City of Huntington Beach 2021-2029 Housing Element Update Implementation Program

Public Review Draft
Subsequent Environmental Impact Report
SCH 2021080104



PUBLIC REVIEW DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

SCH # 2021080104

CITY OF HUNTINGTON BEACH 2021-2029 HOUSING ELEMENT UPDATE IMPLEMENTATION PROGRAM

LEAD AGENCY



CITY OF HUNTINGTON BEACH

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Appendix B - Candidate Housing Sites Inventory

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Appendix D - Greenhouse Gas Emissions Data

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1.0 EXECUTIVE SUMMARY

1.1 Introduction

The environmental impact report (EIR) process, as defined by the California Environmental Quality Act (CEQA), requires the preparation of an objective, full-disclosure document to (1) inform agency decision-makers and the general public of the direct and indirect potentially significant environmental effects of a proposed action; (2) identify feasible or potentially feasible mitigation measures to reduce or eliminate potentially significant adverse impacts; and (3) identify and evaluate reasonable alternatives to a project. In accordance with State CEQA Guidelines (Title 14 of the California Code of Regulations [CCR]) §15168 and the City's CEQA procedures, this Draft Subsequent Environmental Impact Report (SEIR) has been prepared for the City of Huntington Beach 2021/2029 Housing Element Update (HEU) Implementation Program (Project), as described in detail in Section 3.5: Housing Element Organization.

This SEIR has been prepared by the City of Huntington Beach (City) to analyze the Project's potential effects on the environment. This SEIR also provides information related to the HEU Implementation Program to be used for reference and information by any decision-makers, responsible agencies, or other interested parties.

The SEIR is intended to comply with the State CEQA Guidelines, which ensures that projects within California (State) result in the lowest possible effects to the environment. To achieve this, State CEQA Guidelines §§15123 through 15131 require EIRs to include a description of the project, the environmental setting, any identified environmental impacts, mitigation measures to be used for environmental impact reduction, alternatives to the project, potential cumulative impacts stemming from the project, and further economic, social, and other growth effects associated with the project.

Additionally, State CEQA Guidelines §15123, Summary, specifies that an EIR shall contain a brief summary of the proposed actions and its consequences. The summary is required to identify:

- 1. Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect;
- 2. Areas of controversy known to the Lead Agency including issues raised by agencies and the public; and
- 3. Issues to be resolved including the choice among alternatives and whether or how to mitigate the significant effects.

1.2 Project Setting

Incorporated in 1909, Huntington Beach is a seaside community within Orange County (County), approximately 90 miles north of the City of San Diego and 35 miles south of downtown Los Angeles. The City is bound by the City of Seal Beach to the north, the cities of Newport Beach and Costa Mesa to the south, the cities of Westminster and Fountain Valley to the east, and the Pacific Ocean to the west. The Project area includes the entire 27.3 square miles within the City limits.

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Regional access to the City is provided by Interstate 405, Beach Boulevard (State Highway 39), and Pacific Coast Highway (State Highway 1).

1.3 Project Objectives

In accordance with State CEQA Guidelines §15124, the following primary objectives support the HEU's purpose, assist the City, as the lead agency, in developing a reasonable range of alternatives to be evaluated in this SEIR, and ultimately aid decision-makers in preparing findings and overriding considerations, if necessary. The HEU's purpose is to address the housing needs and objectives of the City and to meet the State Housing law requirements. The HEU has the following goals:

- Adopt State-mandated and locally desired programs to implement the City's Housing Element.
- Maintain and enhance the quality and affordability of existing housing in Huntington Beach.
- Provide adequate sites to accommodate projected housing unit needs at all income levels identified by the 2021-2029 RHNA.
- Provide for safe and decent housing for all economic segments of the community.
- Reduce governmental constraints to housing production, with an emphasis on improving processes for projects that provide on-site affordable units.
- Promote equal housing opportunities for all residents, including Huntington Beach's special needs populations.
- Promote a healthy and sustainable Huntington Beach through support of housing at all income levels that minimizes reliance on natural resources and automobile use.
- Maximize solutions for those experiencing or at risk of homelessness.
- Improve quality of life and promote placemaking.
- Affirmatively further fair housing.

1.4 Project Description Summary

The Housing Element is a State-mandated policy document that is a component of the Huntington Beach General Plan. The Housing Element provides direction for implementation of various programs to meet existing and projected future housing needs for all income levels within Huntington Beach. It provides policies, programs, and actions that support and create the framework for production, preservation, and maintenance of the City's housing stock for all income levels. The Housing Element is updated every eight years and is based on the Regional Housing Needs Assessment (RHNA) allocation for that planning period (the 6th Cycle is the current planning period, which is 2021-2029). The City of Huntington Beach 2021 – 2029 Housing Element is being prepared to ensure adequate, safe, and affordable housing conditions and accommodate housing needs based on a comprehensive analysis of the City's current and projected demographic, economic, and housing characteristics and needs, including its identified RHNA requirement. The City's projected regional housing need for the 6th Cycle RHNA planning period (2021-2029), as assigned by the Southern California Association of Governments (SCAG) in accordance with State law, is 13,368 dwelling units (11,743 units when accounting for existing applications and projects, that are currently under review).

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As required by State Housing Law, the City must specify the number of units that can realistically be accommodated on each candidate housing site and identify whether the site is adequate to accommodate lower-income housing in accordance with existing regulations or if future implementation actions could accommodate these lower-income units by amending the land use designation and applicable zoning for selected sites. If adequate sites cannot be identified within the existing zoning, the City is required to identify various strategies to accommodate the lower-income RHNA units. The City is not required to build dwelling units in order to meet its RHNA allocation, only to identify potential sites and create the framework to allow the market the opportunity to develop these units. It is unlikely that the City would be able to accommodate its RHNA allocation for lower-income housing within existing residential neighborhoods based on the existing regulatory context. Therefore, to comply with State law, the City has developed a Housing Program to accommodate the lower-income RHNA units, including amendments to existing land use designations and zoning districts, an affordable housing overlay, and identification of underutilized, residentially-zoned parcels in an inventory of candidate housing sites. In total, the HEU identifies 378 candidate housing sites (approximately 419 acres).

To begin assessing options to meet RHNA, the City compiled an inventory of candidate housing sites with the potential to accommodate the City's RHNA, shown on **Exhibit 1-1: Candidate Housing Sites**. The candidate housing sites inventory includes properties that are dispersed throughout the City to minimize the potential for adverse neighborhood changes and adverse environmental impacts. The intent of the Implementation Program is to minimize impacts by placing housing near public transportation and recreation opportunities and away from environmentally sensitive resources.

Under the HEU, the Programs will be considered in addition to various other strategies to increase housing capacity and production of affordable dwelling units; see HEU Section 4 for additional details on the HEU Implementation Programs. Additional affordable units can also be accommodated through future accessory dwelling unit (ADU) development, which is anticipated to occur on sites throughout the community, in addition to the candidate housing sites. To meet the City's very-low and low-income RHNA need, the City has identified non-vacant parcels currently zoned for non-residential uses. These parcels are located primarily within the Beach and Edinger Corridors Specific Plan, the Research and Technology Land Use District, the North Huntington Center Specific Plan, the Holly-Seacliff Specific Plan, and the Ellis-Goldenwest Specific Plan.

To comply with Assembly Bill (AB) 1397, the City must specify the number of units that can realistically be accommodated on each candidate housing site; and identify whether the site is adequate to accommodate lower-income housing in accordance with existing regulations or if future implementation actions are needed. As discussed above and recognizing that not all candidate housing sites will ultimately be included in the HEU, the 378 candidate housing sites addressed in the SEIR account for a 60 percent buffer (an additional 7,995 dwelling units [60 percent of the 13,368 RHNA units]), which is intended to serve as a contingency that may be considered after HEU certification to address future "no net loss," if it becomes necessary to identify a replacement site during the 6th Cycle (2021-2029). Therefore, while likely fewer than 378 candidate housing sites would be developed to meet the 13,368 RHNA units (11,743 units when accounting for existing applications and projects that are currently under review), this SEIR

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considers potential housing development on all 378 candidate housing sites, as well as on ADU sites throughout the City.

This SEIR specifically addresses amendments to the Huntington Beach General Plan Update (GPU) and the City of Huntington Beach Zoning and Subdivision Ordinance of the City of Huntington Beach Municipal Code (Zoning Text and Zoning Map amendments) for changes to land use designations and base/overlay districts, as well as ancillary amendments to other planning documents, as necessary for clarification and consistency purposes. These amendments are needed to accommodate future housing sites as part of the HEU's Implementation Program. As such, the Project analyzed in the SEIR is the HEU Implementation Program and assumes 11,743 additional housing units.

The Project does not propose new residential or other development on the 378 candidate housing sites evaluated in this SEIR; rather, it provides capacity for future development of approximately 19,738 housing units to meet the City's remaining unmet RHNA of 11,743 housing units, consistent with state law.

