento, CA.

<sup>11</sup> California Geological Survey. 1998. *Seismic Hazard Zone Report for the Long Beach 7.5-Minute Quadrangle, Los Angeles County, California*. Sacramento, CA.

susceptible to strong ground shaking from severe earthquakes. Earthquakes on faults, such as the Newport-Inglewood fault (capable of 7.1 magnitude), can generate seismic shaking.<sup>12</sup>

### ***Landslides***

Landslides result from unstable slopes that lose cohesion and collapse. Contributing factors to landslides include weakened bedrock, soil erosion, heavy and consistent rainfall, ground shaking from earthquake activity, and fire, as well as by human alteration of the surrounding environment. Very few portions of the City are located in “areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical, and subsurface water conditions indicate a potential for permanent ground displacements.”<sup>13</sup> These areas, such as the slope northeast of Reservoir Drive East, pose a potential hazard to housing structures in the area.

### ***Liquefaction***

Liquefaction occurs when saturated, cohesionless (low relative density) materials (usually sand or silty sand) are transformed from a solid to a near-liquid state due to the increase in pore water pressure that can be caused by moderate to severe seismic ground shaking. In order for liquefaction to occur, the groundwater table must be relatively close to the surface, the soil must be loosely packed, and ground shaking needs to be powerful enough to cause the soil to liquefy. Large areas of the City are located in “areas where historic occurrence of liquefaction, or local geological, geotechnical and groundwater conditions, indicate a potential for permanent ground displacement.”<sup>14</sup> The liquefaction zone in much of the City is widespread due to shallow ground water and abundant young alluvium.<sup>15</sup>

### ***Soil Erosion***

Soil erosion is the removal and transport of soils through geomorphic processes. The materials most susceptible to erosion are poorly consolidated sediments such as artificial fill, natural soil, and younger alluvium, all of which exist in various concentrations throughout the City.<sup>16</sup> Most susceptible areas are typically steeper slopes and along drainage courses.

### ***Unstable and Expansive Soils***

Subsidence is the gradual sinking of the earth's surface in a particular region. Subsidence hazard is found in areas with active groundwater or petroleum production. Petroleum activity is present within the City; however, reserves have been depleted.<sup>17</sup><sup>18</sup><sup>19</sup> Soils that expand and contract in

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<sup>12</sup> California Geological Survey. 1998. *Seismic Hazard Zone Report for the Long Beach 7.5-Minute Quadrangle, Los Angeles County, California*. Sacramento, CA.

<sup>13</sup> California Geological Survey. 1999. *State of California Seismic Hazard Zones, Long Beach Quadrangle*. Sacramento, CA.

<sup>14</sup> California Geological Survey. 1999. *State of California Seismic Hazard Zones, Long Beach Quadrangle*. Sacramento, CA.

<sup>15</sup> California Geological Survey. 1998. *Seismic Hazard Zone Report for the Long Beach 7.5-Minute Quadrangle, Los Angeles County, California*. Sacramento, CA.

<sup>16</sup> California Geological Survey. 1998. *Seismic Hazard Zone Report for the Long Beach 7.5-Minute Quadrangle, Los Angeles County, California*. Sacramento, CA.

<sup>17</sup> California Department of Conservation, Division of Oil, Gas, and Geothermal Resources. 1994. *California Oil and Gas Fields, Volume II, Southern, Central Coastal, and Offshore California Oil and Gas Fields*. Available at: [http://www.conservation.ca.gov/dog/pubs\\_stats/Pages/technical\\_reports.aspx](http://www.conservation.ca.gov/dog/pubs_stats/Pages/technical_reports.aspx)

volume (“shrink-swell” pattern) are considered to be expansive and may cause damage to aboveground structures as a result of density changes that shift overlying materials. Expansive soils have relatively high clay mineral content and are usually found in areas where underlying formations contain an abundance of clay minerals or where coarse-grained materials are weathered and break down into clay-rich materials. Holocene alluvial soft clay of distal fan deposits associated with the Los Angeles River, Rio Hondo, and San Gabriel River alluvial systems is present within the City and may have expansive properties.

### 3.6.2 Impact Analysis

The State CEQA Guidelines recommend the consideration of five questions when addressing the potential for significant impact to geology and soils:

Would the project have any of the following effects:

- (a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - (i) 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?

The proposed project is expected to result in less than significant impacts from exposing people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. Potential impacts associated with fault surface rupture will be addressed and evaluated through building new housing structures and updating existing housing structures in accordance with Chapter 18.68 of the Long Beach Building Standards Code.<sup>20</sup> The Housing Element is a policy statement consistent with the provisions of the land use designation in the City General Plan<sup>21</sup> and the City Zoning Ordinance.<sup>22</sup> Any development undertaken under the Housing Element would be subject to separate environmental review pursuant to CEQA. Therefore, the proposed project is not expected to result in significant impacts from exposing people or structures to potential substantial adverse effects involving rupture of a known earthquake fault. No further analysis is warranted.

- (ii) Strong seismic ground shaking?

There are areas within the City that are susceptible to strong ground shaking from severe earthquakes. Earthquakes on faults, such as the Newport-Inglewood fault (capable of 7.1 magnitude), can generate seismic shaking.<sup>23</sup> There are also a number of other active and potentially

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<sup>18</sup> California Department of Conservation, Division of Oil, Gas, and Geothermal Resources. 2009. *2008 Preliminary Report of California Oil and Gas Production Statistics*. Available at: [ftp://ftp.consrv.ca.gov/pub/oil/annual\\_reports/2008/PR03\\_2008.pdf](ftp://ftp.consrv.ca.gov/pub/oil/annual_reports/2008/PR03_2008.pdf)

<sup>19</sup> City of Long Beach. 2011. *Long Beach Building Standards Code*. Long Beach, CA.

<sup>20</sup> City of Long Beach. 2011. *Long Beach Building Standards Code*. Long Beach, CA.

<sup>21</sup> City of Long Beach, City Planning Department. 1989. *General Plan Program, Land Use Element*. Long Beach, CA.

<sup>22</sup> City of Long Beach and Municipal Code Corporation. 2012. *Long Beach Municipal Code, Volume 3, Title 21: “Zoning.”* Available at: <http://library.municode.com/HTML/16115/book.html>

<sup>23</sup> California Geological Survey. 1998. *Seismic Hazard Zone Report for the Long Beach 7.5-Minute Quadrangle, Los Angeles County, California*. Sacramento, CA.

active faults within 60 miles of the City, any of which could cause significant ground shaking at the site. Potential impacts associated with seismic ground shaking will be addressed and evaluated through building new housing structures and updating existing housing structures in accordance with Chapter 18.68 of the Long Beach Building Standards Code.<sup>24</sup> The Housing Element is a policy statement consistent with the provisions of the land use designation in the City General Plan and the City Zoning Ordinance. Any development undertaken under the Housing Element would be subject to separate environmental review pursuant to CEQA. Therefore, the proposed project is not expected to result in significant impacts from exposing people or structures to strong seismic ground shaking. No further analysis is warranted.

(iii) Seismic-related ground failure, including liquefaction?

Potential impacts associated with seismic-related ground failure, including liquefaction, will be addressed and evaluated through building new housing structures and updating existing housing structures in accordance with applicable city, county, and state building codes. The Housing Element is a policy statement consistent with the provisions of the land use designation in the City General Plan and the City Zoning Ordinance. Any development undertaken under the Housing Element would be subject to separate environmental review pursuant to CEQA. Therefore, the proposed project is not expected to result in significant impacts from exposing people or structures to potential substantial adverse effects involving seismic-related ground failure, including liquefaction. No further analysis is warranted.

(iv) Landslides?

Potential impacts associated with landslides in these areas will be addressed and evaluated through building new housing structures and updating existing housing structures in accordance with applicable city, county, and state building codes. The Housing Element is a policy statement consistent with the provisions of the land use designation in the City General Plan and the City Zoning Ordinance. Any development undertaken under the Housing Element would be subject to separate environmental review pursuant to CEQA. Therefore, the proposed project is not expected to result in significant impacts from exposing people or structures to potential substantial adverse effects involving landslides. No further analysis is warranted.

(b) Result in substantial soil erosion or the loss of topsoil?

Due to the relatively flat nature of the City, erosion is not a major concern. The largest threat from erosion is uncontrolled drainage, especially during construction. The building of any new housing structures or updating of existing housing structures will be done in accordance with applicable city, county, and state building codes to limit and control erosion during site grading, earth moving, and other construction activities. The Housing Element is a policy statement consistent with the provisions of the land use designation in the City General Plan and the City Zoning Ordinance. Any development undertaken under the Housing Element would be subject to separate environmental review pursuant to CEQA. Therefore, the proposed project is not expected to result in significant impacts resulting from substantial soil erosion or the loss of topsoil. No further analysis is warranted.

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<sup>24</sup> City of Long Beach. 2011. *Long Beach Building Standards Code*. Long Beach, CA.

- (c) 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?

Liquefaction is discussed above. Because soil type is variable throughout the city, soil will be analyzed on an individual basis for any new housing structures or updates to existing housing structures in accordance with applicable city, county, and state building codes. The Housing Element is a policy statement consistent with the provisions of the land use designation in the City General Plan and the City Zoning Ordinance. Any development undertaken under the Housing Element would be subject to separate environmental review pursuant to CEQA. Therefore, the proposed project is not expected to result in significant impacts resulting from unstable soils. No further analysis is warranted.

- (d) 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?

New housing structures or existing housing structures undergoing updates would be built in accordance with local, county, and state codes to reduce impacts from expansive soils to below the level of significance.<sup>25</sup> The Housing Element is a policy statement consistent with the provisions of the land use designation in the City General Plan and the City Zoning Ordinance. Any development undertaken under the Housing Element would be subject to separate environmental review pursuant to CEQA. Therefore, the proposed project is not expected to result in significant impacts resulting from expansive soils. No further analysis is warranted.

- (e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

The City is serviced by the Long Beach Water Department and has over 765 miles of sanitary sewer lines.<sup>26</sup> The Housing Element is currently served by the city sewer system. Additionally, the Housing Element is a policy statement consistent with the provisions of the land use designation in the City General Plan and the City Zoning Ordinance. Any development undertaken under the Housing Element would be subject to separate environmental review pursuant to CEQA. Therefore, the proposed project is not expected to result in significant impacts resulting from soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water. No further analysis is warranted.

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<sup>25</sup> California Geological Survey. 1998. *Seismic Hazard Zone Report for the Long Beach 7.5-Minute Quadrangle, Los Angeles County, California*. Sacramento, CA.

<sup>26</sup> Long Beach Water Department. n.d. "Sewage Treatment." Available at: <http://www.lbwater.org/sewage-treatment>

## 3.7 GREENHOUSE GAS EMISSIONS

This analysis is undertaken to determine if the City of Long Beach (City) 2013–2021 Housing Element (proposed project) may have a significant impact to greenhouse gas (GHG) emissions, thus requiring the consideration of mitigation measures or alternatives in accordance with Section 15063 of the State of California Environmental Quality Act Guidelines (State CEQA Guidelines).<sup>1</sup>

### 3.7.1 Affected Environment

#### ***Assembly Bill 32***

Assembly Bill 32 (AB 32), also known as the Global Warming Solutions Act of 2006, is a California state law that addresses climate change by establishing a comprehensive program to reduce GHG emissions from all sources throughout the state. AB 32 requires that the California Air Resources Board (ARB) develop regulations and market mechanisms to reduce California's GHG emissions to 1990 levels by 2020. To achieve this goal, AB 32 mandates that the California ARB establish a quantified emissions cap; institute a schedule to meet the cap; implement regulations to reduce statewide GHG emissions from stationary sources; and develop tracking, reporting, and enforcement mechanisms to ensure that reductions are achieved.

#### ***Senate Bill 375***

Senate Bill 375 (SB 375), also known as the Sustainable Communities Protection Act of 2008, outlines strategies for achieving the goals set forth in AB 32. Pursuant to SB 375, the Southern California Association of Governments (SCAG) developed a Regional Transportation Plan (RTP) as part of its Sustainable Communities Strategy. As a way to significantly reduce GHG emissions in the future, the RTP focuses the majority of new housing and job growth in high quality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs/housing balance and more opportunity for transit-oriented development.

#### ***Southern California Association of Governments***

SCAG is the largest metropolitan planning area in the U.S., encompassing 38,000 square miles, and has one of the largest concentrations of population, employment, income, business, industry, and finance in the world. SCAG forecasts reveal that the region's population is projected to increase by almost 5.1 million people from 2008 to 2035, employment by 2.2 million jobs, and the number of households by 1.8 million<sup>2</sup>. As was discussed in Section 3.3, *Air Quality*, of this document, SCAG prepared a Regional Comprehensive Plan (RCP) to address important issues like housing, traffic/transportation, water, and air quality. In addition, SCAG updated its Regional Housing Needs Assessment (RHNA) in 2012 based on forecasts contained in its RTP. The RHNA is mandated by state housing law as part of the periodic process of updating local housing elements of the General Plan. These documents serve as advisory documents to local agencies in the Southern California region for their information and voluntary use for preparing local plans and handling local issues of regional significance. Within these documents, SCAG set forth various

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> Southern California Association of Governments (SCAG). n.d. *Growth forecast for 2008 Regional Transportation Plan*. Available at: <http://www.scag.ca.gov/forecast/index.htm>

strategies and objectives to reduce GHG emissions and air quality impacts including, but not limited to:

- Reverse current trends in GHG emissions to support sustainability goals for energy, water supply, agriculture, and other resource areas
- Expand green building practices to reduce energy-related emissions from developments to increase economic benefits to business and residents
- Focus growth in existing and emerging centers and along major transportation corridors
- Target growth in housing, employment, and commercial development within walking distance and existing and planned transit stations
- Reduce vehicle miles traveled by concentrating new housing in highly developed areas serviced by public transit

### ***Long Beach Sustainable City Action Plan***

The City Council adopted the Long Beach Sustainable City Action Plan (SCAP) in 2010 to guide operational, policy, and financial decisions to create a more sustainable Long Beach. The SCAP includes measurable goals and actions that are intended to be challenging, yet realistic. The chapters include: (1) Buildings & Neighborhoods, (2) Energy, (3) Green Economy & Lifestyle, (4) Transportation, (5) Urban Nature, (6) Waste Reduction, and (7) Water. The SCAP indicates the City's commitment to reducing GHG emissions through strategic and sustainable planning initiatives.

### ***Long Beach Office of Sustainability***

The Long Beach Office of Sustainability was created to facilitate the process of developing and implementing model sustainability programs for the City. The Office of Sustainability delivers policy and programs that integrate efforts related to buildings and neighborhoods, urban nature, transportation, water, energy, waste reduction, and eco-products and services. Within its Buildings & Neighborhood elements, the Office of Sustainability emphasizes the importance of creating walkable neighborhoods as a means of reducing GHG emissions. Walkable neighborhoods help reduce the cities GHG emissions by locating housing near grocery and retail stores, schools, libraries, parks, businesses, and other local amenities within an easy and safe walking distance.

### **3.7.2 Impact Analysis**

Over the last decade, California's gross emissions of GHGs decreased 2.9 percent from 465.2 million tons of carbon dioxide equivalent (CO<sub>2</sub>e) in 2000 to 451.6 million in 2010.<sup>3</sup> According to the SCAP adopted by the City Council in 2010, the City's operations emitted a total of 51,754 tons of carbon dioxide in 2007.<sup>4</sup> Indirect emissions (buildings, electricity) accounted for 59.8 percent of total carbon emissions; stationary sources (buildings, natural gas) accounted for 7.4 percent of carbon emissions; and mobile sources (vehicles) accounted for 32.9 percent of total carbon emissions.

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<sup>3</sup> Air Resources Board. March 2013. *California Greenhouse Gas Emissions for 2000 to 2010 – Trends by Emissions and Other Indicators*. Available at: [http://www.arb.ca.gov/cc/inventory/data/tables/ghg\\_inventory\\_trends\\_00-10\\_2013-03-04.pdf](http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_trends_00-10_2013-03-04.pdf)

<sup>4</sup> City of Long Beach Office of Sustainability. February 2010. *Sustainable City Action Plan*. Available at: <http://www.longbeach.gov/civica/filebank/blobdload.asp?BlobID=26498>

In addition to tracking and monitoring GHG emissions, the City emphasizes the importance of establishing a balance of jobs and housing within the City as a way to plan future housing developments and lower emissions through the reduction of vehicle miles traveled. According to an analysis of regional jobs/housing balance issues conducted by SCAG, the City is designated as “Gain Many Jobs” with regards to the change in the jobs/housing ratio from 1997 to 2025, suggesting a further need to balance housing with jobs.<sup>5</sup> As mentioned above, SCAG set forth various strategies for reaching the desired jobs/housing balance including targeting growth in housing, employment, and commercial developments within walking distance and existing and planned transit stations. According to the City SCAP, only 33 percent of Long Beach residents work in the City, with the remaining 66 percent commuting outside of the City. Furthermore, only 3.3 percent of Long Beach residents bike or walk to work, while 6.6 percent ride public transportation.<sup>6</sup>

State CEQA Guidelines recommend the consideration of two questions when addressing the potential for significant impacts to greenhouse gas emissions.

Would the proposed project have any of the following effects:

- (a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

The proposed project would be expected to result in less than significant impacts to GHG emissions. According to the City’s 2008 Annual Emissions Report, the City emitted 49,216 tons of carbon, down from 51,754 tons of carbon in 2007.<sup>7</sup> Future housing will generate some emissions of GHG during both project construction, primarily through construction vehicle and equipment exhaust emissions, and operations, primarily through passenger vehicle emissions. However, the Housing Element is a policy document that does not propose any specific development projects. The Housing Element demonstrates the feasibility of accommodating forecast housing demand through the capacity of five Planned Development (PD) districts to accommodate housing development, consistent with the existing land use designations for residential development and the adopting zoning ordinance. Thus, the Housing Element does induce growth beyond the levels anticipated in the adopted general plan. Residential development proposals will be subject to environmental review in accordance with the provisions of CEQA. Any new, ongoing emissions associated with the Housing Element could be reduced by decreasing vehicle miles traveled through the development of walkable neighborhoods. By targeting five PD districts in areas serviced by multiple bus routes and a Metro light rail, the proposed project’s generation of GHG emissions would be less than significant. Therefore, no further analysis is warranted.

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<sup>5</sup> Southern California Association of Government. April 2001. *Change in Jobs/Housing Ratios between 1997 and 2025 in the SCAG Region by Regional Statistical Area*. Los Angeles, CA.

<sup>6</sup> City of Long Beach Office of Sustainability. February 2010. *Sustainable City Action Plan*. Available at: <http://www.longbeach.gov/civica/filebank/blobdload.asp?BlobID=26498>

<sup>7</sup> California Climate Action Registry. 2010. *Annual Emissions Report: City of Long Beach*. Available at: <http://www.longbeach.gov/civica/filebank/blobdload.asp?BlobID=27243>

- (b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

The Housing Element considers the development of housing consistent with the seven land use designations that allow for residential development ranging from 7 units to 249 units per acre.<sup>8</sup> A review of existing residential developments indicates that there is capacity for additional development in most of the planned development districts within the City. Therefore, the Housing Element is consistent with the objectives of the General Plan and encourages residential development in the appropriate locations. In addition, the Housing Element is consistent with the City of Long Beach Zoning Ordinance and the Long Beach SCAP. Thus, there would be no anticipated conflicts with the existing state and City plans, policies, or regulations established for the purpose of reducing GHG emissions. No further analysis is warranted.

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<sup>8</sup> City of Long Beach Department of Planning and Building. April 1997. *Land Use Element of the City of Long Beach General Plan*. Long Beach, CA.

### **3.8 HAZARDS AND HAZARDOUS MATERIALS**

This analysis is undertaken to determine if the 2013–2021 Housing Element update (proposed project) to the City of Long Beach (City) General Plan would have a significant impact to hazards and hazardous materials, thus requiring the consideration of mitigation measures or alternatives in accordance with Section 15063 of the State of California Environmental Quality Act (CEQA) Guidelines.<sup>1</sup> Hazardous wastes are by-products of society that can pose a substantial risk or potential hazard to human health or the environment when improperly managed. Hazardous wastes possess at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity) or appear on special Environmental Protection Agency (EPA) lists.<sup>2</sup>

Hazards and hazardous materials within the City site were evaluated based on expert opinion supported by facts and the Public Safety and Seismic Safety Elements of the City General Plan.

#### **3.8.1 Affected Environment**

##### ***Hazards and Hazardous Materials***

According to Plate 12 of the Public Safety Element of the City General Plan, the City has 1,684 acres of industrial land use. For the most part, the industrial areas are concentrated in five locations of the City: the harbor area, the Westside Industrial Area (just north of the harbor), in and surrounding the airport, in north Long Beach, and on the east side at the conjunction of Westminster and Studebaker Road. From a public safety standpoint, the greatest threat is that of encroachment of industrial activities into other areas of the City. This mixing of incompatible land uses presents itself in west Long Beach and north Long Beach.

##### ***Transportation Routes for Hazardous Materials***

The California Department of Transportation (Caltrans) sets forth regulations and restrictions upon the transportation of dangerous fluids, chemicals, or explosives. In the City, designated truck routes are established. These routes are delineated on Plate 13 of the Public Safety Element of the City General Plan, along with freeways and railroads.<sup>3</sup>

##### ***Public Airports***

The Long Beach Airport is located within the City, just north of the 405 freeway between Cherry Avenue and Lakewood Boulevard (Figure 1.4-1, *Local Vicinity Map*).

##### ***Private Airports***

The nearest private airstrip is the Los Angeles County Compton/Woodley Airport located approximately 5.5 miles northwest of the city of Long Beach.

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> *Code of Federal Regulations*. Title 40, Chapter 1, Part 261.

<sup>3</sup> Long Beach Planning Department. May 1975. *Long Beach General Plan Program. Public Safety Element*. Available at: <http://www.lbds.info/civica/filebank/blobload.asp?BlobID=2545>

## **Emergency Response Plans**

The City has collected data and compiled research on five hazards: earthquakes, flooding, earth movements, windstorms, and tsunamis. Research materials came from the City's General Plan, Threat Assessment contained in the Multi-Hazard Functional Plan, and state agencies including the California Governor's Office of Emergency Services and the California Department of Forestry and Fire Protection. The City has identified current mitigation activities, resources and programs, and potential action items from research materials and stakeholder interviews.<sup>4</sup>

The Long Beach City Council is responsible for adopting the Natural Hazards Mitigation Plan. This governing body has the authority to promote sound public policy regarding natural hazards. Once the plan has been adopted, the City's Hazard Mitigation Coordinator will be responsible for submitting it to the State Hazard Mitigation Officer at the Governor's Office of Emergency Services. The Governor's Office of Emergency Services will then submit the plan to the Federal Emergency Management Agency (FEMA) for review. This review will address the federal criteria outlined in FEMA Interim Final Rule 44 CFR Part 201. Upon acceptance by FEMA, the City will gain eligibility for Hazard Mitigation Grant Program funds.

## **Wildlands**

The City of Long Beach is located in an area mapped as being at very low risk for wildland hazard.<sup>5</sup>

### **3.8.2 Impact Analysis**

The State CEQA Guidelines recommend the consideration of eight questions when addressing the potential for significant impact to hazards and hazardous materials:

Would the project have any of the following effects:

- (a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The proposed project is not expected to result in impacts from hazards and hazardous materials with respect to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act.<sup>6</sup> The Housing Element identifies 31 specific sites suitable for future housing development. The Housing Element is a policy document that does not propose any specific development projects or alterations of any specific properties. The development and occupation of residential land uses do not normally involve the routine transport, use, or disposal of hazardous materials. Redevelopment of building and structures constructed prior to 1979 may require remediation of building materials contaminated with arsenic, asbestos or lead. The Housing Element would not relieve private- or public-sector developers of the requirement for appropriate remediation and disposal of such materials consistent with applicable federal, state, and local statutes and regulations. In addition, hazardous materials handling associated with housing maintenance and construction activities would be limited to asbestos removal/disposal and

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<sup>4</sup> City of Long Beach. 19 October 2004. *City of Long Beach Natural Hazards Mitigation Plan, Final Working Document*. Prepared by: Emergency Planning Consultants, San Diego, CA. Long Beach, CA.

<sup>5</sup> See <http://nfpa.typepad.com/.a/6a00d8351b9f3453ef017d41943e0c970c-popup>

<sup>6</sup> *Code of Federal Regulations*. Title 40, Chapter 1, Parts 106–180.

common household materials such as paints and insecticides. The handling and disposal of any hazardous or potentially hazardous materials would be in full compliance with Long Beach Municipal Code Sections 8.86 through 8.88, as well as all existing state safety regulations. Future development proposals will be subject to separate environmental review in accordance with CEQA. Therefore, there are no expected impacts from hazards and hazardous materials related to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. No further analysis is warranted.

- (b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous material?

The proposed project is not expected to result in impacts from hazards and hazardous materials with respect to creating a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous material. The Housing Element is a policy document that does not propose any specific development projects or alterations of any specific properties. Future development proposals will be subject to separate environmental review in accordance with CEQA. In addition, hazardous materials handling associated with housing maintenance and construction activities would be limited to asbestos removal/disposal and common household materials such as paints and insecticides. The handling and disposal of any hazardous or potentially hazardous materials would be in full compliance with Long Beach Municipal Code Sections 8.86 through 8.88 as well as all existing state safety regulations. Therefore, there are no expected impacts from hazards and hazardous materials related to the creation of a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous material. No further analysis is warranted.

- (c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The proposed project is not expected to result in impacts from hazards and hazardous materials with respect to the emission of hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. The Housing Element does identify 31 specific sites suitable for future housing developments to encourage special needs housing production. The Housing Element is a policy document that does not propose any specific development projects or alterations of any specific properties. Residential housing is a land use that does not normally involve emissions of hazardous emissions or the handling of acutely hazardous materials. Handling of hazardous materials associated with housing construction, rehabilitation, and maintenance activities would be limited to asbestos removal/disposal and common household materials such as paints and insecticides. Parties engaged in the handling and disposal of any hazardous or potentially hazardous materials are required to comply to undertake such activities in compliance with Long Beach Municipal Code Sections 8.86 through 8.88 as well as all existing state safety regulations. Future development proposals will be subject to separate environmental review in accordance with CEQA. Therefore, there are no expected impacts from hazards and hazardous materials with respect to the emission of hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No further analysis is warranted.

- (d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to the Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

The proposed project is not expected to result in impacts from hazards and hazardous materials such that residential housing developed to provide the anticipated capacity associated with the Housing Element would not be proposed on a site, which is included on a list of hazardous materials site, unless a “no further action” was obtained from the appropriate regulatory oversight agency, the State Environmental Protection Agency Department of Toxic Substances Control for contaminated soil or the Regional Water Quality Control Board for contaminated surface or groundwater. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the state and local agencies and developers to comply with CEQA requirements in providing information about the location of hazardous materials release sites. All future residential development projects would be subject to separate CEQA review that would include analysis of information from the Cortese List. Therefore, there are no expected impacts from hazards and hazardous materials related to location on a hazardous materials site. No further analysis is warranted.

- (e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

The proposed project is not expected to result in impacts from hazards and hazardous materials in relation to the proximity from an airport and the safety hazard for people residing or working in the project area. The Housing Element would not alter air traffic patterns or encourage housing developments that could conflict with established Federal Aviation Administration (FAA) flight protection zones. Therefore, there are no expected impacts from hazards and hazardous materials in relation to the proximity from an airport and the safety hazard for people residing or working in the project area. No further analysis is warranted.

- (f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The proposed project is not expected to result in impacts from hazards and hazardous materials due to the project vicinity within a private airstrip and the potential for safety hazards for people residing or working in the project area. There are no private airstrips located within or adjacent to the City. Therefore, there are no expected impacts from hazards and hazardous materials due to the project vicinity within a private airstrip and the potential for safety hazards for people residing or working in the project area and no further analysis is warranted.

- (g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The proposed project is not expected to result in impacts from hazards and hazardous materials impairing the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Housing Element would be consistent with all chapters of the General Plan, including the Public Safety Element. The Housing Element would not encourage or otherwise set forth any policies or recommendations that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Therefore, there are no expected impacts from hazards and hazardous materials from impairing the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No further analysis is warranted.

- (h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The proposed project is not expected to result in impacts from hazards and hazardous materials from exposure of people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.<sup>7</sup> The City is a highly urbanized community and there are no residential properties located adjacent to wildlands and there is no risk of exposing people or structures to a significant risk of loss, injury or death involving wildland fires. Therefore, there are no expected impacts from exposure of people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. No further analysis is warranted.

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<sup>7</sup> California Department of Forestry and Fire Protection, Fire Resources Assessment Program. 11 November 2007. *Fire Hazard Severity Zones in State Responsibility Area – Los Angeles County*. Sacramento, CA.