Project Components

Candidate Housing Sites

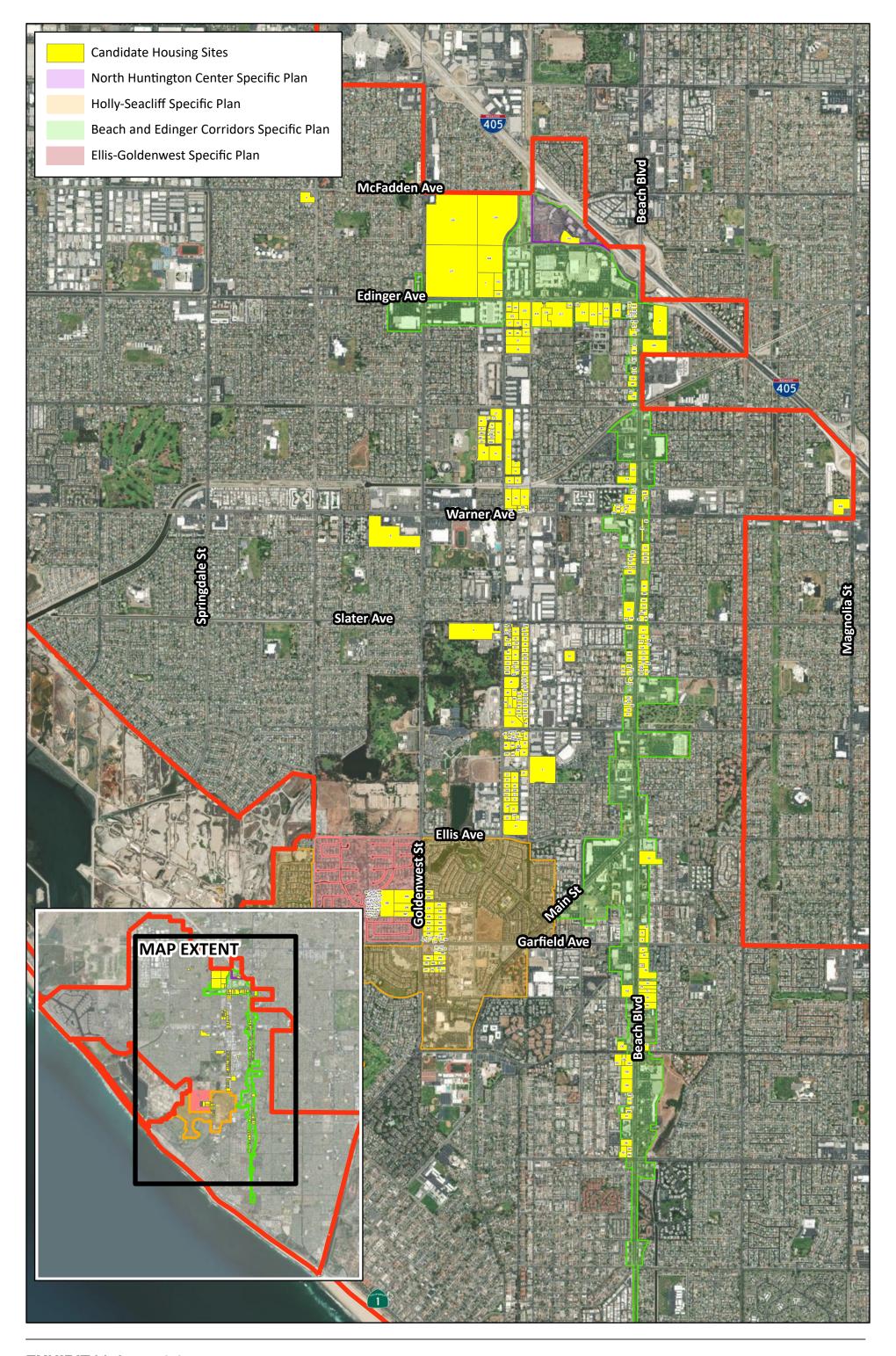
To comply with State law (CGC §65583), the City prepared an inventory of candidate housing sites that may be suitable for residential development, including the lower-income dwelling units allocated to the City in the 6th Cycle RHNA. **Appendix B: Candidate Housing Sites Inventory** includes a parcel-specific listing of candidate housing sites that are available to accommodate the City's full share of the regional housing need (i.e., RHNA allocation) during the 2021-2029 planning period. Ultimately, the Huntington Beach City Council will decide which housing sites from the candidate housing sites inventory will be identified in the 6th Cycle Housing Element, as action programs to accommodate the assigned affordable housing obligations.

Table 1-1: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units) shows the City's 2021-2029 RHNA need by income category and a summary of the sites identified to meet that need. The analysis shows that the City has the capacity to meet its 2021-2029 RHNA allocation through various methods, including the following:

- Identification of development capacity on sites to permit the development of residential uses at or above 30 dwelling units per acre,
- Identification of properties suitable for hotel/motel conversion to housing, and
- Future development of ADUs

As shown in **Table 1-1**, the City's total potential development capacity for all candidate housing sites, in addition to the 565 ADUs that could be developed during the 2021-2029 planning period, is approximately 19,738 housing units (rezones only). This would exceed the City's unmet RHNA of 11,743 housing units by approximately 7,995 dwelling units (or approximately 60 percent).

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Table 1-1: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units)

	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total
RHNA (2021-2029)	3,661	2,184	2,308	5,215	13,368
Units Issued Building Permits in Projection Period (Begins June 31,	0	43	0	449	492
Applications and Pipeline Projects	17	242	61	813	1,133
Sum of Pipeline	17	285	61	1,262	1,625
Remaining Unmet RHNA	3,644	1,899	2,247	3,953	11,743
	Sites Inv	entory – Rez	ones		
Sites Identified for Rezone	0		128	300	428
Sites Identified for Overlay	5,6	11	2,685	10,033	18,329
Hotel/Motel Conversion	41	6	0	0	416
Accessory Dwelling Units (ADU)	38	5	169	11	565
Sum of Sites Inventory - Rezones	6,412		2,982	10,344	19,738
Sum of Total Sites* 6,714		14	3,043	11,606	21,363
RHNA (2021-2029)	5,845		2,308	5,215	13,368
Sites Surplus/Remaining	869		735	6,391	7,995
Percent Above/Below RHNA	15%		32%	123%	60%
Source: City of Huntington Beach. 2022. 2021-2029 Housing Element. Table B-2. * = Sum of Rezones and Pipeline Projects.					

Amendments to Base and Overlay Zoning Districts

The HEU Implementation Program establishes a total potential development capacity of approximately 428 units (128 moderate income and 300 above moderate) provided by sites that would be rezoned and 18,329 units (5,611 very low/low income, 2,685 moderate income and 10,033 above moderate) provided by sites within proposed housing overlay zones. This includes a buffer, in this case 60 percent, sufficient to accommodate the RHNA during the entire planning period given the requirements of the "no net loss" statute. The purpose of No Net Loss Law (CGC §65863) is to ensure development opportunities remain available throughout the planning period to accommodate a jurisdiction's RHNA, especially for lower- and moderate-income households.¹ Potential development capacity from rezoning alone could accommodate the RHNA allocation for moderate and above moderate income but could not meet the total need for the very low and low income RHNA allocation. Therefore, the application of housing overlay zones, the hotel/motel conversion to housing strategy, and the development of ADUs would be required to meet the City's RHNA allocation for these income levels.

As previously stated, rezoning would occur across sites for moderate and above moderate-income categories and a zoning overlay would occur across sites for all income categories. In order to accommodate the rezoning/overlay effort, the HEU would involve Zoning Code/Specific Plan Amendments to as many as 378 sites, shown on **Exhibit 1-1**, within the City (as many as 378 parcels). Although it is likely that not all the candidate sites will be included in the final HEU, this SEIR evaluates

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¹ California Department of Housing and Community Development. 2021. *Accountability and Enforcement*. https://www.hcd.ca.gov/community-development/accountability-enforcement.shtml (accessed January 2022).

development of all 378 candidate sites to provide a conservative analysis of potential environmental impacts.