### 3.9 HYDROLOGY AND WATER QUALITY

This analysis is undertaken to determine if the City of Long Beach (City) 2013–2021 Housing Element update (proposed project) may have a significant impact to hydrology and water quality, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State California Environmental Quality Act Guidelines (State CEQA Guidelines).<sup>1</sup> Hydrology and water quality at the proposed project site were evaluated with regard to the applicable City of Long Beach General Plan;<sup>2</sup> State of California Regional Water Quality Control Board (RWQCB) Basin Plan<sup>3</sup> for the Los Angeles RWQCB's Water Quality Control Plan: Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties Region; National Flood Insurance Program Flood Insurance Rate Maps (FIRMs)<sup>4</sup> for the appropriate Los Angeles County; and the USGS 7.5-minute series topographic quadrangles for the proposed project area.<sup>5</sup>

#### 3.9.1 Affected Environment

##### ***Water Quality and Waste Discharge Requirements***

The municipal storm water National Pollution Discharge Elimination System (NPDES) Order No. 99-060 issued to the City by the California RWQCB, Los Angeles Region, in 1999 requires the development and implementation of a program addressing storm water pollution issues in development planning for private projects. As part of the NPDES permit, the Storm Water Management Program in the City requires new developments to meet the permit requirements through best management practices (BMPs) to reduce or eliminate non-storm discharges to the storm water system.

##### ***Groundwater***

The City is located within the area regulated by the Los Angeles Region 4 of the California RWQCB.<sup>6</sup> The City is a highly urbanized community with the water system infrastructure fully in place to accommodate future development. Potable water supplies are provided by the City.

##### ***Drainage Patterns***

Because of the coastal setting of the City, the open space resources include both land and water areas. There are approximately 11,600 water (surface) acres that are subject to the jurisdiction of the U.S. Army Corps of Engineers (USACOE) pursuant to Section 404 of the Clean Water Act, most of which would also be subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW) pursuant to Section 1600 of the State Fish and Game Code. Wetland and riparian

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> City of Long Beach. n.d. *General Plan*. Long Beach, CA. Available at: [http://www.lbds.info/planning/advance\\_planning/general\\_plan.asp](http://www.lbds.info/planning/advance_planning/general_plan.asp)

<sup>3</sup> California Regional Water Quality Control Board, Los Angeles Region. 1994. *Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*. Monterey Park, CA.

<sup>4</sup> Federal Emergency Management Agency. 26 September 2008. *Flood Insurance Rate Map, Long Beach, Los Angeles County, California*. Map Number 06037C1960F. Washington, DC.

<sup>5</sup> U.S. Geological Survey. 2012. *7.5-Minute Series, Long Beach, California, Topographical Quadrangle*. Reston, VA.

<sup>6</sup> California Regional Water Quality Control Board, Los Angeles Region, 1994. *Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties*. Monterey Park, CA.

resources within the City include bays, rivers, creeks, channels and canals, lagoons, lakes and ponds, and wetlands.

### **100-Year Flood Hazard Zone**

According to the Federal Emergency Management Agency (FEMA), the City is located in Zone X, which is outside of the 100-year flood hazard area.<sup>7</sup>

### **Areas Subject to Seiche, Tsunami, and Mudflows**

A seiche is another earthquake or slide-induced wave that can be generated in an enclosed body of water of any size from a swimming pool to a harbor or lake. Historically, seiches have not caused as much damage as tsunamis. According to the Seismic Element of the City General Plan, seiche hazards are primarily limited areas that are less than 10 feet above mean sea level in elevation and within 100 feet of the beach.

A tsunami is a sea wave generated by a submarine earthquake, landslide, or volcanic action. According to the Seismic Element of the City General Plan, a major tsunami from either a landslide or volcanic event is considered extremely remote for the City. The most likely tsunami source is a submarine earthquake. Submarine earthquakes are common around the edges of the Pacific Ocean. Therefore, all of the Pacific Coastal areas are subject to this potential hazard to a greater or lesser degree.

A mudflow is a downhill movement of soft wet earth and debris, made fluid by rain or melted snow and often building up great speed. The relatively flat nature of areas designated for residential land uses in the Land Use Element of the City General Plan are largely not at risk for mudflows.

### **3.9.2 Impact Analysis**

The State CEQA Guidelines recommend the consideration of ten questions when addressing the potential for significant impacts to hydrology and water quality:

Would the project have any of the following effects?

- (a) Violate any water quality standards or waste discharge requirements?

The Storm Water Management Program in the City requires new developments to meet the permit requirements through BMPs to reduce or eliminate non-storm water discharges to the storm water system. These requirements meet the water quality standards as set forth by the responsible agencies and address storm runoff quantity and flow rate, suspended solids (primarily from erosion), and contaminants such as phosphorus (primarily from landscaping) and hydrocarbons (primarily from automobiles).

The Housing Element of the City General Plan is a policy document and does not propose any specific development projects. The Housing Element is not expected to result in impacts to hydrology and water quality in relation to water quality standards or waste discharge requirements.

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<sup>7</sup> Federal Emergency Management Agency. Effective 26 September 2008. *City of Long Beach, California Flood Zones*. Washington, DC.

Therefore, there are no expected impacts to hydrology and water quality related to violation of any water quality standards or waste discharge requirement. No further analysis is warranted.

- (b) 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)?

The Housing Element of the Long Beach General Plan is not expected to result in impacts to hydrology and water quality in relation to groundwater supplies or groundwater recharge. No wells will be proposed for groundwater extraction. Irrigation of landscape areas would fully utilize existing available supplies of reclaimed water. Therefore, there are no expected impacts to hydrology and water quality related to groundwater supplies or groundwater recharge and no further analysis is warranted.

The Housing Element of the City General Plan is a policy document and does not propose any specific development projects. Therefore, there would be no anticipated impact on groundwater supplies due to interference with groundwater recharge. No further is warranted.

- (c) 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 that would result in substantial erosion or siltation on or off site?

The Housing Element is not be expected to result in impacts to hydrology and water quality in relation to alteration of existing drainage patterns in a manner that would result in substantial erosion or siltation on or off site. There are substantial areas within the City of Long Beach that include natural and man-made drainages. The USACOE and CDFW discourage the filling or alteration of existing drainage patterns. Where such impacts cannot be avoided, a permit is likely to be required pursuant to Section 404 of the Clean Water Act and a Streambed Alteration Agreement (SAA) is likely to be required pursuant to Section 1600 of the State Fish and Game Code. The Housing Element is a policy document that does not propose any specific development project. The Housing Element considers opportunities for increasing housing supply consistent with existing land use designations that allow for residential development and consistent with the zoning ordinance. The Housing Element does not encourage any alterations to existing drainage patterns with the potential for impacts to hydrology and water quality in relation to alteration of existing drainage patterns in a manner that would result in substantial erosion or siltation on or off site. A project to develop new housing or rehabilitate existing structures to accommodate housing would be subject to environmental review pursuant to CEQA and would be required to obtain necessary permits and agreements to alter any existing drainage. Therefore, there are no expected impacts to hydrology and water quality related to alteration of existing drainage patterns in a manner that would result in substantial erosion or siltation on or off site. No further analysis is warranted.

- (d) 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 that would result in flooding on site or off site?

The proposed project is not expected to result in impacts to hydrology and water quality in relation to alteration of existing drainage patterns in a manner that would result in flooding on site or off site. USACOE and CDFW discourage the filling or alteration of existing drainage patterns. Where such impacts cannot be avoided, a permit is likely to be required pursuant to Section 404 of the Clean Water Act and a SAA is likely to be required pursuant to Section 1600 of the State Fish and Game Code. The Housing Element is a policy document that does not propose any specific development project. The Housing Element considers opportunities for increasing housing supply consistent with existing land use designations that allow for residential development and consistent with the zoning ordinance. The Housing Element does not encourage any alterations to existing drainage patterns with the potential for impacts to hydrology and water quality in relation to alteration of existing drainage patterns in a manner that would result in substantial erosion or siltation on or offsite. A project to develop new housing or rehabilitate existing structures to accommodate housing would be subject to environmental review pursuant to CEQA and would be required to obtain necessary permits and agreements to alter any existing drainage. Therefore, there are no significant impacts to hydrology and water quality related to alteration of existing drainage patterns in a manner that would result in flooding on site or off site. No further analysis is warranted.

- (e) Create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff?

The proposed project is not expected to result in impacts to hydrology and water quality in relation to exceeding the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff. The Housing Element is a policy document and does not encourage the potential for impacts to hydrology and water quality in relation to exceeding the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff. The City storm water drainage system is adequate to accommodate runoff from future development projects. All future residential developments would be subject to separate environmental analysis in accordance with CEQA. Therefore, there are no impacts to hydrology and water quality related to exceeding the capacity of existing or planned storm water drainage systems or providing substantial additional sources of polluted runoff. No further analysis is warranted.

- (f) Otherwise substantially degrade water quality?

The proposed project is not expected to result in impacts to hydrology and water quality in relation to substantial degradation of water quality. The Housing Element is a policy document and does not encourage the potential for impacts to hydrology and water quality in relation to substantial degradation of water quality. All future residential developments would be subject to separate environmental analysis in accordance with CEQA. Therefore, there are no expected impacts to hydrology and water quality in relation to substantial degradation of water quality. No further analysis is warranted.

- (g) 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?

The proposed project is not expected to result in impacts to hydrology and water quality in relation to placement of housing within a 100-year flood hazard area. According to FEMA, most of the City is located in Zone X, which is outside of the 100-year flood hazard area and there is no potential for impacts to hydrology and water quality in relation to placement of housing within a 100-year flood hazard area. Therefore, there are no expected impacts to hydrology and water quality related to placement of housing within a 100-year flood hazard area. No further analysis is warranted.

- (h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?

The proposed project is not expected to result in impacts to hydrology and water quality in relation to placement of structures (other than housing) within a 100-year flood hazard area.<sup>8,9</sup> The Housing Element is a policy document that does not propose any specific development projects; however, it does include a list of specific sites considered suitable for new housing development and according to FEMA, since most of the City, including all of these identified sites, is located in Zone X, which is outside of the 100-year flood hazard area. There is no potential for impacts to hydrology and water quality in relation to placement of structures (other than housing) within a 100-year flood hazard area. Therefore, there are no expected impacts to hydrology and water quality related to placement of structures (other than housing) within a 100-year flood hazard area. No further analysis is warranted.

- (i) 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?

The proposed project is not expected to result in impacts to hydrology and water quality in relation to the failure of a levee or dam. The City is not located in the proximity of a levee or a dam and no potential exists for impacts to hydrology and water quality in relation to the failure of a levee or dam. Therefore, there are no expected impacts to hydrology and water quality related to the failure of a levee or dam. No further analysis is warranted.

- (j) Inundation by seiche, tsunami, or mudflow?

The proposed project is expected to result in less than significant impacts to hydrology and water quality in relation to the inundation by seiche, tsunami, or mudflow. The Seismic Safety Element of the City General Plan identifies areas that are subject to seiche, tsunami, and mudflow and provides guidelines for remediating the attendant risks. The Housing Element of the Long Beach General Plan is a policy document and does not propose any specific development projects. Based on the review of the current Seismic Safety Element<sup>10</sup> of the City General Plan, the proposed project is not expected to result in significant impacts to hydrology and water quality related to inundation by seiche, tsunami, or mudflow. No further analysis is warranted.

<sup>8</sup> Federal Emergency Management Agency. 1996. *Compliant Metadata for Q3 Flood Data Coverage for Los Angeles, California*. Washington, DC.

<sup>9</sup> City of Long Beach, Department of Planning and Building. April 1997. "Flood Hazards Areas Map." In *Land Use Element of the Long Beach General Plan*. Available at: [http://www.lbds.info/planning/advance\\_planning/general\\_plan.asp](http://www.lbds.info/planning/advance_planning/general_plan.asp)

<sup>10</sup> City of Long Beach, Department of Planning and Building. July 1988. "Plate 11 – Tsunami and Seiche Influence Areas." In *Seismic Safety Element of the Long Beach General Plan*. Available at: [http://www.lbds.info/planning/advance\\_planning/general\\_plan.asp](http://www.lbds.info/planning/advance_planning/general_plan.asp)

### 3.10 LAND USE AND PLANNING

This analysis is undertaken by the City of Long Beach (City) to determine if the City's 2013–2021 Housing Element (proposed project) might have a significant impact to land use and planning, thus requiring the consideration of mitigation measures or alternatives in accordance with Section 15063 of the State California Environmental Quality Act Guidelines (State CEQA Guidelines).<sup>1</sup> Land use and planning at the proposed project site was evaluated in light of the adopted published maps, adopted plans, and in coordination with U.S. Fish and Wildlife (USFWS) and California Department of Fish and Wildlife (CDFW) with regard to the applicable proposed or adopted land use plans and regulations.

#### 3.10.1 Affected Environment

As described in Section 1.0, the City was incorporated into Los Angeles County in 1897 and is a highly diverse community of 462,257 residents with no ethnic majority. Located in the South Bay region of Los Angeles County, adjacent to the Pacific Ocean, the City encompasses approximately 51 square miles and is a fully urbanized community with a major port; regional airport; passenger rail to Los Angeles; a branch of California State University; and over 60 residential neighborhoods, including 17 historic districts. There are 173,932 housing units in the City to house 160,972 households. The Land Use Element of the City General Plan (General Plan) was last revised in 1997 and the Housing Element was last updated in 2009. Table 3.10.1-1, *General Plan Land Use Districts*, outlines the allowable densities for residential land use districts (LUDs) pursuant to the Land Use Element of the General Plan.

**TABLE 3.10.1-1  
GENERAL PLAN LAND USE DISTRICTS**

<b>Land Use District (LUD)</b>	<b>Maximum Density (per acre)</b>
LUD1 – Single-Family District	7 units
LUD2 – Mixed Style Home District	14 units
LUD3A – Townhomes	25 units
LUD3B – Moderate Density Residential District	30 units
LUD4 – High Density Residential District	44 units
LUD5 – Urban High Density Residential District	108 units
LUD6 – High-Rise Residential District	249 units

**SOURCE:** City of Long Beach Department of Planning and Building. April 1997. *Land Use Element of the City of Long Beach General Plan*. Long Beach, CA.

#### ***Regional Housing Needs Assessment***

In 2012, the Southern California Association of Governments (SCAG) updated its Regional Housing Needs Assessment (RHNA) based on forecasts contained in its Regional Transportation Plan (RTP). The RHNA is mandated by State Housing Law as part of the periodic process of updating local housing elements of the General Plan. For the 2013 Housing Element update, the City is allocated a RHNA of 7,048 units. The RHNA for this planning period commences on January 1, 2014 and covers through October 31, 2021. The RHNA for the City is allocated as follows:

<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

- Extremely Low Income (up to 30 percent of AMI): 886 units (12 percent)
- Very Low Income (31 to 50 percent of AMI): 887 units (13 percent)
- Low Income (51 to 80 percent of AMI): 1,066 units (15 percent)
- Moderate Income (81 to 120 percent AMI): 1,170 units (17 percent)
- Above Moderate Income (more than 120 percent of AMI): 3,039 units (43 percent)

### ***Planned Development Districts***

The Planned Development (PD) district allows flexible development standards for areas with unique land uses that would benefit from special design policies and standards not otherwise possible under conventional zoning district regulations. The PD district is designed to promote a compatible mix of land uses, allow for planned commercial/business parks, and encourage a variety of housing styles and densities. Many of the PD districts have provided the primary opportunities for infill development during the past decade, specifically in PDs 5, 6, 25, 29, and 30. Since 2006, at least 824 housing units have been constructed within the various PD districts, including 207 affordable units for lower and moderate income households. Although all PDs were evaluated for their potential to accommodate additional housing units, a combination of five districts was used to demonstrate the feasibility of attaining the required number of housing units in relation to SCAG's 2012 RHNA forecast. PD districts identified in the Housing Element as having significant potential for residential development are noted below:

- **PD-5 (Ocean Boulevard):** PD-5 is located between the beach and Ocean Boulevard, from Alamitos Boulevard to Bixby Park. The land is primarily used for multi-family housing at a relatively high density (54 units per acre). The PD-5 plan is designed to encourage similar high-density housing through lot assembly, provided that development is sensitive to parameters in the Long Beach Local Coastal Program.
- **PD-6 (Downtown Shoreline):** The goal of the PD-6 plan is to guide and control the development of the Downtown Shoreline below Ocean Boulevard. Specifically, the plan intends to coordinate future public and private improvements under a concept of mixed uses, including residential, commercial, and recreational components. PD-6 consists of 11 sub-areas, each with unique standards and guidelines for development. Though housing is not permitted in some subareas of PD-6, sub-area 9 permits residential density up to 250 units per acre.
- **PD-25 (Atlantic Avenue):** The Atlantic Avenue PD-25 area is transitioning from blighted conditions such as vacant, underutilized, and deteriorated commercial and residential structures and incompatible land uses, to include new schools, banks, residences and shopping opportunities. PD-25 aims to ensure that recycling and reinvestment results in high-quality development and compatible uses that complement and serve the adjoining residential neighborhoods. New workforce, senior, and family housing developments are improving this corridor.

- **PD-29 (Long Beach Boulevard):** PD-29 is designed to promote the economic and aesthetic revitalization of Long Beach Boulevard below the I-405 freeway, once a very distressed corridor. PD-29 has encouraged quality commercial, residential and infill institutional projects, and promotes uses and levels of intensity that take advantage of the Blue Line passenger rail service to Los Angeles. Higher density residential uses and special needs housing, including R-4-N uses with residential densities up to 109 units per acre, are permitted in sub-areas 1 and 3, and R-4-U uses are allowed in sub-areas 2 and 5.
- **PD-30 (Downtown):** PD-30 is designed to develop the downtown into a multi-purpose activity center of regional significance and to connect the various districts of downtown into a cohesive and functional whole. PD-30 residential districts include the: Mixed Use District, East Village Mixed Use District, West End Residential District, and East Village Residential District. Typical densities range from 31 to 54 dwelling units (du) per acre, with unlimited higher densities available to high-rise buildings in the Downtown Core.

Overall, the City's development standards (citywide and in the coastal zone) do not constrain housing development. Because the City facilitates residential development primarily through PD zoning, flexibility in development standards is built into the PD regulations.

### 3.10.2 Impact Analysis

The State CEQA Guidelines recommend the consideration of three questions when addressing the potential for significant impact to land use and planning:

Would the project have any of the following effects:

- (a) Physically divide an established community?

The proposed project is not expected to result in impacts to land use and planning through the physical division of an established community. In conformance with the General Plan, Title 21 of the City of Long Beach Municipal Code, Zoning Regulations,<sup>2</sup> 32 PD districts were established to allow flexible development plans to be prepared for areas of the City that may benefit from the formal recognition of unique or special land uses and the definitions of special design policies and standards not otherwise possible under conventional zoning districts. The five PD districts in which the Housing Element is concentrating its efforts (PDs 5, 6, 25, 29, 30) are located in highly developed, dense areas that are compatible with the existing community and would not cause a physical division within the established community. Therefore, there are no expected impacts to land use and planning resulting in a physical division to the established community and no further analysis is warranted.

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<sup>2</sup> City of Long Beach Municipal Code, Title 21, Chapter 21.37, "Planned Development Districts." Available at: [http://library.municode.com/HTML/16115/level3/voii\\_tit21zo\\_ch21.37pldedi.html](http://library.municode.com/HTML/16115/level3/voii_tit21zo_ch21.37pldedi.html)

- (b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The proposed project is not expected to result in impacts to land use and planning in relation to a conflict with adopted or proposed land use plans, policies, or regulations. The proposed project area is owned by the City and falls within the jurisdiction of the City of Long Beach General Plan. The Housing Element does not propose any changes to the Land Use Element or Zoning Ordinances of the General Plan, and is consistent with the City of Long Beach Local Coastal Program (LCP).

The entirety of PD-5 falls within the City of Long Beach Coastal Zone established by the City of Long Beach LCP pursuant of the California Coastal Act.<sup>3</sup> PD-5 is located immediately south of Ocean Boulevard, between Alamitos Avenue and Cherry Avenue, and is completely located within a designated Appealable Area. PD-30 is located immediately north of Ocean Boulevard, between the Los Angeles Flood Control Channel and Alamitos Avenue, with the southern boundary along Ocean Boulevard being designated as an Appealable Area.

According to Chapter 7, Article 1, Section 30603 of the California Coastal Act (CCA),<sup>4</sup> once an LCP is approved by the California Coastal Commission (CCC), a local government may appeal to the CCC for the following types of coastal developments:

1. Developments approved by the local government between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or of the mean high tideline of the sea where there is no beach, whichever is the greater distance
2. Developments approved by the local government not included within paragraph (1) that are located on tidelands, submerged lands, public trust lands, within 100 feet of any wetland, estuary, or stream, or within 300 feet of the top of the seaward face of any coastal bluff
3. Developments approved by the local government not included within paragraph (1) or (2) that are located in a sensitive coastal resource area
4. Any development approved by a coastal county that is not designated as the principal permitted use under the zoning ordinance or zoning district map approved pursuant to Chapter 6 (commencing with Section 30500)
5. Any development which constitutes a major public works project or a major energy facility

If developed in PD-5 or PD-30, the proposed project would satisfy paragraph (1) and thus be in compliance with the CCA.

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<sup>3</sup> City of Long Beach. 2007. *City of Long Beach Coastal Zone*. Long Beach, CA. Available at: <http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=2555>

<sup>4</sup> *California Public Resources Code*, Division 20, Chapter 7, Article 1, Section 30603.

PD-6 is located entirely within the City Coastal Zone, as well. The area encompassing PD-6 is designated as State Permit Jurisdiction. According to Chapter 3, Article 6, Section 30250 of the CCA,<sup>5</sup> new residential, commercial, or industrial development 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 coast resources. Section 30253<sup>6</sup> states that new development shall do all of the following:

1. Minimize risks to life and property in areas of high geologic, flood, and fire hazard
2. 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
3. Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development
4. Minimize energy consumption and vehicle miles traveled
5. Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visit destination points for recreational use

If developed in PD-6, the proposed project would be consistent with the provisions outlined in sections 30250 and 30253, and thus be in compliance with the CCA.

Additionally, a small portion of PD-30 is located in the Drake Park / Willmore City Historic Landmark District designated in Chapter 16.52, *Public Facilities and Historic Landmarks*, of the City of Long Beach Municipal Code.<sup>7</sup> If developed in the Drake Park / Willmore City Historic Landmark District, the proposed project shall be undertaken consistent with the guidance provided in the Historical Element (last updated in 2010) of the City General Plan and related ordinances discussed in Chapter 2.63, *Cultural Heritage Commission*; Chapter 16.52, *Historic Landmarks*; and Chapter 21.27, *Nonconformities*, of the City of Long Beach Municipal Code. Individual projects that are proposed in a manner that is inconsistent with the established City Zoning and Ordinances would be subject to a separate analysis pursuant to CEQA that is beyond the scope of the Housing Element.

Therefore, there are no expected impacts to land use and planning related to a conflict with adopted or proposed land use plans, policies, or regulations, and no further analysis is warranted.

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<sup>5</sup> *California Public Resources Code*, Division 20, Chapter 3, Article 6, Section 30250.

<sup>6</sup> *California Public Resources Code*, Division 20, Chapter 3, Article 6, Section 30253.

<sup>7</sup> City of Long Beach Municipal Code. Title 15, Chapter 16.52, "Public Facilities and Historic Landmarks."

- (c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

The proposed project is not expected to result in impacts to land use and planning in relation to a conflict with any applicable Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). An HCP is a tool by which the USFWS can ensure long-term conservation of land critical to the survival of endangered and threatened species of wildlife and plants. An NCCP is a similar tool used by the CDFW to provide for regional or area-wide protection of plants, animals, and their habitats, while allowing for compatible and appropriate economic activity. The proposed project area is not located in an area proposed or adopted as part of an HCP.<sup>8</sup> The proposed project area is not located in an area proposed or adopted as part of an NCCP.<sup>9</sup> Therefore, there are no expected impacts to land use and planning related to a conflict with any adopted habitat conservation plan or natural community conservation plan and no further analysis is warranted.

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<sup>8</sup> Snyder, Jonathon, U.S. Fish and Wildlife Service, Carlsbad Fish and Wildlife Office, Carlsbad, CA. 22 April 2013. Personal communication to Adam Furman, Sapphos Environmental, Inc. Pasadena, CA.

<sup>9</sup> Chirdon, Matt, California Department of Fish and Wildlife, South Coast Region Office, San Diego, CA. 22 April 2013. Personal communication to Adam Furman, Sapphos Environmental, Inc. Pasadena, CA.

### 3.11 MINERAL RESOURCES

This analysis is undertaken to determine if the proposed 2013–2021 Housing Element update (proposed project) of the City of Long Beach (City) General Plan would have a significant impact to mineral resources, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act (CEQA) Guidelines.<sup>1</sup> Mineral resources at the proposed project site were evaluated with regard to California Geological Survey publications<sup>2,3</sup> and the City of Long Beach General Plan.<sup>4</sup>

#### 3.11.1 Affected Environment

##### *State-Designated Mineral Resources*

According to the California Geological Survey, there are 25 active mines located in the County of Los Angeles including active sand and gravel, dimension stone, clay, decorative rock, and tungsten producers.<sup>5</sup> However, there are no mining districts or active mines located in the City.

##### *Locally Designated Mineral Resources*

There are no areas designated for mining in the City Zoning Ordinance.<sup>6</sup> The City has designated areas for oil drilling.<sup>7</sup> The Long Beach Oil Field is situated beneath the City and remains one of the most active oil fields in the state, producing over 1.5 million barrels in 2008.<sup>8,9</sup>

#### 3.11.2 Impact Analysis

State CEQA Guidelines recommend the consideration of two questions when addressing the potential for significant impact to mineral resources. Would the proposed project:

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> California Geological Survey. [1966] Reprinted 13 March 2008. *Bulletin 189: Minerals of California*. Centennial Volume (1866–1966). Los Angeles, CA.

<sup>3</sup> California Geological Survey. Revised 1999. *Mines and Mineral Producers Active in California (1997–1998)*. Special Publication 103. Los Angeles, CA.

<sup>4</sup> City of Long Beach, City Planning Department. 1989. *General Plan Program, Land Use Element*. Long Beach, CA.

<sup>5</sup> California Geological Survey. Revised 1999. *Mines and Mineral Producers Active in California (1997–1998)*. Special Publication 103. Los Angeles, CA.

<sup>6</sup> City of Long Beach and Municipal Code Corporation. 2012. *Long Beach Municipal Code*, Volume 3, Title 21: “Zoning.” Available at: <http://library.municode.com/HTML/16115/book.html>

<sup>7</sup> City of Long Beach and Municipal Code Corporation. 2012. *Long Beach Municipal Code*, Volume 1, Title 12: “Oil Production Areas.” Available at: <http://library.municode.com/HTML/16115/book.html>

<sup>8</sup> California Department of Conservation, Division of Oil, Gas, and Geothermal Resources. 1994. *California Oil and Gas Fields*, Volume II, *Southern, Central Coastal, and Offshore California Oil and Gas Fields*. Available at: [http://www.conservation.ca.gov/dog/pubs\\_stats/Pages/technical\\_reports.aspx](http://www.conservation.ca.gov/dog/pubs_stats/Pages/technical_reports.aspx)

<sup>9</sup> California Department of Conservation, Division of Oil, Gas, and Geothermal Resources. 2009. *2008 Preliminary Report of California Oil and Gas Production Statistics*. Available at: [ftp://ftp.consrv.ca.gov/pub/oil/annual\\_reports/2008/PR03\\_2008.pdf](ftp://ftp.consrv.ca.gov/pub/oil/annual_reports/2008/PR03_2008.pdf)

- (a) 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?

The proposed project would not be expected to result in impacts to mineral resources in relation to the loss of availability of a known mineral resource. There are no known non-fuel mineral resources of statewide or regional importance located within the proposed project site.<sup>10</sup> The City is situated above a large oil field; however, the remaining oil is quickly vanishing as the field has been drilled for nearly a hundred years.

The proposed project would not interfere with any petroleum extraction operations as activities associated with the proposed project would not occur in areas zoned for petroleum operations by the City's Municipal Code. Therefore, the proposed project would not result in significant impacts to mineral resources related to the loss of availability of a known mineral resource. No further analysis is warranted.

- (b) 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?

The proposed project would not be expected to result in impacts to mineral resources in relation to the loss of availability of a known mineral resource recovery site. Based on a review of the Land Use Element and the Safety Element of the City's General Plan and the Zoning Ordinance, there are no locally important non-fuel mineral resource recovery sites delineated in the City.<sup>11,12,13</sup> The proposed project would not interfere with any petroleum extraction operations, as activities associated with the proposed project would not occur in areas zoned for petroleum operations by the City's Municipal Code. Therefore, there would be no impacts to mineral resources related to the loss of availability of a known locally important mineral resource recovery site. No further analysis is warranted.

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<sup>10</sup> California Department of Conservation, Division of Oil, Gas, and Geothermal Resources. n.d. Website. [ftp://ftp.consrv.ca.gov/pub/oil/history/History\\_of\\_Calif.pdf](ftp://ftp.consrv.ca.gov/pub/oil/history/History_of_Calif.pdf)

<sup>11</sup> Department of Development Services, Planning Bureau, Advance Planning Division. n.d. *2014-2021 Safety Element*. Available at: [http://www.lbds.info/planning/advance\\_planning/](http://www.lbds.info/planning/advance_planning/)

<sup>12</sup> California Division of Conservation, Division of Mines and Geology. 1966. *Minerals of California Volume (1866–1966)*. Bulletin 189. Los Angeles, CA.