The Project proposes Zoning Text Amendments to revise applicable Huntington Beach Zoning and Subdivision Ordinance (HBZSO) and Specific Plan sections affected by the Project's rezoning/overlay program; and a Zoning Map Amendment to resolve any resolve potential zoning inconsistencies resulting from adoption of the Project's rezoning/overlay program. The Project proposes to amend HBMC Titles 20-25 (the HBZSO) to reflect the following rezoning and overlay strategies intended to create and encourage the residential infill strategies:

- Beach and Edinger Corridors Specific Plan (SP14) 20 Affordable Overlay: This strategy would increase affordable housing options in the SP14 by expanding the 20 percent Affordable Overlay that was established in 2020. The 20 percent overlay would permit residential projects that propose at least 20 percent lower income units on-site by-right. The SP14 Affordable Housing Overlay would expand the provisions of the existing affordable housing overlay to 151 additional sites within SP14, which can accommodate the following housing units: 3,276 low and very low-income units; 1,539 moderate income units; and 5,827 above moderate-income units. A complete description of the overlay unit calculation is available within Appendix B.
- Affordable Housing Overlay: The Affordable Housing Overlay would create housing opportunities
 primarily in the City's well-connected nonresidential areas. The City has identified 167 sites to
 apply the Affordable Housing Overlay, which can accommodate the following housing units: 2,222
 low and very low-income units; 1,083 moderate income units; and 3,889 above moderate-income
 units.
- Ellis Goldenwest Specific Plan (SP7) High Density Residential RH Overlay: This strategy utilizes the City's existing RH High Density Residential District (maximum 35.0 dwelling units per acre) to create housing opportunities within SP7. This area is approximately 18 acres (Sites 395 through 448) and is mostly vacant. The sites in SP7 are currently designated as low density estate residential (maximum 3.0 dwelling units per acre) and are surrounded by residentially developed and/or designated land uses. The City has identified 53 parcels to be zoned RH Overlay to increase residential development opportunities within the specific plan area, which can accommodate the following housing units: 111 low and very low-income units, 89 moderate income units, and 291 above moderate-income units.
- Medium High Density Residential RMH: This rezone strategy utilizes the City's existing RMH
 Zoning District to create housing opportunities in areas where residential development is
 appropriate. The City has identified three candidate housing sites (Sites 3, 4, and 5) for rezoning.
 The sites can accommodate the following housing units: 128 moderate income units; and 300
 above moderate-income units.

The existing and proposed Zoning for the 378 candidate housing sites are specified in **Appendix B**. Of the 378 candidate housing sites, 372 sites would be assigned an overlay, as described above, to permit housing by right. These 372 sites, as well as the three sites that involve hotel conversions (Sites 69, 116, and 118), would retain their underlying zoning. Only three sites (Sites 3, 4, and 5) propose zone changes.

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Amendments to the General Plan Land Use Element

The Project proposes to add the overlay designations listed below to the GP Land Use Element and to redesignate three sites as detailed below. The GP land use designation amendments are required for consistency with the HEU Implementation Program's proposed zoning and overlays, as discussed above. Further, Land Use Element updates are required to ensure consistency between General Plan elements (i.e., the Housing Element and the Land Use Element) in compliance with State law. The following land use overlay designations would be added to the GP Land Use Element:

- Beach and Edinger Corridors Specific Plan (SP14) 20 percent Affordable Overlay: The Project would increase affordable housing options in existing SP14 by expanding the 20 percent Affordable Overlay that was established in 2020. The 20 percent overlay would permit residential projects that propose at least 20 percent lower income units on-site by-right (ministerial approval rather than discretionary approval subject to an entitlement process). The SP14 Affordable Housing Overlay would expand the provisions of the existing affordable housing overlay to 151 additional sites within SP14.
- Affordable Housing Overlay: The Affordable Housing Overlay would create housing opportunities
 primarily in the City's well-connected nonresidential areas. The City has identified 167 sites to
 apply the Affordable Housing Overlay.
- Ellis Goldenwest Specific Plan (SP7) High Density Residential RH Overlay: This strategy utilizes the City's existing High Density Residential (RH) land use designation to create housing opportunities within SP7. The City has identified 53 sites to designate as RH Overlay to increase residential development opportunities within SP7.
- Medium High Density Residential RMH Redesignations: This strategy utilizes the City's existing
 Medium High Density Residential (RMH) land use designation (density range 15.0 to 25.0 dwelling
 units/acre) to create housing opportunities in areas where residential development is
 appropriate. For consistency with the proposed rezoning, the City proposes to redesignate three
 candidate housing sites to RMH.

Although the development capacity of the candidate housing sites totals 19,738 housing units, this includes a 60 percent buffer, which is intended to serve as a sites contingency. Therefore, the CEQA Project analyzed in this SEIR assumes 11,743 additional housing units over existing conditions, which excludes the 60 percent buffer and the pipeline projects, since these have previously received CEQA clearance. The precise distribution of housing units on the candidate housing sites is not known. Therefore, for analysis purposes, the CEQA Project analyzed in this SEIR assumes the 11,743 additional housing units are comprised of the following:

- Rezones: Approximately 255 additional housing units;
- Housing Overlay Zones: Approximately 10,905 additional housing units;
- Hotel/Motel Conversions: Approximately 247 additional housing units; and
- Accessory Dwelling Units: Approximately 336 additional housing units.

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1.5 Areas of Controversy and Issues to be Resolved

State CEQA Guidelines §§15123 (b)(2) and (3) require an EIR to identify areas of controversy known to the Lead Agency, issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether, or how to, mitigate the significant effects. The following areas of concern/controversy have been identified during the Notice of Preparation (NOP) review period and scoping meeting:

- A desire to utilize the local workforce in the construction of new housing;
- Concerns related to high-density dwelling units;
- Concerns related to impacts on utilities, water, and sewage;
- Concerns related to impacts on emergency resources;
- Concerns related to impacts on public education;
- Concerns related to impacts on street traffic;
- A desire for the subsidization of additional low-income housing;
- Concerns related to impacts of rezoning for multi-story dwellings in single unit zones;
- Concerns related to CEQA air quality analysis and mitigation measures;
- Concerns related to hazardous materials sites;
- Consistency with Connect SoCal; and
- Consultation with Native American tribes.

The above issues have been considered in this SEIR, where applicable, in **Sections 5.1** through **5.15**. Concerning the candidate sites, this SEIR discusses and evaluates the locations and potential impacts associated with future development facilitated by the HEU. The decision-making body (i.e., the City Council) will be asked to select housing strategies for the HEU that take into account local values and community character while meeting the various State mandates that apply in order for the City to meet its objective to gain certification of the HEU in accordance with State Housing laws.

1.6 Alternatives to the Proposed Project

State CEQA Guidelines §15126.6(a) requires a Draft EIR to "describe the range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but will avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." The following alternatives were selected for analysis: No Project Alternative (Alternative 1) and the Beach and Edinger Corridors Alternative (Alternative 2); see Section 7.0: Alternatives for a complete discussion.

The two alternatives analyzed present a reasonable range of alternatives to the Project. The analysis in this section focuses on significant and unavoidable impacts attributable to each alternative and the ability of each alternative to meet basic project objectives.

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"No Project" Alternative (Alternative 1)

According to State CEQA Guidelines §15126.6(e), the specific alternative of "No Project" shall also be evaluated along with its impact. The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the impacts of approving the proposed Project with impacts of not approving the Project. The No Project Alternative analysis is required to discuss the existing conditions at the time the Notice of Preparation is published (August 4, 2021), as well as what would be reasonably expected to occur in the foreseeable future, if the Project were not approved, based on current plans and consistent with available infrastructure and community services.

Under Alternative 1, development within the City would proceed pursuant to the adopted City General Plan and zoning. The City's projected regional housing need for the 6th Cycle RHNA planning period (2021-2029) is 13,368 dwelling units (11,743 units when accounting for existing applications and pipeline projects). Under Alternative 1, the City would not implement the HEU Implementation Program required to comply with State law, to accommodate the lower-income RHNA units, including amendments to existing land use designations and zoning districts, an affordable housing overlay, and identification of underutilized, residentially-zoned parcels in an inventory of candidate housing sites. In total, the HEU identifies 378 candidate housing sites (approximately 419 acres). The proposed amendments to the Huntington Beach General Plan Update (GPU) and the City of Huntington Beach Zoning and Subdivision Ordinance of the City of Huntington Beach Municipal Code (Zoning Text and Zoning Map amendments) for changes to land use designations and base/overlay districts, as well as ancillary amendments to other planning documents, would not be implemented. These amendments, which are needed to accommodate future housing sites as part of the HEU's Implementation Program, would not be implemented at the 378 identified candidate housing sites. The capacity for future development of approximately 19,738 housing units that would be facilitated by Project implementation would not be provided under the No Project Alternative. The Project proposes only three candidate housing sites (Sites 3, 4, and 5) for rezoning, and all other sites would retain their existing underlying zoning; see Table 5.8-5: Proposed Zone Changes – Candidate Housing Sites, for existing and proposed zoning. The Project's development capacity changes on these sites (approximately 643,272 square feet less of industrial uses; approximately 122,186 square feet less of commercial uses; and approximately 428 additional housing units) would not occur under this Alternative, the existing underlying zoning would be retained.

Under the No Project Alternative, State Housing Law and legislative requirements for implementation of the Project's proposed programs and strategies to increase housing capacity and the production of affordable dwelling units in the City would not occur. Overall, Alternative 1 would not consider the candidate housing sites and adoption of the land use amendments and rezones necessary to achieve the City's RHNA. As a result, the capacity for 11,743 multi-family housing units would not be created. This alternative would not satisfy the Project objectives stated above because implementation of Alternative 1 would not facilitate the development of sufficient residential units to meet the City's RHNA allocation and would not satisfy legislative mandates for the HEU.

Beach and Edinger Corridors Alternative (Alternative 2)

As with the proposed Project, the Beach and Edinger Corridors Alternative (Alternative 2) would meet the City's RHNA. However, residential development under Alternative 2 would be concentrated around the

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Beach and Edinger Corridors area of the Beach and Edinger Corridors Specific Plan (Specific Plan 14). More specifically, new residential development would occur in portions of Specific Plan 14's Transition Corridor Areas (TCAs), which would support transit-oriented communities, and on fewer total parcels. This would have the effect of further reducing vehicle miles traveled (VMT), transportation-related energy demands, and associated criteria air pollutant and greenhouse gas emissions associated with housing development. However, this approach would require taller building heights and higher densities to achieve the target housing production in this area necessary to meet the RHNA. This alternative would also create dense/confined residential development and not expand housing opportunities across the City and therefore would not affirmatively further fair housing to the same degree as the Project.

Environmentally Superior Alternative

According to State CEQA Guidelines §15126.6(e), No Project Alternative, "if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." **Table 7-2: Comparison of Project Alternatives** and **Table 7-3: Ability of Alternatives to Meet Project Objectives**, summarize the comparative analyses presented above (i.e., the alternatives compared to the Project). As shown in **Table 7-2**, the No Project Alternative is the environmentally superior alternative because it would avoid many of the Project's impacts. Therefore, in compliance with CEQA requirements, this SEIR also identifies an environmentally superior alternative among the other alternatives.

No Project Alternative (Alternative 1): The No Project Alternative would result in fewer impacts than the Project. Although this Alternative could reduce environmental impacts from future housing development facilitated by the HEU, the No Project Alternative would not achieve any of the project objectives. The No Project Alternative would not provide adequate housing sites to meet the City's 6th Cycle RHNA allocation or satisfy State housing law including AB 1397. Under the No Project Alternative, the City would not meet its RHNA obligations. Thus, this Alternative would directly conflict with California Government Code \$65583, which stipulates that a jurisdiction must assess its housing element every eight years and identify adequate sites for housing and provide for the existing and projected needs of all economic segments of the community.

Beach and Edinger Corridors Alternative (Alternative 2): This Alternative would meet the majority of the project objectives as it is assumed that development under this alternative would meet the 6th Cycle RHNA housing needs. However, Alternative 2 would not provide affirmative housing that is accessible to all as this alternative would provide all new housing with a confined area of the City.

1.7 Significant and Unavoidable Project Impacts

Impacts found significant and unavoidable are relevant in making the final determination of whether an alternative is environmentally superior or inferior to the proposed Project; see State CEQA Guidelines §15126.6. As concluded in **Section 5.1** through **Section 5.15**, the Project would result in significant and unavoidable impacts concerning air quality, greenhouse gases, hydrology and water quality, noise, and utilities and services systems, as summarized below:

Air Quality

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Despite compliance with GPU policies, PEIR mitigation, and MM AQ-1 and AQ-2, the Project would result in significant and unavoidable impacts concerning construction-related ROG emissions and operational ozone, PM_{2.5}, and PM₁₀ emissions. In addition, sites over two acres could expose sensitive receptors to significant impacts by exceeding construction LST thresholds. The Project-related contribution of daily construction and operational emissions from considered cumulatively significant and unavoidable.

Greenhouse Gas Emissions

Despite the recommendation of GGRP GHG reduction strategies, the Project would generate GHG emissions that may have a significant impact on the environment and could conflict with applicable plans for reducing GHG emissions. Therefore, impacts on GHG are considered significant and unavoidable, both for the Project and cumulative conditions.

Hydrology and Water Quality

The Project could substantially decrease groundwater supplies resulting in a significant and unavoidable impact concerning sustainable management of the Basin. The Project's impact concerning groundwater supplies would be cumulatively considerable and a significant unavoidable impact would occur.

Noise

Despite compliance with GPU PEIR mitigation, the Project would result in significant and unavoidable impacts concerning construction-related noise and vibration levels and operational noise levels associated with traffic. The Project's impact concerning the substantial temporary and permanent increase of ambient noise levels would be cumulatively considerable. The Project's impact concerning construction-related noise and groundborne vibration would also be cumulatively considerable.

Utilities and Service Systems

Despite compliance with GPU PEIR mitigation, and as similarly concluded in the GPU PEIR, until the water supply situation improves, the water demands from future development pursuant to the HEU would result in a significant and unavoidable impact concerning water supplies. Additionally, until such time as greater confidence in and commitment from water suppliers can be made, or the water supply situation improves, the Project's impacts concerning water supplies to serve future development would be cumulatively considerable.

1.8 Summary of Environmental Impacts and Mitigation Measures

The following table is a summary of significant impacts and proposed mitigation measures associated with the Project as identified in this SEIR. Refer to **Sections 5.1** through **5.15**, for a detailed description of the Project's environmental impacts and mitigation measures.

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Table 1-2: Summary of Significant Impacts and Proposed Mitigation Measures

Thursday	COLUMNIA Minimation Management 11		Level of Significance
Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	After Mitigation
Section 5.1, Air Quality			
Impact AQ-1	No relevant mitigation measures were identified in the	No mitigation measure required.	Less Than Significant
Would the project conflict	GPU PEIR.		
with or obstruct the			
implementation of the			
applicable air quality plan?			
Impact AQ-2	GPU PEIR MM 4.2-1	No feasible mitigation beyond GPU PEIR mitigation is	Significant and
Would the project result in	Project applicants shall require by contract specifications that	available to reduce impacts to less than significant.	Unavoidable
a cumulatively considerable	all diesel-powered equipment used will be retrofitted with		
net increase of any criteria	after-treatment products (e.g., engine catalysts). Contract		
pollutant for which the	specifications shall be included in project construction		
project region is in nonattainment under an	documents, which shall be reviewed by the City of Huntington Beach prior to issuance of a grading permit.		
applicable federal or state	beach prior to issuance of a grading permit.		
ambient air quality	GPU PEIR MM 4.2-2		
standard (including	Project applicants shall require by contract specifications that		
releasing emissions which	all heavy-duty diesel-powered equipment operating and		
exceed quantitative	refueling at the project site use low nitrogen oxides diesel fuel		
thresholds for ozone	to the extent that it is readily available and cost effective in the		
precursors)?	Basin (this does not apply to diesel-powered trucks traveling to		
	and from the project site). Contract specifications shall be		
	included in project construction documents, which shall be		
	reviewed by the City of Huntington Beach prior to issuance of		
	a grading permit.		
	GPU PEIR MM 4.2-3		
	Project applicants shall require by contract specifications that		
	construction equipment engines be maintained in good		
	condition and in proper tune per manufacturer's specification		
	for the duration of construction. Contract specifications shall		
	be included in project construction documents, which shall be		
	reviewed by the City of Huntington Beach prior to issuance of		
	a grading permit.		
	GPU PEIR MM 4.2-4		
	Project applicants shall require by contract specifications that		
	construction operations rely on the electricity infrastructure		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	surrounding the construction site rather than electrical		
	generators powered by internal combustion engines. Contract		
	specifications shall be included in project construction		
	documents, which shall be reviewed by the City of Huntington		
	Beach prior to issuance of a grading permit.		
	GPU PEIR MM 4.2-5		
	As required by South Coast Air Quality Management District		
	Rule 403—Fugitive Dust, all construction activities that are		
	capable of generating fugitive dust are required to implement		
	dust control measures during each phase of project		
	development to reduce the amount of particulate matter		
	entrained in the ambient air. These measures include the		
	following:		
	(1) Application of soil stabilizers to inactive construction areas		
	(2) Quick replacement of ground cover in disturbed areas		
	(3) Watering of exposed surfaces three times daily		
	(4) Watering of all unpaved haul roads three times daily		
	(5) Covering all stock piles with tarp		
	(6) Reduction of vehicle speed on unpaved roads		
	(7) Post signs on-site limiting traffic to 15 miles per hour or		
	less		
	(8) Sweep streets adjacent to the project site at the end of		
	the day if visible soil material is carried over to adjacent		
	roads		
	(9) Cover or have water applied to the exposed surface of all		
	trucks hauling dirt, sand, soil, or other loose materials		
	prior to leaving the site to prevent dust from impacting		
	the surrounding areas		
	(10) Install wheel washers where vehicles enter and exit		
	unpaved roads onto paved roads to wash off trucks and		
	any equipment leaving the site each trip		
	GPU PEIR MM 4.2-6		
	Project applicants shall require by contract specifications that		
	construction-related equipment, including heavy-duty		
	equipment, motor vehicles, and portable equipment, shall be		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	turned off when not in use for more than 30 minutes. Diesel-		
	fueled commercial motor vehicles with gross vehicular weight		
	ratings of greater than 10,000 pounds shall be turned off when		
	not in use for more than 5 minutes. Contract specifications		
	shall be included in future project construction documents,		
	which shall be approved by the City of Huntington Beach.		
	GPU PEIR MM 4.2-7		
	Project applicants shall require by contract specifications that		
	construction parking be configured to minimize traffic		
	interference during the construction period and, therefore,		
	reduce idling of traffic. Contract specifications shall be included		
	in future project construction documents, which shall be		
	approved by the City of Huntington Beach.		
	GPU PEIR MM 4.2-8		
	Project applicants shall require by contract specifications that		
	temporary traffic controls are provided, such as a flag person,		
	during all phases of construction to facilitate smooth traffic		
	flow. Contract specifications shall be included in future project		
	construction documents, which shall be approved by the City		
	of Huntington Beach.		
	GPU PEIR MM 4.2-9		
	Project applicants shall require by contract specifications that		
	construction activities that affect traffic flow on the arterial		
	system be scheduled to off-peak hours (10:00 a.m. to		
	4:00 p.m.). Contract specifications shall be included in future		
	project construction documents, which shall be approved by		
	the City of Huntington Beach.		
	GPU PEIR MM 4.2-10		
	Project applicants shall require by contract specifications that		
	dedicated on-site and off-site left-turn lanes on truck hauling		
	routes be utilized for movement of construction trucks and		
	equipment on-site and off-site to the extent feasible during		
	construction activities. Contract specifications shall be		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	included in future project construction documents, which shall		
	be approved by the City of Huntington Beach.		
	GPU PEIR MM 4.2-11		
	Upon issuance of building or grading permits, whichever is		
	issued earlier, notification shall be mailed to owners and		
	occupants of all developed land uses within 300 feet of a		
	project site providing a schedule for major construction		
	activities that will occur through the duration of the construction period. In addition, the notification will include		
	the identification and contact number for a community liaison		
	and designated construction manager that would be available		
	on-site to monitor construction activities. The construction		
	manager shall be responsible for complying with all project		
	requirements related to PM_{10} generation. The construction		
	manager will be located at the on-site construction office		
	during construction hours for the duration of all construction		
	activities. Contract information for the community liaison and		
	construction manager will be located at the construction		
	office, City Hall, the police department, and a sign on site.		
	GPU PEIR MM 4.2-12		
	Project applicants shall require by contract specifications that		
	the architectural coating (paint and primer) products used		
	would have a volatile organic compound rating of $\frac{125}{50}$ grams		
	per liter or less. Contract specifications shall be included in		
	future project construction documents, which shall be		
	reviewed and approved by the City of Huntington Beach.		
	GPU PEIR MM 4.2-13		
	Project applicants shall require by contract specifications that		
	materials that do not require painting be used during		
	construction to the extent feasible. Contract specifications		
	shall be included in future project construction documents,		
	which shall be reviewed and approved by the City of		
	Huntington Beach.		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	GPU PEIR MM 4.2-14 Project applicants shall require by contract specifications that pre-painted construction materials be used to the extent feasible. Contract specifications shall be included in future project construction documents, which shall be reviewed and approved by the City of Huntington Beach.		
Impact AQ-3 Would the project expose sensitive receptors to substantial pollutant concentrations?	No relevant mitigation measures were identified in the GPU PEIR.	MM AQ-1 During the site-specific entitlement and/or the design review process, the City of Huntington Beach Community Development Department shall that a project-specific Health Risk Assessment shall be conducted for future residential development proposed within 500 feet of the I-405 freeway right-of-way, pursuant to the recommendations set forth in the CARB Air Quality and Land Use Handbook. The Health Risk Assessment shall evaluate a project per the following SCAQMD thresholds: Cancer Risk: Emit carcinogenic or toxic contaminants that exceed the maximum individual cancer risk of 10 in one million. Non-Cancer Risk: Emit toxic contaminants that exceed the maximum hazard quotient of one in one million.	Less Than Significant Impact with Mitigation Incorporated
		The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Noncarcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index less of than one (1.0) means that adverse health effects are not expected. If projects are found to exceed the SCAQMD's Health Risk Assessment thresholds, mitigation measures, such as requiring MERV 13 air filters in all dwelling	