<sup>13</sup> California Division of Conservation, Division of Mines and Geology. 1990. *Mines and Mineral Producers Active in California (1988–1989)*. Special Publication 103. Los Angeles, CA.

### 3.12 NOISE

This analysis is undertaken by the City of Long Beach (City) to determine if the City 2013–2021 Housing Element (proposed project) may have a significant impact to noise, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State California Environmental Quality Act Guidelines (State CEQA Guidelines).<sup>1</sup> Noise at the proposed project site was evaluated with regard to the Noise Element of the City of Long Beach General Plan<sup>2</sup> and the City of Long Beach Community Noise Ordinance.<sup>3</sup>

#### 3.12.1 Affected Environment

##### *Noise Definition*

Noise is defined as unwanted sound. The human response to environmental noise is subjective and varies considerably from individual to individual. Sensitive receptors, such as residential areas, convalescent homes, schools, auditoriums, and other similar land uses, may be affected to a greater degree by increased noise levels than industrial, manufacturing, or commercial facilities. The effects of noise can range from interference with sleep, concentration, and communication to the causation of physiological and psychological stress and, at the highest intensity levels, hearing loss.

The method commonly used to quantify environmental noise involves evaluation of all frequencies of sound, with an adjustment to reflect the constraints of human hearing. Since the human ear is less sensitive to low and high frequencies than to midrange frequencies, noise measurements are weighted more heavily within those frequencies of maximum human sensitivity in a process called “A-weighting,” written as dBA. In practice, environmental noise is measured using a sound level meter that includes an electronic filter corresponding to the A-weighted (Table 3.12.1-1, *A-Weighted Sound Levels*).

**TABLE 3.12.1-1  
A-WEIGHTED SOUND LEVELS**

Noise Source	A-Weighted Sound Level (in dBA)	Subjective Loudness	Effect of Noise
Near jet engine	130	Intolerable or deafening	Hearing loss
Loud auto horn	100	Very noisy	Hearing loss
Normal conversation at 5–10 feet	60	Loud	Speech interference
Bird calls	40	Moderate	Sleep disturbance
Whisper	30	Faint	No effect
Rustling leaves	10	Very faint	No effect

**KEY:** dBA = decibels in A-weighted sound levels.

<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> City of Long Beach, Department Development Services, 1975. *Noise Element of the General Plan*. Prepared by: City of Long Beach, Department of Development Services, Long Beach, CA. Available at: <http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=3051>

<sup>3</sup> City of Long Beach. *Community Noise Ordinance*, Section 8.80.010. Long Beach, CA.

There are several statistical tools used to evaluate and compare noise level measurements. To account for the fluctuation in noise levels over time, noise impacts are commonly evaluated using time-averaged noise levels. Equivalent Levels ( $L_{eq}$ ) are used to represent the noise level experienced over a stated period of time averaged as a single noise level. Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, an artificial decibel increment is added to quiet-time noise levels to create a 24-hour noise descriptor, or a 24-hour  $L_{eq}$ , called the Community Noise Equivalent Level (CNEL). This equivalent level is also known as the Day-Night Level ( $L_{dn}$ ).

Another measure used to characterize noise exposure is the variation in sound levels over time, measured by the percentage exceedance level.  $L_{10}$  is the A-weighted sound level that is exceeded for 10 percent of the measurement period, and  $L_{90}$  is the level that is exceeded for 90 percent of the measurement period.  $L_{50}$  is the median sound level. Additional statistical measures include  $L_{min}$  and  $L_{max}$ , the minimum and maximum sound levels, respectively, measured during a stated measurement period.

These descriptions of noise are based on the sound level at the point of measurement. When determining potential impacts to the environment, the noise level at the receptor is considered. Noise is attenuated as it propagates from the source to the receiver. Attenuation is the reduction in the level of sound resulting from absorption by the topography, the atmosphere, distance, barriers, and other factors. Attenuation is also logarithmic, rather than linear, so that for stationary sources like the proposed project, noise levels decrease approximately 6 dBA for every doubling of distance.

### ***Groundborne Vibration Definition***

Vibration is an oscillatory motion, which can be described in terms of displacement, velocity, or acceleration. Because motion is oscillatory and there is no net movement of the vibrating element, the average of any of the motion descriptors is zero. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the movement and the acceleration represents the rate of change in the speed.

Although displacement is easier to understand than velocity and acceleration, it is rarely used for describing groundborne vibration. This is because most transducers used to measure groundborne vibration use either velocity or acceleration. Even more important, the response of humans, buildings, and equipment to vibration is more accurately described using velocity or acceleration. Therefore, groundborne vibration is measured as a velocity level in  $10^{-6}$  inches per second.

The effects of groundborne vibration include striking movements of the building floors, rattling of windows, or shaking of items on shelves or hangings on walls. The rumble is the noise radiated from the motion and contact of room surfaces. In essence, the room surfaces act like a loudspeaker. This is called groundborne noise. In extreme cases, vibrations can cause damage to buildings.

### ***State***

California Senate Bill 860, which became effective January 1, 1976, directed the California Office of Noise Control within the State Department of Health Services to prepare "Guidelines for the

Preparation and Content of Noise Elements of the General Plan.”<sup>4</sup> One purpose of these guidelines was to provide sufficient information concerning the noise environment in the community so that noise could be considered in the land use planning process. As part of this publication, Land Use Compatibility Standards were developed in four categories: Normally Acceptable, Conditionally Acceptable, Normally Unacceptable, and Clearly Unacceptable. These categories were based on earlier work done by the U.S. Department of Housing and Urban Development (HUD). The interpretation of the four categories is as follows:

- Normally Acceptable: Specified land use is satisfactory without special insulation.
- Conditionally Acceptable: New development requires detailed analysis of noise insulation requirements.
- Normally Unacceptable: New development is discouraged and requires a detailed analysis of insulation features.
- Clearly Unacceptable: New development should not be undertaken.

The State of California has developed a Land Use Compatibility Matrix for community noise environments that further defines the four categories of acceptance and assigns CNEL values to them. In addition, the State Building Code (Title 24, California Code of Regulations [CCR], Part 2) establishes uniform minimum noise insulation performance standards to protect persons within new hotels, motels, dormitories, long-term care facilities, apartment houses, and residential units other than detached single-family residences from the effects of excessive noise, including, but not limited to, hearing loss or impairment and interference with speech and sleep. Residential structures to be located where the CNEL or  $L_{dn}$  is 60 dBA or greater are required to provide sound insulation to limit the interior CNEL to a maximum of 45 dBA. An acoustic, or noise, analysis report prepared by an experienced acoustic engineer is required for the issuance of a building permit for these structures. Conversely, land use changes that result in increased noise levels at residences of 60 dBA or greater must be considered in the evaluation of impacts to ambient noise levels. Table 3.12.1-2, *Land Use Compatibility for Community Noise Environments*; and Table 3.12.1-3, *Normally Acceptable Noise Levels for Residential Land Use*, depict noise levels for a variety of uses.

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<sup>4</sup> California Department of Health Services, Office of Noise Control. 1976. *Guidelines for the Preparation and Content of Noise Elements of the General Plan*. Sacramento, CA.

**TABLE 3.12.1-2  
LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS**

Land Use Category	Community Noise Exposure L <sub>dn</sub> or CNEL (dBA)					
	55	60	65	70	75	80
Residential—low-density single-family, duplex, mobile homes	Green	Green	Green	Green	Green	Green
Residential—multiple family	Green	Green	Green	Green	Green	Green
Transient lodging—motels, hotels	Green	Green	Green	Green	Green	Green
Schools, libraries, churches, hospitals, nursing homes	Green	Green	Green	Green	Green	Green
Auditoriums, concert halls, amphitheaters	Green	Green	Green	Green	Green	Green
Sports area, outdoor spectator sports	Green	Green	Green	Green	Green	Green
Playgrounds, neighborhood parks	Green	Green	Green	Green	Green	Green
Golf courses, riding stables, water recreation, cemeteries	Green	Green	Green	Green	Green	Green
Office buildings, business commercial and professional	Green	Green	Green	Green	Green	Green
Industrial, manufacturing, utilities, agriculture	Green	Green	Green	Green	Green	Green
<b>INTERPRETATION:</b>						
 <b>Normally acceptable</b> Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.	 <b>Normally unacceptable</b> New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.					
 <b>Conditionally acceptable</b> New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction with closed windows and fresh air supply systems or air conditioning will normally suffice.	 <b>Clearly unacceptable</b> New construction of development should not be undertaken.					

**NOTES:**

L<sub>dn</sub> = Day-Night Level  
 CNEL = Community Noise Equivalent Level  
 dBA = decibels in A-weighted sound levels

**SOURCE:**

California Department of Health Services, Office of Noise Control. February 1976. *Guidelines for the Preparation and Content of Noise Elements of the General Plan*. Sacramento, CA.

**TABLE 3.12.1-3  
NORMALLY ACCEPTABLE NOISE LEVELS FOR RESIDENTIAL LAND USE**

Land Use	Acceptable Range (dBA)
Residential – low density single-family, duplex, mobile homes	50–60
Residential – multiple family	50–65

***Local***

The Noise Element of the City of Long Beach General Plan was last updated in 1975 and includes a number of regulations and planning objectives for noise. The Noise Element suggests the following acceptable construction noise levels, where an average maximum noise level at the window outside the nearest building of an occupied room closest to the site boundary should not exceed:

- 70 dBA in areas away from main roads and sources of industrial noise
- 75 dBA in areas near main roads and heavy industries

Additionally, the City Municipal Code, Chapter 8.80, *Noise*, outlines additional policies and regulations for controlling unnecessary and excessive noise. Sections 8.80.150 and 8.80.170 provide exterior/interior noise standards and specific noise restrictions, exemptions, and variances for noise sources. Table 3.12.1-4, *Exterior Noise Limits*; and Table 3.12.1-5, *Interior Noise Limits*, provide these regulations in more detail.

Section 8.80.150, Exterior Noise Limits – Sound Levels by Receiving Land Use District, states that no person shall operate or cause to be operated any source of sound at any location within the incorporated limits of the City or allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, which causes the noise level when measured from any other property, either incorporated or unincorporated, to exceed:<sup>5</sup>

- The noise standard for that land use district as specified in Table 3.12.1-4 for a cumulative period of more than 30 minutes in any hour
- The noise standard plus five (5) decibels for a cumulative period of more than fifteen (15) minutes in any hour
- The noise standard plus ten (10) decibels for a cumulative period of more than five (5) minutes in any hour
- The noise standard plus fifteen (15) decibels for a cumulative period of more than one (1) minute in any hour
- The noise standard plus twenty (20) decibels or the maximum measured ambient, for any period of time

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<sup>5</sup> *City of Long Beach Municipal Code*, Title 8, Chapter 8.80, Section 8.80.150, "Exterior Noise Limits – Sound Levels by Receiving Land Use District."

**TABLE 3.12.1-4  
EXTERIOR NOISE LIMITS**

Receiving Land Use District*	Time Period	Noise Level**(dBA)
District One	Night: 10 p.m. to 7 a.m.	45
	Day: 7 a.m. to 10 p.m.	50
District Two	Night: 10 p.m. to 7 a.m.	55
	Day: 7 a.m. to 10 p.m.	60
District Three	Anytime	65
District Four	Anytime	70
District Five	Regulated by other agencies and laws	

**NOTE:**

\* = District One: Predominantly residential with other land use types also present.

District Two: Predominantly commercial with other land use types also present.

District Three and Four: Predominantly industrial with other land types use also present.

District Five: Airport, freeways and waterways regulated by other agencies

\*\* = Districts Three and Four limits are intended primarily for use at their boundaries rather than for noise control within those districts.

Background Noise Correction

Difference between total noise and

Background noise alone (decibels)

6-8

9-10

Amount to be subtracted from

1

0.5

In the event that alleged offensive noise contains a steady audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering or riveting or contains music or speech conveying informational content, the standard limits set forth in this table shall be reduced by 5 dB.

**SOURCE:** City of Long Beach Municipal Code, Title 8, Chapter 8.80, Section 8.80.160, "Exterior Noise Limits – Correction for Character of Sound."

Section 8.80.170, Interior Noise Limits – Maximum Sound Levels, states that no person shall operate, or cause to be operated, any source of sound indoors at any location within the incorporated limits of the City or allow the creation of any indoor noise that causes the noise level when measured inside the receiving dwelling unit to exceed:<sup>6</sup>

- The noise standard for that land use district as specified in Table 3.12.1-5 for a cumulative period of more than five (5) minutes in any hour
- The noise standard plus five decibels (5 dB) for a cumulative period of more than one (1) minute in any hour
- The noise standard plus ten decibels (10 dB) or the maximum measured ambient, for any period of time

<sup>6</sup> City of Long Beach Municipal Code, Title 8, Chapter 8.80, Section 8.80.170, "Interior Noise Limits – Maximum Sound Levels."

**TABLE 3.12.1-5  
INTERIOR NOISE LIMITS**

Receiving Land Use District	Type of Land Use	Time Interval	Allowable Interior Noise Level (dBA)
All	Residential	10:00 p.m. – 7:00 a.m.	35
		7:00 a.m. – 10:00 p.m.	45
All	School	7:00 a.m. – 10:00 p.m. (While school is in session)	45
Hospital, designated quiet zones and noise sensitive zones		Any Time	40

**NOTE:** If the measured indoor ambient level exceeds that permissible within any of the first two (2) noise limit categories in this Section, the allowable noise exposure standard shall be increased in five decibel (5 dB) increments in each category as appropriate to reflect the indoor ambient noise level. In the event the indoor ambient noise level exceeds the third noise limit category, the maximum allowable indoor noise level under said category shall be increased to reflect the maximum indoor ambient noise level.

**SOURCE:** City of Long Beach Municipal Code, Title 8, Chapter 8.80, Section 8.80.170, "Interior Noise Limits – Maximum Sound Levels."

Section 8.80.202, Construction Activities – Noise Regulations, states that the following regulations shall apply only to construction activities where a building or other related permit is required or was issued by the Building Official and shall not apply to any construction activities within the Long Beach harbor district as established pursuant to Section 201 of the City Charter:<sup>7</sup>

- *Weekdays and federal holidays:* No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of 7 p.m. and 7 a.m. the following day on weekdays, except for emergency work authorized by the Building Official. For purposes of this Section, a federal holiday shall be considered a weekday.
- *Saturdays:* No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity which produce loud or unusual noise which annoys or disturbs a reasonable person of normal sensitivity between the hours of 7 p.m. on Friday and 9 a.m. on Saturday and after 6 p.m. on Saturday, except for emergency work authorized by the Building Official.
- *Sundays:* No person shall operate or permit the operation of any tools or equipment used for construction, alteration, repair, remodeling, drilling, demolition or any other related building activity at any time on Sunday, except for emergency work authorized by the Building Official or except for work authorized by permit issued by the Noise Control Officer.

<sup>7</sup> City of Long Beach Municipal Code, Title 8, Chapter 8.80, Section 8.80.202, "Construction Activity – Noise Regulations."

### 3.12.2 Impact Analysis

The State CEQA Guidelines recommend the consideration of six questions when addressing the potential for significant impact to noise.

Would the project have any of the following effects:

- (a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The proposed project is expected to result in less than significant impacts to noise in relation to exposure or generation of noise levels in excess of established standards. The proposed project is a Housing Element update for the City of Long Beach General Plan and, therefore, must be evaluated on a development by development basis to determine the impact of noise on the environment. While residential land uses are not typically associated with the types of operational noises of nonresidential land uses, the construction of residential developments will involve various short-term noise impacts. Additionally, the Housing Element identified potential areas for development situated in highly urbanized, dense communities that would result in minimal growth-inducing elements that could potentially increase population or vehicular trips, on-site construction, and any other source of temporary or permanent noise. All construction activities must be done in compliance with the Noise Element of the City of Long Beach General Plan and the City of Long Beach Community Noise Ordinance discussed in Section 3.12.1 of this document.

The Housing Element will be consistent with all aspects of the General Plan, including the Noise Element. While the Housing Element does identify four PD districts suitable for new housing development and encourages the production of new housing units, it does not set forth any specific housing development proposals. The Housing Element does not alter the nature of construction activities, and all future housing developments would involve the same type of short-term noise producing actions and equipment. The local Noise Ordinance discussed in Section 3.12.1 of this document would continue to regulate all future land use construction and operational noise levels. In addition, all future housing projects would be subject to separate environmental review in accordance with CEQA. Therefore, the proposed project is not expected to result in significant impacts to noise, and no further analysis related to exposure or generation of noise levels in excess of established standards and no further analysis is warranted.

- (b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

The proposed project is expected to result in less than significant impacts to noise in relation to generation of excessive groundborne vibration or groundborne noise. Groundborne vibrations and groundborne noise associated with residential developments would be typical for a construction site and, thus, be regulated by the local Noise Ordinance discussed in Section 3.12.1 of this document. Future residential developments have the potential to generate short-term and periodic groundborne vibrations and groundborne noise during phases of construction and demolition; however, the operation of the proposed project would not require use of heavy equipment or earth-moving activities and, therefore, would not be expected to generate impacts related to groundborne vibrations or groundborne noise. Therefore, the proposed project is not expected to result in significant impacts to noise, and no further analysis related to groundborne vibrations or groundborne noise is warranted.

- (c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

The proposed project is expected to result in less than significant impacts to noise in relation to permanent increases in ambient noise levels. The City of Long Beach Noise Ordinance discussed in Section 3.12.1 of this document would regulate all future ambient noise associated with the proposed project. While the Housing Element encourages new residential developments and identifies specific site suitable for development, it does not set forth any specific development proposals or alter the nature of residential land uses. Permanent ambient noise levels for future residential developments would be similar to noise levels found in existing residential land uses. Even though conversion of a vacant site to residential uses would cause a permanent increase in ambient noise levels due to activation of a previously unused and/or unoccupied site, the increase in noise levels would not be considered significant and the Housing Element goals, policies, and objectives would not encourage noise levels any higher than typically associated with residential land uses. Therefore, the proposed project is not expected to result in significant impacts to noise, and no further analysis related to permanent increases in ambient noise levels is warranted.

- (d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity about levels existing without the project?

The proposed project is expected to result in less than significant impacts to noise in relation to temporary or periodic increases in ambient noise levels. The City of Long Beach Noise Ordinance discussed in Section 3.12.1 of this document would regulate all future ambient noise associated with the proposed project. As discussed in Section 3.11(c), the Housing Element does not set forth any specific development proposals that would alter the nature of residential land uses. Temporary or periodic increases in ambient noise levels for future residential developments would be similar to noise levels found in existing residential land uses. Therefore, the proposed project is not expected to result in significant impacts to noise, and no further analysis related to temporary or periodic increases in ambient noise levels is warranted.

- (e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project is not expected to result in impacts to noise in relation to public airports. Pursuant of the California State Aeronautics Act, the Los Angeles Airport Land Use Commission (ALUC) is responsible for coordinating airport land use compatibility planning efforts at the state, regional, and local levels; prepare and adopt an Airport Land Use Compatibility Plan (ALUCP) for each public-use airport in its jurisdiction; and review plans, regulations, and other actions of local agencies and airport operators. It is required that once an ALUC has adopted or amended an ALUCP, general plans and any applicable specific plans be amended, as necessary, in order to be consistent with the ALUCP.<sup>8</sup>

The nearest public airport/public use airport is the Long Beach Airport (LGB) located approximately 1.5 miles northeast of the nearest PD districts (PD-25 and PD-29) specified for potential residential development in the Housing Element. The Housing Element would not alter noise levels emanating

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<sup>8</sup> California Government Code. Section 65302.3 (a)-(b). Available at: [http://www.leginfo.ca.gov/html/gov\\_table\\_of\\_contents.html](http://www.leginfo.ca.gov/html/gov_table_of_contents.html)

from any future housing construction or residential land use operations. Future residential development must be in compliance with all applicable regulation discussed in Section 3.12.1 of this document, as well as Federal Aviation Administration (FAA) regulations. The Housing Element would not alter air traffic patterns or encourage housing developments that could conflict with established FAA flight protection zones. Therefore, there are no expected impacts to noise related to public airports, and no further analysis is warranted.

- (f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The proposed project is not expected to result in impacts to noise in relation to private airstrips. The City of Long Beach Housing Element does not specify any locations for potential residential development within the vicinity of a private airstrip. The nearest private airstrip is the Compton/Woodley Airport in the City of Los Angeles, located approximately 6.5 miles northwest of the PD districts discussed in the Housing Element. Therefore, there are no expected impacts to noise related to private airstrips and no further analysis is warranted.

### 3.13 POPULATION AND HOUSING

This analysis is undertaken to determine if the Long Beach Housing Element (proposed project) may have a significant impact to population and housing, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State CEQA Guidelines.<sup>1</sup> Population and housing at the proposed project site were evaluated with regard to state, regional, and local data and forecasts for population and housing, and the proximity of the proposed project to existing and planned utility infrastructure.

#### 3.13.1 Affected Environment

##### *Population*

The City of Long Beach (City) is made up of a highly diverse society of 462,257 residents, with no ethnic majority.<sup>2</sup> The City is the second largest in Los Angeles County, fifth largest in the state of California and is fully urbanized.

##### *Housing*

Housing in the City is organized into more than 60 residential neighborhoods, including 17 historic districts. There are 173,932 housing units in the City to house 160,972 households. The Southern California Association of Governments (SCAG) projects the 2020 population to rise to 491,000 people in 175,600 households.<sup>3</sup>

#### 3.13.2 Impact Analysis

The State CEQA Guidelines recommend the consideration of three questions when addressing the potential for significant impacts to population and housing:

Would the project have any of the following effects:

- (a) 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)?

The proposed project is not expected to result in impacts to population and housing in relation to inducing substantial direct or indirect population growth. The Housing Element encourages new housing production and identifies 31 sites suitable for new housing within 5 planning districts for the development of 7,261 housing units, but it does not set forth any specific development proposals or alter the nature of residential land uses. The Housing Element is in compliance with the housing densities that are currently allowed by the land use designations in the Land Use Element of the City of Long Beach General Plan and the Zoning Ordinance. Further, State Housing Element law requires local jurisdictions to accommodate a share of the region's projected housing needs for a specific planning period, which is referred to as the Regional Housing Needs Allocation

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> U.S. Census Bureau. *2010 U.S. Census*. Washington, DC.

<sup>3</sup> Southern California Association of Governments. 2012. *Local Housing Element Assistance: Existing Housing Data Needs Report*. Los Angeles, CA.

(RHNA). For this 2013–2021 Housing Element update, the City is allocated a RHNA of 7,048 housing units as follows:

- Extremely Low Income (up to 30 percent of average median income): 886 units (12 percent)
- Very Low Income (31 to 50 percent of average median income): 887 units (13 percent)
- Low Income (51 to 80 percent of average median income): 1,066 units (15 percent)
- Moderate Income (81 to 120 percent of average median income): 1,170 units (17 percent)
- Above Moderate Income (more than 120 percent of average median income): 3,039 units (43 percent)

The RHNA for this planning period begins on January 1, 2014 and extends through October 31, 2021. Because the RHNA for the Housing Element commences on January 1, 2014, housing developments that have been entitled but are not expected to issue building permits until January 2014 can be credited toward the RHNA. Two affordable housing projects have been entitled to provide a total of 66 very low-income units. Two other apartment-building projects have been entitled that are expected to provide 289 moderate-income units. Additionally, another 2,096 upper-income units have been entitled and another 194 upper-income units have been proposed. Therefore, 2,645 units in the City qualify for the RHNA credit. Another 4,403 units can be authorized during this planning period. The City has identified 58.38 acres, which can accommodate 7,261 units without any rezoning in 5 planning districts (PD 6, PD 25, PD 29, PD 30, and PD 31). Therefore, there are no expected impacts to population and housing related to inducing substantial direct or indirect population growth, and no further analysis is warranted.

- (b) Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?

The proposed project is not expected to result in impacts to population and housing in relation to the displacement of substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere. The Housing Element is intended to address a number of housing issues, including ensuring the quality and affordability of the housing stock, ensuring that suitable housing is available for persons of all economic levels, assisting individuals and families with special needs housing, and meeting the needs of a diverse community. The Housing Element does not set forth or encourage any policies or programs that would directly or indirectly displace existing housing units in the City. Further, the City has established a policy that requires a one-to-one replacement of affordable housing in the coastal zone. Therefore, there are no expected impacts to population and housing related to the displacement of substantial amounts of existing housing.

- (c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The proposed project is not expected to result in impacts to population and housing in relation to the displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere. The Housing Element is intended to address a number of housing issues, including ensuring the quality and affordability of the housing stock, ensuring that suitable housing is available for persons of all economic levels, assisting individuals and families with special needs housing, and meeting the needs of a diverse community. The Housing Element does not set forth

or encourage any policies or programs that would directly or indirectly displace existing housing units in the City. Further, the City has established a policy that requires a one-to-one replacement of affordable housing in the coastal zone. Therefore, there are no expected impacts to population and housing related to the displacement of substantial numbers of people, and no further analysis is warranted.

### **3.14 PUBLIC SERVICES**

This analysis is undertaken to determine if the 2013–2021 Housing Element update (proposed project) to the City of Long Beach (City) General Plan may have a significant impact to public services, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act (CEQA) Guidelines.<sup>1</sup>

#### **3.14.1 Affected Environment**

##### ***Fire***

Fire protection is provided by the Long Beach Fire Department, which has 23 stations in the City. The Fire Department is divided into bureaus of Fire Prevention, Fire Suppression, the Bureau of Instruction, and the Bureau of Technical Services. The Fire Department provides medical, paramedic, and other first-aid rescue calls to the community.

##### ***Police***

Police protection is provided by the Long Beach Police Department, which is divided into bureaus of Administration, Investigation, and Patrol. There are four Patrol Divisions within the City: East, West, North, and South.

##### ***Public Schools***

The Long Beach Unified School District serves the City of Long Beach along with the City of Signal Hill, Catalina Island, and a large portion of the City of Lakewood.

##### ***Parks***

More than 3,100 acres within the City's 50 square miles are developed for recreation. Long Beach Parks, Recreation and Marine (LBPRM) provides programs and services at 162 parks with 26 community centers, two historic sites, two major tennis centers, and five municipal golf courses; the largest municipally operated marina system in the nation with 3,677 boat slips; and six miles of beaches.<sup>2</sup>

#### **3.14.2 Impact Analysis**

State CEQA Guidelines recommend the consideration of the following question when addressing the potential for significant impact to public services:

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for 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 any of the public services:

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> About Long Beach Parks, Recreation and Marine. n.d. Website. <http://admin.longbeach.gov/park/about/default.asp>

1) Fire protection?

The proposed project is expected to result in less than significant impacts to public services in relation to fire protection. The Housing Element encourages future housing development on 31 sites that have been identified for their capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. For the proposed project, the City is allocated a Regional Housing Needs Allocation (RHNA) of 7,048 housing units, equivalent to less than 5 percent of the existing residential units in the City. The Housing Element is a policy document that conforms to the City's General Plan and does not propose any specific development projects. The density and intensity of planned growth set forth in the Housing Element would not be of a magnitude to substantially affect the provision of fire protection services. Any future housing developments resulting from the implementation of the Housing Element will undergo environmental review. Therefore, the proposed project is not expected to result in significant impacts to public services, and no further analysis related to fire protection is warranted.

2) Police protection?

The proposed project is expected to result in less than significant impacts to public services in relation to police protection. The Housing Element encourages future housing development on 31 sites that have been identified for their capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. For the proposed project, the City is allocated an RHNA of 7,048 housing units, equivalent to less than 5 percent of the existing residential units in the City. The Housing Element is a policy document that conforms to the City's General Plan and does not propose any specific development projects. The density and intensity of planned growth set forth in the Housing Element would not be of a magnitude to substantially affect the provision of police protection services. Any future housing developments resulting from the implementation of the Housing Element will undergo environmental review. Therefore, the proposed project is not expected to result in significant impacts to public services, and no further analysis related to police protection is warranted.

3) Schools?

The proposed project is expected to result in less than significant impacts to public services in relation to schools. The Housing Element encourages future housing development on 31 sites that have been identified for their capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. For the proposed project, the City is allocated an RHNA of 7,048 housing units, equivalent to less than 5 percent of the existing residential units in the City. The Housing Element is a policy document that conforms to the City's General Plan and does not propose any specific development projects. The density and intensity of planned growth set forth in the Housing Element would not be of a magnitude to substantially affect the provision of schools. Any future housing developments resulting from the implementation of the Housing Element will undergo environmental review and will be subject to development fees paid to the school district to mitigate the impacts of these future projects. Therefore, the proposed project is not expected to result in significant impacts to public services, and no further analysis related to schools is warranted.

4) Parks?

The proposed project is expected to result in less than significant impacts to public services in relation to parks. The Housing Element encourages future housing development on 31 sites that have been identified for their capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. For the proposed project, the City is allocated an RHNA of 7,048 housing units, equivalent to less than 5 percent of the existing residential units in the City. The Housing Element is a policy document that conforms to the City's General Plan and does not propose any specific development projects. The density and intensity of planned growth set forth in the Housing Element would not be of a magnitude to substantially affect the provision of fire protection services. Any future housing developments resulting from the implementation of the Housing Element will undergo environmental review and will be subject to park impact fees paid to the City to mitigate the impacts of these future projects. Therefore, the proposed project is not expected to result in significant impacts to public services, and no further analysis related to parks is warranted.