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
		units, shall be incorporated to reduce impacts to	
		below SCAQMD thresholds.	
		MM AQ-2	
		During the site-specific entitlement and/or the design	
		review process, the City of Huntington Beach	
		Community Development Department shall ensure	
		that residential development shall not be located	
		closer than 1,000 feet from any existing or proposed	
		distribution center/warehouse facility which	
		generates a minimum of 100 heavy truck trips per day, or 40 truck trips with transport refrigeration units	
		(TRUs) per day, or TRU operations exceeding	
		300 hours per week, pursuant to the	
		recommendations set forth in the CARB Air Quality	
		and Land Use Handbook. If future residential	
		development cannot meet this setback, a project-	
		specific Health Risk Assessment shall be prepared to	
		evaluate a project for the SCAQMD thresholds	
		(i.e., carcinogenic risk equals or exceeds 10 in one	
		million; acute non-carcinogenic hazard index equals or	
		exceeds one; and/or if chronic non-carcinogenic	
		hazard index equals or exceeds one, as outlined	
		above). If projects are found to exceed the SCAQMD's	
		Health Risk Assessment thresholds, mitigation	
		measures, such as requiring MERV 13 air filters in all	
		dwelling units, shall be incorporated to reduce	
Import AO 4	No relevant mitigation measures were identified in the CDU	impacts to below SCAQMD thresholds.	Loss Than Cianificant
Impact AQ-4 Would the project result in	No relevant mitigation measures were identified in the GPU PEIR.	No mitigation required.	Less Than Significant
other emissions (such as	FLIIV.		
those leading to odors)			
adversely affecting a			
substantial number of			
people?			

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
Section 5.2, Cultural Reso	ources		
Impact CUL-1	GPU PEIR MM 4.4-1	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the project cause a	Prior to development activities that would demolish or		with Mitigation
substantial adverse change	otherwise physically affect buildings or structures 45 50 years		Incorporated
in the significance of a	old or older or affect their historic setting, the project-level		
historical resource pursuant	applicant shall retain a cultural resource professional who		
to §15064.5?	meets the Secretary of the Interior's Professional		
	Qualifications Standards for Architectural History to determine		
	if the GPU would cause a substantial adverse change in the		
	significance of a historical resource as defined in		
	Section 15064.5 of the CEQA Guidelines. The investigation shall		
	include, as determined appropriate by the cultural resource		
	professional and the City of Huntington Beach, the appropriate		
	archival research, including, if necessary, an updated records		
	search of the South-Central Coastal Information Center of the		
	California Historical Resources Information System and a		
	pedestrian survey of the proposed development area to		
	determine if any significant historic-period resources would be		
	adversely affected by the proposed development. The results		
	of the investigation shall be documented in a technical report		
	or memorandum that identifies and evaluates any historical		
	resources within the development area and includes		
	recommendations and methods for eliminating or reducing		
	impacts on historical resources. The technical report or		
	memorandum shall be submitted to the City of Huntington		
	Beach for approval. As determined necessary by the city,		
	environmental documentation (e.g., CEQA documentation)		
	prepared for future development under the General Plan		
	Amendment shall reference or incorporate the findings and		
	recommendations of the technical report or memorandum.		
	The project-level applicant shall be responsible for		
	implementing methods for eliminating or reducing impacts on		
	historical resources identified in the technical report or		
	memorandum.		
Impact CUL-2	GPU PEIR MM 4.4-2	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the project cause a	Prior to any earth-disturbing activities (e.g., excavation,	, , , , , , , , , , , , , , , , , , , ,	with Mitigation
substantial adverse change	trenching, grading) that could encounter undisturbed soils, the		Incorporated
in the significance of an	project-level applicant for future development shall retain an		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
archaeological resource	archaeologist who meets the Secretary of the Interior's		
pursuant to § 15064.5?	Professional Qualifications Standards for Archaeology to		
	determine if site-specific development allowed under the		
	General Plan Update could result in a substantial adverse		
	change in the significance of an archaeological resource		
	pursuant to Section 15064.5 of the CEQA Guidelines or disturb		
	human remains. The investigation shall include, as determined		
	appropriate by the archaeologist and the City of Huntington		
	Beach, an updated records search of the South Central Coastal		
	Information Center of the California Historical Resources		
	Information System, updated Native American consultation,		
	and a pedestrian survey of the area proposed for development.		
	The results of the investigation shall be documented in a		
	technical report or memorandum that identifies and evaluates		
	any archaeological resources within the development area and		
	includes recommendations and methods for eliminating or		
	avoiding impacts on archaeological resources or human		
	remains. The measures shall include, as appropriate,		
	subsurface testing of archaeological resources and/or		
	construction monitoring by a qualified professional and, if		
	necessary, appropriate Native American monitors identified by		
	the applicable tribe (e.g., the Gabrielino Tongva Nation) and/or		
	the Native American Heritage Commission. The methods shall		
	also include procedures for the unanticipated discovery of		
	human remains, which shall be in accordance with Section		
	5097.98 of the State Public Resources Code and Section 7050.5		
	of California's Health and Safety Code. The technical report or		
	memorandum shall be submitted to the City of Huntington		
	Beach for approval. As determined necessary by the city,		
	environmental documentation (e.g., CEQA documentation)		
	prepared for future development allowed under the General		
	Plan Update shall reference or incorporate the findings and		
	recommendations of the technical report or memorandum.		
	The project-level applicant shall be responsible for		
	implementing methods for eliminating or avoiding impacts on		
	archaeological resources identified in the technical report or		
	memorandum. Projects that would not encounter undisturbed		
	soils and would therefore not be required to retain an		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	archaeologist shall demonstrate non-disturbance to the city through the appropriate construction plans or geotechnical studies prior to any earth-disturbing activities. Projects that would include any earth disturbance (disturbed or undisturbed soils) shall comply with MM 4.4-3.		
	GPU PEIR MM 4.4-3 If evidence of an archaeological site or other suspected historical resource as defined by CEQA Guidelines Section 15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials) are discovered during any project-related earth-disturbing activities (including projects that would not encounter undisturbed soils), all earth-disturbing activity within 100 feet of the find shall be halted and the City of Huntington Beach shall be notified. The project-level applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less than significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 form		
Impact CUL-3 Would the project disturb any human remains, including those interred outside of formal cemeteries?	and filed with the appropriate Information Center. See GPU PEIR MM 4.4-2 and MM 4.4-3 above	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant with Mitigation Incorporated
Section 5.3, Energy Impact ENE-1 Would the project result in potentially significant environmental impact due	No relevant mitigation measures were identified in the GPU PEIR.	No mitigation required.	Less Than Significant