5) Other public facilities?

The proposed project is not expected to result in impacts to public services in relation to other public facilities. No other impacts have been identified that would require the provision of new or physically altered municipal facilities. The Housing Element encourages future housing development on 31 sites that have been identified for their capacity and suitability for residential projects. The Housing Element is a policy document that conforms to the City's General Plan and does not propose any specific development projects. Any future housing developments resulting from the implementation of the Housing Element will undergo environmental review. Therefore, there are no expected impacts to public services related to other public facilities, and no further analysis is warranted.

### 3.15 RECREATION

This analysis is undertaken to determine if the City of Long Beach 2013–2021 Housing Element (proposed project) may have a significant impact to recreation, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act (CEQA) Guidelines.<sup>1</sup> Recreation at the proposed project site was evaluated with regard to expert opinion, technical studies, and other substantial evidence.

#### 3.15.1 Affected Environment

##### *Neighborhood and Regional Parks*

More than 3,100 acres within the City of Long Beach's (City's) 50 square miles are developed for recreation. Long Beach Parks, Recreation and Marine (LBPRM) provides programs and services at 162 parks with 26 community centers, two historic sites, two major tennis centers, and five municipal golf courses; the largest municipally operated marina system in the nation with 3,677 boat slips; and 6 miles of beaches.<sup>2</sup>

#### 3.15.2 Impact Analysis

State CEQA Guidelines recommend the consideration of two questions when addressing the potential for significant impact to recreation:

Would the proposed project have any of the following effects:

- (a) Would the project 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?

The proposed project would be expected to result in less than significant impacts to recreation in relation to increased use of existing neighborhood and regional parks or other recreational facilities that would contribute to their physical deterioration. The Housing Element encourages future housing development on 31 sites that have been identified for their capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. For the 2013–2021 Housing Element update, the City is allocated a Regional Housing Needs Allocation (RHNA) of 7,048 housing units, roughly equivalent to less than 5 percent of the existing residential units in the City. The Housing Element is a policy document that conforms to the City's General Plan and the City's Dedication of Parks in Perpetuity Ordinance and does not propose any specific development projects. Any future housing developments resulting from the implementation of the proposed project will undergo environmental review and are subject to park impact fees paid to the City, except in the case of low and very low income units. Therefore, the proposed project would not be expected to result in significant impacts to recreation related to increased use of existing neighborhood and regional parks or other recreational facilities that would contribute to their physical deterioration. No further analysis is warranted.

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> About Long Beach Parks, Recreation and Marine. n.d. Website. <http://admin.longbeach.gov/park/about/default.asp>

- (b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The proposed project would not be expected to result in adverse physical effects on the environment as a result of existing recreational facilities or proposed construction or expansion of recreational facilities. The Housing Element encourages future housing development on 31 sites that have been identified for their capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. For the 2013–2021 Housing Element update, the City is allocated an RHNA of 7,048 housing units, roughly equivalent to less than 5 percent of the existing residential units in the City. The Housing Element is a policy document that conforms to the City's General Plan and the City's Dedication of Parks in Perpetuity Ordinance and does not propose any specific development projects. The planned growth set forth in the Housing Element would not create significant increases in demand for parks or other recreational facilities. Any future housing developments resulting from the implementation of the proposed project will undergo environmental review and are subject to park impact fees paid to the City, except in the case of low and very low income units. Therefore, there would be no expected impacts to recreation related to adverse physical effects on the environment as a result of existing recreational facilities or proposed construction or expansion of recreational facilities. No further analysis is warranted.

### 3.16 TRANSPORTATION/TRAFFIC

This analysis was undertaken to determine if the City of Long Beach 2013–2021 Housing Element (proposed project) may have a significant impact to transportation/traffic, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State California Environmental Quality Act Guidelines (State CEQA Guidelines).<sup>1</sup> Transportation/traffic at the proposed project site was evaluated with regard to the Transportation Element of the adopted General Plan,<sup>2</sup> the adopted Congestion Management Plan,<sup>3</sup> the Thomas Guide®, and maps available from the Automobile Association of America.

#### 3.16.1 Affected Environment

The City of Long Beach (City) encompasses approximately 51 square miles and is a fully-urbanized community with a major port; regional airport; passenger rail to Los Angeles; a branch of California State University; and over 60 residential neighborhoods, including 17 historic districts. Primary access to the City is via I-405, I-710, and I-605. The City is also served by several public transit lines, including the free downtown Passport shuttle, the Metro Blue Line light-rail train that connects the City with downtown Los Angeles, and the Long Beach Transit bus system. The City has installed bike lanes and instituted Bikestation, which allows users to travel by bike, rent a bike, plan trips, and conveniently park bikes.<sup>4</sup>

#### 3.16.2 Impact Analysis

The State CEQA Guidelines recommend the consideration of seven questions when addressing the potential for significant impact to transportation/traffic:

Would the project have any of the following effects:

- (a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

The Housing Element is expected to result in less than significant impacts to transportation/traffic in relation to creating a substantial increase in traffic in relation to the existing traffic and capacity of the street system. The Housing Element is a policy document that does not propose any specific development projects. The Housing Element would be consistent with all other chapters of the General Plan, including the Mobility (Circulation) Element. The Housing Element would not encourage population growth beyond the planned growth set forth in the General Plan. All future projects would be subject to separate CEQA review and, except for low and very low income units, would be required to pay transportation developer fees. Therefore, the Housing Element

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> City of Long Beach. December 1991. *Transportation Element of the General Plan*. Available at: <http://www.lbds.info/civica/filebank/blobload.asp?BlobID=2542>

<sup>3</sup> City of Long Beach, Department of Development Services. 16 August 2011. "Resolution to Certify the 2010-2011, Local Development Report Conformance with the State Congestion Management Plan." Available at: <http://longbeach.legistar.com/LegislationDetail.aspx?ID=937829&GUID=CF9D34CE-D23E-4541-AE6F-49FD77C43ED7>

<sup>4</sup> City of Long Beach, Office of Sustainability. Accessed 22 May 2013. "Transportation." Available at: <http://www.longbeach.gov/citymanager/sustainability/transportation/>

goals, policies and programs would not result in traffic growth beyond the levels planned for in the General Plan. No further analysis related to creating a substantial increase in traffic is warranted.

- (b) Exceed, either individually or cumulatively, a level of service (LOS) standard established by the county congestion management agency for designated roads or highways?

The Housing Element is expected to result in less than significant impacts to transportation/traffic in relation to exceeding, either individually or cumulatively, an LOS standard established by the county congestion management agency for designated roads or highways. The Housing Element would not alter land use patterns or encourage population growth beyond the levels set forth in the General Plan. Since the Housing Element would not result in traffic growth beyond General Plan levels, there would be no significant impacts on LOS. Therefore, the Housing Element is not expected to result in significant impacts to transportation/traffic, and no further analysis related to exceeding an LOS standard established by the county congestion management agency for designated roads or highways is warranted.

- (c) 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?

The Housing Element is not expected to result in impacts to transportation/traffic in relation to a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. All future development in the vicinity of the Long Beach Airport would be in compliance with all applicable local and Federal Aviation Administration (FAA) requirement. Therefore, there are no expected impacts to transportation/traffic related to a change in air traffic patterns that results in substantial safety risks and no further analysis is warranted.

- (d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Housing Element would have no impacts on transportation and traffic related increasing hazards due to a design feature or incompatible uses. The Housing Element is a policy document that does not propose any specific development projects and, therefore, would not create or encourage any transportation related design features is not expected to result in impacts to transportation/traffic in relation to substantially increasing hazards due to a design feature or incompatible uses. The Housing Element relies on the use of properties within the City that have been designated for residential land use in the Land Use Element of the General Plan and or in the Zoning Ordinance but have not yet been developed to the allowable capacity. As such, there are no proposed changes to the existing circulation system for vehicular or alternative modes of travel. Similarly, areas designated for residential land use have already been determined to be compatible for such uses through the City's adoption of the General Plan. Therefore, there are no expected impacts to transportation/traffic related to substantially increasing hazards due to a design feature and no further analysis is warranted.

- (e) Result in inadequate emergency access?

The Housing Element would not propose any specific development projects and, therefore, is not expected to result in impacts to transportation/traffic in relation to inadequate emergency access. There are no expected impacts to transportation/traffic related to inadequate emergency access and no further analysis is warranted.

(f) Result in inadequate parking capacity?

The Housing Element is not expected to result in impacts to transportation/traffic in relation to inadequate parking capacity. The Housing Element would not encourage housing growth beyond levels planned for in the General Plan. The Housing Element would be consistent with all other chapters of the General Plan, including the Land Use and Mobility Elements. The Housing Element would not alter any local development standards related to parking or exempt any specific development projects from such parking standards. Therefore, there are no expected impacts to transportation/traffic related to inadequate parking capacity and no further analysis is warranted.

(g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

The Housing Element is not expected to result in impacts to transportation/traffic in relation to conflict with adopted policies, plans, or programs supporting alternative transportation. The Housing Element is a policy document that would be consistent with all other chapters of the General Plan, including the Mobility Element. The Housing Element would not set forth or encourage any proposals or projects that would conflict with any adopted alternative transportation policies. Therefore, there are no expected impacts to transportation/traffic related to inadequate parking capacity and no further analysis is warranted.

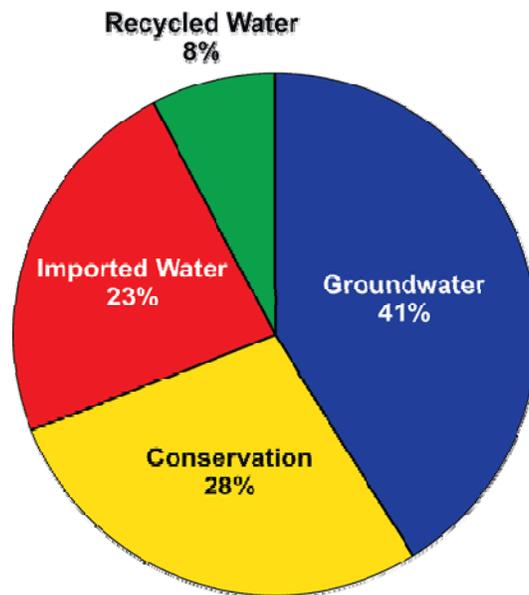
### 3.17 UTILITIES AND SERVICE SYSTEMS

This analysis is undertaken to determine if the 2013–2021 Housing Element update (proposed project) to the City of Long Beach (City) General Plan would have a significant impact to utilities and service systems, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act (CEQA) Guidelines.<sup>1</sup> Utilities and service systems at the proposed project site were evaluated with regard to water, wastewater, solid waste, and sewage systems; their current capacities; and the projected future demand for these services. Conclusions rely primarily on consultation with the utility and service system providers. The Waste Facilities section of the Land Use and Open Space Elements of the City General Plan<sup>2,3</sup> and applicable municipal codes were also consulted.

#### 3.17.1 Affected Environment

##### Water

The Long Beach Water Department (LBWD) oversees a large network of water infrastructure that provides water to City residents through more than 900 miles of pipeline. Currently, City residents use an average of 109 gallons of water per person per day.<sup>4</sup> To meet this demand, the LBWD manages a diverse Water Supply Portfolio represented in the pie chart below:



**SOURCE:** Long Beach Water Department. 2013. *Water Supply Portfolio*. Available at: <http://www.lbwater.org/water-supply-portfolio>

<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

<sup>2</sup> City of Long Beach, Department of Development Services. 1989. *Land Use Element of the Long Beach General Plan*. Long Beach, CA.

<sup>3</sup> City of Long Beach, Department of Development Services. 1989. *Open Space Element of the Long Beach General Plan*. Long Beach, CA.

<sup>4</sup> Long Beach Water Department. 2013. *Water Services*. Available at: <http://www.lbwater.org/water-services>

## **Groundwater**

The LBWD treats groundwater pumped from 30 wells at the Long Beach Groundwater Treatment Plant. This is the largest groundwater treatment plant in the U.S. and has the capacity to treat up to 62.5 million gallons of groundwater each day. In 2012, the treatment plant processed over 10.2 billion gallons of drinking water. Overall, more than 19.1 billion gallons of high-quality drinking water were delivered to the City.<sup>5</sup>

## **Wastewater**

The LBWD operates and maintains nearly 765 miles of sanitary sewer lines that deliver over 40 million gallons per day to Los Angeles County Sanitation District (LACSD) facilities located on the north and south sides of the City. A majority of the City's wastewater is delivered to the Joint Water Pollution Control Plant (JWPCP) of the LACSD. The remaining portion of the City's wastewater is delivered to the Long Beach Water Reclamation Plant (LBWRP). The JWPCP is the largest of the LACSD's wastewater treatment plants, providing primary and secondary treatment for 350 million gallons of wastewater a day. The plant serves approximately 3.5 million people, including 460,000 residents of the City. The LBWRP provides primary, secondary, and tertiary treatment for 25 million gallons of wastewater per day, serving approximately 250,000 people, including a portion of the 460,000 residents of the City. Almost 6 million gallons per day of reclaimed water are reused at over 60 reuse sites. The LBWD's recycled water expansion, when complete, will more than double recycled water use in the City, eventually meeting 12 percent of the City's total water demand.<sup>6</sup>

## **Solid Waste**

Each year, the residents and businesses of the City dispose of approximately 368,000 tons of residential, commercial, and industrial waste. The primary means of waste disposal for the City is through the Southeast Resource Recovery Center (SERRF), where the waste is incinerated and converted to electricity. SERRF processes an average of 1,290 tons of municipal solid waste each day, but has a maximum capacity of 2,240 tons of solid waste per day.

The remainder of waste is taken to the Puente Hills Landfill in the City of Whittier. According to the Puente Hills Landfill Annual Report, the Puente Hills Landfill disposed more than 1.8 million tons of waste from July 2011 to June 2012. The associated remaining capacity under the current Conditional Use Permit for the Puente Hills Landfill is 26.4 million cubic yards or 14.5 million tons.<sup>7</sup> In addition to SERRF and the Puente Hills Landfill, the City sends recycled waste to one of two transfer stations, the Bel Art Transfer Station located in north Long Beach or the EDCO Recycling and Transfer station located in Signal Hill. Both the Bel Art Transfer Station and the EDCO Recycling and Transfer station have the capacity to handle up to 1,500 tons of waste per day.<sup>8,9</sup>

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<sup>5</sup> Long Beach Water Department. 2013. *Groundwater Treatment Plant*. Available at: <http://www.lbwater.org/groundwater-treatment-plant>

<sup>6</sup> Long Beach Water Department. 2013. *Sewage Treatment*. Available at: <http://www.lbwater.org/sewage-treatment>

<sup>7</sup> County Sanitation Districts of Los Angeles County. November 2012. *Puente Hills Landfill Annual Report*. Available at: <http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=7695>

<sup>8</sup> Anthony, Marilyn, Bel Art Transfer Station, Long Beach, CA. 9 May 2013. Personal communication to Adam Furman, Sapphos Environmental, Inc., Pasadena, CA.

<sup>9</sup> Sanchez, Carlos, EDCO Recycling and Transfer, Long Beach, CA. 9 May 2013. Personal communication to Adam Furman, Sapphos Environmental, Inc., Pasadena, CA.

### 3.17.2 Impact Analysis

The State CEQA Guidelines recommend the consideration of seven questions when addressing the potential for significant impact to utilities and service systems:

Would the project have any of the following effects:

- (a) Exceed wastewater treatment requirements of the applicable regional water quality control board?

The proposed project would not result in impacts to utilities and service systems in relation to exceeding wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board. The proposed project is a policy document and does not set forth any specific developments, and all future housing development projects will be subject to separate environmental review in accordance with CEQA. The Housing Element encourages housing development to accommodate the anticipated level of population growth consistent with the requirements of the State Housing Element law that requires local jurisdictions to accommodate a share of the region's projected housing needs for a specific planning period, which is referred to as the Regional Housing Needs Allocation (RHNA). For the proposed project, the City is allocated an RHNA of 7,048 housing units on sites that have been identified for their capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. The RHNA of 7,048 housing units is equivalent to less than 5 percent of the existing residential units in the City. The proposed project is consistent with total allowable residential development in the City's General Plan and Zoning Ordinance. The LBWD manages municipal water supplies consistent with the adopted General Plan. Therefore, there are no expected impacts to utilities and service systems related to exceeding wastewater treatment requirements of the applicable regional water quality control board. No further analysis is warranted.

- (b) Require or result in the construction of new water or wastewater treatment facilities, the construction of which could cause significant environmental effects?

The proposed project would not result in impacts to utilities and service systems in relation to the construction of new water or wastewater treatment facilities or expansion of facilities, causing significant environmental effects. The Housing Element encourages housing development to accommodate the anticipated level of population growth consistent with the requirements of the State Housing Element law that requires local jurisdictions to accommodate a share of the region's projected housing needs for a specific planning period. For the proposed project, the City is allocated an RHNA of 7,048 housing units on sites that have been identified for their capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. The RHNA of 7,048 housing units is equivalent to less than 5 percent of the existing residential units in the City. The proposed project is consistent with total allowable residential development in the City's General Plan and Zoning Ordinance. The LACSD has wastewater facilities located on the north and south sides of the City. The majority of the City's wastewater is delivered to the JWPCP, with the remaining portion delivered to LBWRP. The JWPCP is the largest of the LACSD's wastewater treatment plants, providing primary and secondary treatment for 350 million gallons of wastewater a day. The plant serves approximately 3.5 million people, including 460,000 residents of the City, and has the capacity to accommodate residential land uses consistent with the City's General Plan. The proposed project is a policy document and does not set forth any specific developments, and

all future housing development projects will be subject to separate environmental review in accordance with CEQA. In the event that the RHNA is fully implemented by 2021, the current water and wastewater treatment facilities would be sufficient to support the proposed developments.<sup>10</sup> Therefore, there would be no impacts to utilities and service systems related to the construction of new water or wastewater treatment facilities or expansion of facilities, causing significant environmental effects. No further analysis is warranted.

- (c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?

The proposed project would not result in impacts to utilities and service systems in relation to the construction of new storm water drainage facilities or expansion of existing facilities, which could cause significant environmental impacts. The Housing Element encourages housing development to accommodate the anticipated level of population growth, on sites that have sufficient capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. The five Planned Development Districts in the City are served by storm water drainage facilities. Increased housing density of up to 5 percent would not necessitate the construction of new storm water drainage facilities or expansion of existing facilities that would cause significant environmental impacts. Therefore, there would be no expected impacts to utilities and service systems related to the construction of new storm water drainage facilities or expansion of existing facilities, which could cause significant environmental impacts, and no further analysis is warranted.

- (d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

The proposed project would not result in impacts to utilities and service systems in relation to having sufficient water supplies available to serve the project from existing entitlements and resources. Implementation of the proposed project would utilize existing potable water supplies. The proposed project is consistent with residential densities allowed by the Land Use Element of the City's General Plan and Zoning Ordinance. Potable water would be supplied by the LBWD. The LBWD plans for water supply based on the General Plan. According to the 2011 Water Quality Report of the LBWD, approximately 30 percent of potable water serving the City is supplied by groundwater (closer to 40 percent today as a result of conservation efforts), with the remaining 70 percent supplied by purchased, imported surface water.<sup>11</sup> The sources of drinking water (for both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. The LBWD purchases treated surface water from the Metropolitan Water District of Southern California and treats groundwater from 30 wells around the City at the Long Beach Groundwater Treatment Plant. The LBWD manages water supply to support allowable land uses as specified in the General Plan. The proposed project is a policy document and does not set forth any specific developments, and all future housing development projects will be subject to separate environmental review in accordance with CEQA. Therefore, there would be no expected impacts to utilities and service systems related to having sufficient water supplies available to serve the project from existing entitlements and resources, or new expanded entitlements. No further analysis is warranted.

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<sup>10</sup> Verceles, Robert, Long Beach Water Department, Long Beach, CA. 17 May 2013. Personal communication to Adam Furman, Sapphos Environmental, Inc., Pasadena, CA.

<sup>11</sup> Long Beach Water Department. 2012. *Annual Water Quality Report, Reporting Year 2011*. Available at: [http://www.lbwater.org/sites/default/files/file\\_attach/pdf/CA000282\\_2011\\_1.pdf](http://www.lbwater.org/sites/default/files/file_attach/pdf/CA000282_2011_1.pdf)

- (e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing conditions ?

The proposed project is not expected to result in impacts to utilities and service systems in relation to resulting in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. The Housing Element encourages housing development to accommodate the anticipated level of population growth consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. For the proposed project, the City is allocated an RHNA of 7,048 housing units, equivalent to less than 5 percent of the existing residential units in the City. The proposed project is consistent with total allowable residential development in the City's General Plan and Zoning Ordinance. The LBWD operates and maintains nearly 765 miles of sanitary sewer lines that deliver over 40 million gallons per day to the LACSD facilities located on the north and south sides of the City, with the remaining portion of the City's wastewater being delivered to LBWRP. The JWPCP is the largest of the LACSD's wastewater treatment plants, providing primary and secondary treatment for 350 million gallons of wastewater a day. The plant serves approximately 3.5 million people, including 460,000 residents of the City, and has the capacity to accommodate residential land uses consistent with the City's General Plan. The proposed project is a policy document and does not set forth any specific developments, and all future housing development projects will be subject to separate environmental review in accordance with CEQA. In the event that the RHNA is fully implemented by 2021, the current water and wastewater treatment facilities would be sufficient to support the proposed developments.<sup>12</sup> Therefore, there would be no impacts to utilities and service systems related to the determination by the wastewater treatment providers that serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing conditions. No further analysis is warranted.

- (f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

The proposed project is not expected to result in impacts to utilities and service systems in relation to being served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs. The Housing Element encourages housing development to accommodate that anticipated level of population growth consistent with the requirements of the State Housing Element law that requires local jurisdictions to accommodate a share of the region's projected housing needs for a specific planning period. For the proposed project, the City is allocated an RHNA of 7,048 housing units on sites that have been identified for their capacity and suitability for residential projects, consistent with existing land use designations for residential density in the Land Use Element of the City's General Plan and the Zoning Ordinance. The RHNA of 7,048 housing units is equivalent to less than 5 percent of the existing residential units in the City. The proposed project is consistent with total allowable residential development in the City's General Plan and Zoning Ordinance.

The City's primary means of disposal is the SERFF, which has a maximum processing capacity of 2,240 tons of solid waste per day, far in excess of the 2,016 tons of solid waste per day that would

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<sup>12</sup> Verceles, Robert, Long Beach Water Department, Long Beach, CA. 17 May 2013. Personal communication to Adam Furman, Sapphos Environmental, Inc., Pasadena, CA.

occur if the City were able to accommodate 7,048 housing units between 2013 and 2021. The remainder of waste for the City is sent to the Puente Hills Landfill, with a remaining capacity of 14.5 million tons of solid waste. In addition to SERFF and the Puente Hills Landfill, the City sends recycled waste to one of two transfer stations, the Bel Art Transfer Station located in north Long Beach or the EDCO Recycling and Transfer station located in Signal Hill. Both the Bel Art Transfer Station and the EDCO Recycling and Transfer station have a capacity to handle up to 1,500 tons of waste per day. As of 2008, the City requires that for construction projects totaling a minimum of \$50,000, 60 percent of project-related construction and demolition materials be diverted.<sup>13</sup> Based on the daily capacities for the City's solid waste facilities, including the Puente Hills Landfill, and the City's requirement of diverting 60 percent of project-related solid waste, the existing means of solid waste disposal for the City are sufficient to support the proposed project. No further analysis is warranted.

(g) Comply with Federal, State, and Local statutes and regulations related to solid waste?

The proposed project is not expected to result in impacts to utilities and service systems in relation to compliance with federal, state, and local statutes and regulations related to solid waste. While the Housing Element does identify five Planned Development Districts for new housing development, the Housing Element does not set forth any specific development project proposals. All future residential development proposals will be subject to separate environmental review in accordance with the provisions of CEQA and would be required to demonstrate the ability to comply with federal, state, and local statutes and regulations related to solid waste. Therefore, there are no expected impacts to utilities and service systems. No further analysis is warranted.

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<sup>13</sup> City of Long Beach Municipal Code, Title 18, Chapter 67: "Construction and Demolition Recycling Program."

### 3.18 MANDATORY FINDINGS OF SIGNIFICANCE

This analysis is undertaken to determine if the 2013–2021 Housing Element update (proposed project) to the City of Long Beach (City) General Plan would have a significant impact to Mandatory Findings of Significance, thus requiring the consideration of mitigation measures or alternatives, in accordance with Section 15063 of the State of California Environmental Quality Act (CEQA) Guidelines.<sup>1</sup> Mandatory Findings of Significance at the proposed project site were evaluated with regard to cultural resources, listed species, and hazards and hazardous materials.

#### 3.18.1 Affected Environment

As described in Section 1.0, the City was incorporated into Los Angeles County in 1897 and is a highly diverse community of 462,257 residents with no ethnic majority. Located in the South Bay region of Los Angeles County, adjacent to the Pacific Ocean, the City encompasses approximately 51 square miles and is a fully urbanized community with a major port; regional airport; passenger rail to Los Angeles; a branch of the California State University; and over 60 residential neighborhoods, including 17 historic districts. There are 173,932 housing units in the City that house 160,972 households.

#### 3.18.2 Impact Analysis

The State CEQA Guidelines recommend the consideration of three questions when addressing the potential for significant impact to Mandatory Findings of Significance:

- (a) Does the project has the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The proposed project is expected to result in organized development of housing to support the Southern California Association of Governments (SCAG) forecast for population growth in a manner that conforms to the City General Plan and Zoning Ordinance. The provisions for orderly growth avoid the potential for degradation of the quality of the environment, or reductions in habitat for fish or wildlife species, or elimination of important examples of the major periods of California history or prehistory. The Housing Element has determined that it is feasible to accommodate the Regional Housing Needs Allocation (RHNA) of 7,048 housing units consistent with the land use designations and densities specified in the Land Use Element of the City General Plan; thus, such use would be consistent with the City's overall goals and objectives related to planned and orderly growth and the legislative intent of Section 21001 (d) of CEQA to

Ensure the long-term protection of the environment, consistent with the provisions of a decent home and suitable living environment for every Californian.

Analysis indicates that the proposed project will have no impact or less than significant impacts to biological and cultural resources. The Housing Element is a policy document that does not propose any specific development projects or alterations to any specific properties. Specifically with respect to fish and wildlife habitat; fish and wildlife populations; and rare, threatened, and endangered species, the Housing Element considers the use of existing Planned Development districts that would not

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<sup>1</sup> *California Code of Regulations*. Title 14, Division 6, Chapter 3, Sections 15000–15387, Appendix G.

involve the development or conversion of native plant communities or habitats. Similarly, the City adopted the Historic Preservation Element of the General Plan on June 22, 2010, which promotes the preservation and rehabilitation of historic resources in the City. Future development proposals consistent with the Housing Element will be subject to environmental review in accordance with CEQA, including evaluation for consistency with the Federal and State Endangered Species Acts, the Migratory Bird Treaty Act, Section 404 of the Clean Water Act, and Section 1600 of the State Fish and Game Code. The Housing Element does not negate the requirement for conformance with the Historic Preservation Element. Future development proposals consistent with the Housing Element will be subject to environmental review in accordance with CEQA, which has specific provisions related to the protection of significant and potentially significant historic resources, as well as consideration of the Historic Preservation Element. Therefore, the proposed project is not expected to result in significant impacts related to environmental degradation, including degradation of fish and wildlife habitats, or elimination of important examples of major periods of California history.

- (b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future project)?

The proposed project is not expected to result in impacts that are individually limited, but cumulatively considerable. The Housing Element is a policy document that does not propose or authorize any specific development projects or alterations to any specific properties. Future development proposals consistent with the Housing Element will be subject to environmental review in accordance with CEQA. Therefore, there are no expected impacts to Mandatory Findings of Significance related to cumulative impacts.

- (c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

The proposed project is not expected to result in impacts that will cause substantial adverse effects on human beings, either directly or indirectly. The Housing Element is a policy document that does not propose any specific development projects or alterations to any specific properties. The Housing Element establishes a conceptual framework and demonstrates the feasibility of the framework to accomplish the organized development of housing to support SCAG forecast for population growth. The framework anticipates the development of housing in a manner that conforms to the City General Plan and Zoning Ordinance. The Housing Element has determined that it is feasible to accommodate the RHNA allocation of 7,048 housing units consistent with the land use designations and densities specified in the Land Use Element of the City General Plan; thus, such use would be consistent with the City’s overall goals and objectives related to planned and orderly growth and the legislative intent of Section 21001 (d) of CEQA to

Ensure the long-term protection of the environment, consistent with the provisions of a decent home and suitable living environment for every Californian.

The orderly development of housing consistent with the provisions of the General Plan and Zoning Ordinance allows for the provision of housing units in areas designated for such purposes, thus avoiding adverse environmental effects from air emissions, noise, hazards and hazardous materials, and traffic hazards on human beings. Future development proposals consistent with the Housing Element will be subject to environmental review in accordance with CEQA. Therefore, there are no

expected significant impacts related to environmental effects on human beings, either directly or indirectly.

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