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
to wasteful, inefficient, or			
unnecessary consumption			
of energy resources, during			
project construction or			
operation?			
Impact ENE-2	No relevant mitigation measures were identified in the GPU	No mitigation required.	Less Than Significant
Would the project conflict	PEIR.		
with or obstruct a State or			
Local plan for renewable			
energy or energy			
efficiency?			
Section 5.4, Geology and	Soils		
Impact GEO-1	GPU PEIR MM 4.5-1	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the project directly	Prior to issuance of a grading permit, a California-licensed		with Mitigation
or indirectly cause potential	Certified Engineering Geologist and/or Geotechnical Engineer		Incorporated
substantial adverse effects,	shall prepare and submit to the City of Huntington Beach		
including the risk of loss,	Department of Public Works a detailed soils and geotechnical		
injury, or death involving:	analysis. The report shall include soil sampling and laboratory		
a) Rupture of a known	testing of materials to provide detailed recommendations for		
earthquake fault as	grading, chemical and fill properties, liquefaction, expansive		
delineated on the most	soils, soil erosion, earthquake faulting and landscaping.		
recent Alquist-Priolo			
Earthquake Fault Zoning	GPU PEIR MM 4.5-2		
Map issued by the State	Any future project within the planning area shall comply with		
Geologist for the area or	the recommendations of a final soils and geotechnical report		
based on other	(a preliminary report would be required per MM 4.5-1). These		
substantial evidence of	recommendations shall be implemented in the design of a		
a known fault;	project, including but not limited to measures associated with		
b) Strong seismic ground	site preparation, fill placement, temporary shoring and		
shaking;	permanent dewatering, groundwater seismic design features,		
c) Seismic-related ground	excavation stability, foundations, soil stabilization,		
failure, including	establishment of deep foundations, concrete slabs and		
liquefaction; and/or	pavements, surface drainage, cement type and corrosion		
d) Landslides?	measures, erosion control, shoring and internal bracing, and		
	plan review.		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
Impact GEO-2	No relevant mitigation measures were identified in the GPU	No mitigation required.	Less Than Significant
Would the project result in	PEIR.		
substantial soil erosion or			
the loss of topsoil?			
Impact GEO-3	See GPU PEIR MM 4.5-1 and MM 4.5-2 above.	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the project be			with Mitigation
located on a geologic unit or	GPU PEIR MM 4.5-3		Incorporated
soil that is unstable, or that	Pre-Construction Soil Condition Evaluation. A site-specific		
would become unstable as	evaluation of soil conditions would be required with the		
a result of the project, and	submittal of grading plans for all future projects and must		
potentially result in on- or	contain recommendations for ground preparation and		
off-site landslide, lateral	earthwork specific to the site		
spreading, subsidence,			
liquefaction, or collapse?			
Impact GEO-4	See GPU PEIR MM 4.5-1, MM 4.5-2, and 4.5-3 above.	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the project be			With Mitigation
located on expansive soil, as			Incorporated
defined in Table 18-1-B of			
the Uniform Building Code			
(1994), creating substantial			
direct or indirect risks to life			
or property?			
Impact GEO-5	No relevant mitigation measures were identified in the	No mitigation required.	No Impact
Would the project have	GPU PEIR.		
soils incapable of			
adequately supporting the			
use of septic tanks or			
alternative wastewater			
disposal systems where			
sewers are not available for			
the disposal of wastewater?			
Impact GEO-6	GPU PEIR MM 4.4-4	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the project directly	Should paleontological resources (i.e., fossil remains) be		with Mitigation
or indirectly destroy a	identified at a particular site during project construction, the		Incorporated
unique paleontological	construction foreman shall cease construction within 100 feet		
resource or site or unique	of the find until a qualified professional can provide an		
geological feature?	evaluation. Mitigation of resource impacts shall be		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	implemented and funded by the project-level applicant and shall be conducted as follows:		
	Identify and evaluate paleontological resources by intense field survey where impacts are considered high		
	2) Assess effects on identified sites		
	Consult with the institutional/academic paleontologists conducting research investigations within the geological formations that are slated to be impacted		
	4) Obtain comments from the researchers		
	5) Comply with researchers' recommendations to address any significant adverse effects were determined by the city to be feasible		
	In considering any suggested mitigation proposed by the consulting paleontologist, the City of Huntington Beach staff shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, applicable policies and land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted.		
	Work may proceed on other parts of the project site while		
Section 5.5, Greenhouse	mitigation for paleontological resources is carried out.		
Impact GHG-1	No relevant mitigation measures were identified in the	No feasible mitigation was identified to reduce	Significant and
Would the project generate	GPU PEIR.	impacts to a less than significant level.	Unavoidable
greenhouse gas emissions,	· · ·		
either directly or indirectly,			
that could have a significant			
impact on the			
environment?			
Impact GHG-2	No relevant mitigation measures were identified in the	No feasible mitigation was identified to reduce	Significant and
Would the project conflict	GPU PEIR.	impacts to a less than significant level.	Unavoidable
with an applicable plan,			
policy, or regulation			
adopted for the purpose of			

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Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
reducing the emissions of			
greenhouse gases?			
Section 5.6, Hazard and H	azardous Materials		
Impact HAZ-1	GPU PEIR MM 4.7-1	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the project create a	Prior to the issuance of grading permits, future development in		with Mitigation
significant hazard to the	the planning area shall comply with Huntington Beach Fire		Incorporated
public or the environment	Department City Specification No. 429, Methane Mitigation		
through the routine	Requirements. A plan for the testing of soils for the presence		
transport, use, or disposal	of methane gas shall be prepared and submitted by the		
of hazardous materials?	project-level applicant to the Huntington Beach Fire		
	Department for review and approval, prior to the		
	commencement of sampling. If significant levels of methane		
	gas are discovered in the soil on a future development site, the		
	project-level applicant's grading, building, and methane plans		
	shall reference that a sub-slab methane barrier and vent		
	system will be installed at the site per City Specification		
	No. 429, prior to plan approval. If required by the Huntington		
	Beach Fire Department, additional methane mitigation		
	measures to reduce the level of methane gas to acceptable		
	levels shall be implemented.		
Impact HAZ-2	GPU PEIR MM 4.7-2	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the project create a	Prior to the issuance of grading permits on any project site, the		with Mitigation
significant hazard to the	project applicant shall:		Incorporated
public or the environment	1) Investigate the project site to determine whether it or		
through reasonably	immediately adjacent areas have a record of hazardous		
foreseeable upset and	material contamination via the preparation of a		
accident conditions	preliminary environmental site assessment, which shall be		
involving the release of	submitted to the city for review. If contamination is found		
hazardous materials into	the report shall characterize the site according to the		
the environment?	nature and extent of contamination that is present before		
	development activities precede at that site.		
	2) If contamination is determined to be on-site, the city, in		
	accordance with appropriate regulatory agencies, shall		
	determine the need for further investigation and/or		
	remediation of the soils conditions on the contaminated		
	site. If further investigation or remediation is required, it		
	shall be the responsibility of the site developer(s) to		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	complete such investigation and/or remediation prior to construction of the project.		
	 If remediation is required as identified by the local oversight agency, it shall be accomplished in a manner that reduces risk to below applicable standards and shall be completed prior to issuance of any occupancy permits. 		
	 4) Closure reports or other reports acceptable to the Huntington Beach Fire Department that document the successful completion of required remediation activities, if any, for contaminated soils, in accordance with City Specification 429 and 431-92, shall be submitted and approved by the Huntington Beach Fire Department prior to the issuance of grading permits for any site development. No construction shall occur in the affected area until reports have been accepted by the city. 5) Any onsite oil wells will need to comply with the requirements found in City Specification No. 429. If abandonment is required, then the well will need to be abandoned to the current California Geologic Energy Management Division (CalGEM) standard for 		
	abandonment. GPU PEIR MM 4.7-3		
	In the event that previously unknown or unidentified soil		
	and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction, construction activities in the immediate vicinity		
	of the contamination shall cease immediately. If contamination is encountered, a Risk Management Plan shall be prepared and		
	implemented that (1) identifies the contaminants of concern		
	and the potential risk each contaminant would pose to human health and the environment during construction and post-		
	development and (2) describes measures to be taken to protect workers, and the public from exposure to potential site		
	hazards. Such measures could include a range of options,		
	including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	development maintenance or access limitations, or some		
	combination thereof. Depending on the nature of		
	contamination, if any, appropriate agencies shall be notified		
	(e.g., City of Huntington Beach Fire Department). If needed, a		
	Site Health and Safety Plan that meets Occupational Safety and		
	Health Administration requirements shall be prepared and in		
	place prior to commencement of work in any contaminated		
	area.		
	No relevant mitigation measures were identified in the	No mitigation required.	Less Than Significant
' '	GPU PEIR.		
hazardous emissions or			
handle hazardous or			
acutely hazardous material,			
substances, or waste within			
one-quarter mile of an			
existing or proposed			
school?			
	No relevant mitigation measures were identified in the	No mitigation required.	No Impact
' '	GPU PEIR.		
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?	No valouset esitiontian recovers were identified in the	Nie walkieskie we walie d	No large est
· ·	No relevant mitigation measures were identified in the GPU PEIR.	No mitigation required.	No Impact
Would the project be located within an airport	GPU PEIK.		
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 or excessive noise			

	Mitigation Measure(s)	After Mitigation
	N I LODUDEID	
To ensure adequate access for emergency vehicles when construction activities would result in temporary lane or roadway closures, a future project applicant shall consult with the City of Huntington Beach Police or Fire Departments to disclose temporary lane or roadway closures and alternative travel routes. The project-level applicant shall be required to keep a minimum of one lane in each direction free from encumbrances at all times on perimeter streets accessing a project site. At any time only a single lane is available, the project-level applicant shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the applicant shall coordinate with the City of Huntington Beach Police and Fire Departments to designate proper detour	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant with Mitigation Incorporated
No relevant mitigation measures were identified in the GPU PEIR.	No mitigation required.	Less Than Significant
d Water Quality		
GPU PEIR MM 4.8-1 The City of Huntington Beach shall require applicants for new development and significant redevelopment projects within the planning area to prepare a project-specific preliminary Water Quality Management Plan (WQMP) in accordance with the Model WQMP and Technical Guidance Document requirements and all current adopted permits. The WQMP shall be prepared by a Licensed Civil Engineer and submitted	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant with Mitigation Incorporated
	construction activities would result in temporary lane or roadway closures, a future project applicant shall consult with the City of Huntington Beach Police or Fire Departments to disclose temporary lane or roadway closures and alternative travel routes. The project-level applicant shall be required to keep a minimum of one lane in each direction free from encumbrances at all times on perimeter streets accessing a project site. At any time only a single lane is available, the project-level applicant shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the applicant shall coordinate with the City of Huntington Beach Police and Fire Departments to designate proper detour routes and signage indicating alternative routes. No relevant mitigation measures were identified in the GPU PEIR. **GPU PEIR MM 4.8-1** The City of Huntington Beach shall require applicants for new development and significant redevelopment projects within the planning area to prepare a project-specific preliminary Water Quality Management Plan (WQMP) in accordance with the Model WQMP and Technical Guidance Document requirements and all current adopted permits. The WQMP	To ensure adequate access for emergency vehicles when construction activities would result in temporary lane or roadway closures, a future project applicant shall consult with the City of Huntington Beach Police or Fire Departments to disclose temporary lane or roadway closures and alternative travel routes. The project-level applicant shall be required to keep a minimum of one lane in each direction free from encumbrances at all times on perimeter streets accessing a project site. At any time only a single lane is available, the project-level applicant shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the applicant shall coordinate with the City of Huntington Beach Police and Fire Departments to designate proper detour routes and signage indicating alternative routes. No relevant mitigation measures were identified in the GPU PEIR. Meduality GPU PEIR. No mitigation beyond GPU PEIR mitigation required. The City of Huntington Beach shall require applicants for new development and significant redevelopment projects within the planning area to prepare a project-specific preliminary water Quality Management Plan (WQMP) in accordance with the Model WQMP and Technical Guidance Document requirements and all current adopted permits. The WQMP shall be prepared by a Licensed Civil Engineer and submitted

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	Public Works Department prior to issuance of a Precise Grading or Building permit.		
	Best management practices in the WQMP shall be designed in accordance with the Municipal NPDES Permit, Model WQMP, Technical Guidance Document, Drainage Area Management Plan, and City of Huntington Beach Local Implementation Plan. All projects shall include site design and source control best management practices in the project WQMP. Additionally, new development or significant redevelopment projects and priority projects shall include low impact development principles to reduce runoff to a level consistent with the maximum extent practicable and treatment control best management practices in the WQMP. If permanent dewatering is required and allowed by the city, OCWD, and other regulatory agencies, the applicant shall include a description of the dewatering technique, discharge location, discharge quantities, chemical characteristics of discharged water, operations and maintenance plan, and Waste Discharger Identification number for proof of coverage under the De Minimus Permit or copy of the individual waste discharge requirements in the WQMP. Additionally, the WQMP shall incorporate any additional best management practices as required by the City of Huntington Beach Public Works Department. The WQMP shall include the following additional requirements:		
	Project and Site Characterization Requirements a) Entitlement Application numbers and site address shall be included on the title sheet of the WQMP		
	 b) In the project description section, explain whether proposed use includes onsite food preparation, eating areas (if not please state), outdoor activities to be expected, vehicle maintenance, service, washing cleaning (if prohibited onsite, please state) 		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	c) All potential pollutants of concern for a proposed project land use type as per Table 2.I.1 of the Technical Guidance Document shall be identified		
	d) A narrative describing how all potential pollutants of concern will be addressed through the implementation of BMPs and describing how site design BMPs concepts will be considered and incorporated into the project design shall be included		
	e) Existing soil types and estimated percentages of perviousness for existing and proposed conditions shall be identified		
	f) In Section I of the WQMP, state verbatim the Development Requirements from the Planning Department's letter to the applicant		
	g) A site plan showing the location of the selected treatment control BMPs and drainage areas shall be included in the WQMP		
	h) A Geotechnical Report shall be submitted to address site conditions for determination of infiltration limitations and other pertinent characteristics.		
	2) Pursuant to the County's Technician Guidance Document. the feasibility of Low Impact Development (LID) BMPs. such as infiltration. harvest and reuse. evapotranspiration. and biotreatment. shall be first in the stormwater treatment design for a new development or redevelopment priority project.		
	3) Project-Based Treatment Control BMPs		
	 a) Infiltration-type BMPs shall not be used unless the Geotechnical Report states otherwise. 		
	 b) Wet swales and grassed channels shall not be used because of the slow infiltration rates of project site soils, the potentially shallow depth to groundwater, and water conservation needs 		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	 c) If proprietary Structural Treatment Control devices are used, they shall be sited and designed in compliance with the manufacturers design criteria 		
	 d) Surface exposed treatment control BMPs shall be selected such that standing water drains or evaporates within 24 hours or as required by the County's vector control 		
	e) Excess stormwater runoff shall bypass the treatment control BMPs unless they are designed to handle the flow rate or volume from a 100-year storm event without reducing effectiveness. Effectiveness of any treatment control BMPs for removing the pollutants of concern shall be documented via analytical models or existing studies on effectiveness.		
	f) A project WQMP shall incorporate water efficient landscaping using drought tolerant, native plants in accordance with Landscape and Irrigation Plans		
	g) Pet waste stations (stations that provide waste pick- up bags and a convenient disposal container protected from precipitation) shall be provided and maintained		
	h) Building materials shall minimize exposure of bare metals to stormwater. Copper or Zinc roofing materials, including downspouts, shall be prohibited. Bare metal surfaces shall be painted with non-lead-containing paint		
	i) Any applicant proposing development in the planning area is encouraged to consider LID BMPs for infiltration, harvest and reuse, evapotranspiration, and bio treatment		
	4) <u>Structural and Non-Structural BMPs.</u> The WQMP shall include the following operations and maintenance BMPs, where applicable. Additionally, a commitment and mechanism to fund and implement an operational and		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	maintenance program that includes the following must be included:		
	a) Minimum landscape maintenance standards and tree trimming requirements for the total project site. Landscape maintenance shall be performed by a qualified landscape maintenance company or individual in accordance with a Chemical Management Plan detailing chemical application methods, chemical handling procedures, and worker training. Pesticide application shall be performed by a certified applicator. No chemicals shall be stored on-site unless in a covered and contained area and in accordance with an approved Materials Management Plan. Application rates shall not exceed labeled rates for pesticides, and shall not exceed soil test rates for nutrients. Slow release fertilizers shall be used to prevent excessive nutrients in stormwater or irrigation runoff.		
	b) Maintenance and tree trimming procedures per the ANSI A-300 Standards as established by the International Society of Arborist must be followed. All trees shall be trimmed by or under the direct observation/direction of a licensed/certified Arborist.		
	c) Landscape irrigation shall be performed in accordance with an Irrigation Management Plan to minimize excess irrigation contributing to dry- and wet-weather runoff. Automated sprinklers shall be used and be inspected at least quarterly and adjusted yearly to minimize potential excess irrigation flows. Landscape irrigation maintenance shall be performed in accordance with the approved irrigation plans, the city Water Ordinance and per the city Arboricultural and Landscape Standards and Specifications.		
	d) Proprietary stormwater treatment systems maintenance shall be in accordance with the manufacturer's recommendations. If a nonproprietary		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	treatment system is used, maintenance shall be in accordance with standard practices as identified in the current CASQA handbooks, operations and maintenance procedures outlined in the approved WQMP, or other city-accepted guidance.		
	e) Signage, enforcement of pet waste controls, and public education would improve use and compliance, and therefore, effectiveness of the program, and reduce the potential for hazardous materials and other pollution in stormwater runoff. The responsible entity (e.g., HOA, property manager) shall prepare and install and include pet waste controls (e.g., requirements for pet waste cleanup, pet activity area restrictions, pet waste disposal restrictions) in the Association agreement/Conditions, Covenants, and Restrictions.		
	f) Street and parking lot/area sweeping shall be performed at an adequate frequency to prevent buildup of pollutants (for street sweeping effectiveness see http://www.fhwa.dot.gov/environment/ultraurb/).		
	g) A maintenance plan for BMPs and facilities identifying responsible parties and maintenance schedules and appropriate BMPs to minimize discharges of contaminants to storm drain systems during maintenance operations.		
	 The responsible entity (e.g., HOA, property manager) must retain records of all maintenance of BMPs including outside vendor invoices. 		
	5) Site Design BMPs. Any applicant proposing development in the planning area is required to incorporate low impact development principles as defined in the NPDES Permit and, if allowed in accordance with the geotechnical report and limitations on infiltration BMPs, encouraged the		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	following LID BMPs: infiltration, harvest and reuse, evapotranspiration, and bio-treatment.		
Impact HYD-2 Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	GPU PEIR MM 4.8-2 The City of Huntington Beach shall require that any applicant prepare a groundwater hydrology study to determine the lateral transmissivity of area soils and a safe pumping yield such that dewatering activities do not interfere with nearby water supplies. The groundwater hydrology study shall make recommendations on whether permanent groundwater dewatering is feasible within the constraints of a safe pumping level. The applicant's engineer of record shall incorporate the hydrology study designs and recommendations into project plans. If safe groundwater dewatering is determined to not be feasible, permanent groundwater dewatering shall not be implemented. The City of Huntington Beach Director of Public Works, Orange County Water District, and other regulatory agencies shall approve or disapprove any permanent groundwater dewatering based on the groundwater hydrology study and qualified engineers' recommendations.	No feasible mitigation beyond GPU PEIR mitigation is available to reduce impacts to less than significant.	Significant and Unavoidable
Impact HYD-3 Would the Project 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: i. result in substantial erosion or siltation on or off-site; or ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	GPU PEIR MM 4.8-3 The City of Huntington Beach shall require that adequate capacity in the storm drain system is demonstrated from a specific development site discharge location to the nearest main channel to accommodate discharges from the specific development. If capacity is demonstrated as adequate, upgrades may not be required. If capacity is not adequate, the City of Huntington Beach shall identify corrective action(s) required by the specific development applicant to ensure adequate capacity. Corrective action could include, but is not limited to: 1) Construction of new storm drain infrastructure, as identified in the Master Plan of Drainage or based on the Hydrology and Hydraulic Study identifies greater impacts than the Master Plan of Drainage 2) Improvement of existing storm drain infrastructure, as identified in the Master Plan of Drainage or based on the	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant with Mitigation Incorporated

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	Hydrology and Hydraulic Study, if the Hydrology and Hydraulic Study identifies greater impacts than the Master Plan of Drainage		
	In-lieu fees to implement system-wide storm drain infrastructure improvements		
	4) Other mechanisms as determined by the City of Huntington Beach Public Works Department.		
	5) For nonresidential areas, if redevelopment would result in an impervious fraction of less than 0.9 and does not increase the directly connected impervious area compared to existing conditions, runoff is expected to remain the same or less than as assessed in the Master Plan of Drainage and only Master Plan of Drainage improvements would be required.		
	Because some storm drain system constraints may be located far downgradient from the actual development site, several properties may serve to contribute to system capacity constraints. Therefore, the City of Huntington Beach Public Works Department shall assess each site development and system characteristics to identify the best method for achieving adequate capacity in the storm drain system. Drainage assessment fees/districts to improve/implement storm drains at downstream locations or where contributing areas are large are enforced through Municipal Code (§14.20).		
	The City of Huntington Beach Public Works Department shall review the Hydrology and Hydraulic Study and determine required corrective action(s) or if a waiver of corrective action is applicable. The site-specific development applicant shall incorporate required corrective actions into their project design and/or plan. Prior to receiving a Certificate of Occupancy or final inspection, the Public Works Department shall ensure that required corrective action has been implemented.		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
Impact HYD-4	No relevant mitigation measures were identified in the	No mitigation required.	Less Than Significant
Would the Project	GPU PEIR.		
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;			
i. 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?			
ii. impede or redirect flood			
flows			
iii. Conflict with or obstruct			
implementation of a			
water quality control			
plan or sustainable			
groundwater			
management plan?			
Impact HYD-5	See GPU PEIR MM 4.8-1 above.	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the project in flood			with Mitigation
hazard, tsunami, or seiche			Incorporated
zones, risk release of			
pollutants due to project			
inundation?			
Section 5.8, Land Use and	Planning		
Impact LU-1	No relevant mitigation measures were identified in the	No mitigation required.	Less Than Significant
Would the project	GPU PEIR.		
physically divide an			
established community?			

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
Impact LU-2 Would the project cause a significant environmental impact due to a conflict with any SCAG land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No relevant mitigation measures were identified in the GPU PEIR.	No mitigation required.	Less Than Significant
Impact LU-3 Would the Project cause a significant environmental impact due to a conflict with any City of Huntington Beach land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No relevant mitigation measures were identified in the GPU PEIR.	No mitigation required.	Less Than Significant
Section 5.9, Noise			
Impact NOI-1 Would the project cause a generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	GPU PEIR MM 4.10-1 Project applicants will require by contract specifications that the following construction best management practices be implemented by contractors to reduce construction noise levels: (1) Ensure that construction equipment is properly muffled according to industry standards and be in good working condition (2) Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible (3) Schedule high noise-producing activities between the hours of 8:00 a.m. and 5:00 p.m. to minimize disruption on sensitive uses, Monday through Saturday. Schedule pile-driving activities between the hours of 8:00 a.m. and 4:00 p.m. on Monday through Friday only.	No feasible mitigation beyond GPU PEIR mitigation is available to reduce impacts to less than significant.	Significant and Unavoidable

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	(4) Implement noise attenuation measures, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources		
	(5) Use electric air compressors and similar power tools rather than diesel equipment, where feasible		
	(6) Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, will be turned off when not in use for more than 10 minutes		
	(7) Construction hours, allowable workdays, and the phone number of the job superintendent will be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the City of Huntington Beach or the job superintendent receives a complaint, the superintendent will investigate, take appropriate corrective action, and report the action taken to the reporting party.		
	Contract specifications will be included in construction documents, which will be reviewed by the City of Huntington Beach prior to issuance of a grading permit.		
	GPU PEIR MM 4.10-2 Project applicants will require by contract specifications that construction staging areas along with the operation of earthmoving equipment within the project area would be located as far away from vibration and noise sensitive sites as possible. Contract specifications will be included in construction documents, which will be reviewed by the City of Huntington Beach prior to issuance of a grading permit.		
	GPU PEIR MM 4.10-3 Project applicants will require by contract specifications that heavily loaded trucks used during construction would be routed away from residential streets. Contract specifications will be included in construction documents, which will be		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	reviewed by the City of Huntington Beach prior to issuance of a grading permit. GPU PEIR MM 4.10-4 Prior to issuance of building permits, project applicants will submit an acoustical study for each development, prepared by a certified acoustical engineer. Should the results of the acoustical study indicate that that exterior and interior noise levels would exceed the standards set forth in the City of Huntington Beach Municipal Code §8.40.050 through §8.40.070, the project applicant will include design measures that may include acoustical paneling or walls to ensure that noise levels do not exceed City standards. Final project design will incorporate special design measures in the construction of		
	the residential units, if necessary.		
Impact NOI-2 Would the project cause the generation of excessive groundborne vibration or groundborne noise levels?	GPU PEIR MM 4.10-5 Prior to issuance of construction permits, applicants for new development projects that require pile driving must incorporate the following vibration-reducing techniques as determined feasible by a project-related geotechnical study: (1) Install intake and exhaust mufflers on pile-driving equipment. (2) Vibrate piles into place when feasible, and install shrouds around the pile-driving hammer where feasible. (3) Implement "quiet" pile-driving technology (such as predrilling of piles and the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions. (4) Use cushion blocks to dampen impact noise, if feasible, based on soil conditions. Cushion blocks are blocks of	No feasible mitigation beyond GPU PEIR mitigation is available to reduce impacts to less than significant.	Significant and Unavoidable
	material that are used with impact hammer pile drivers. They consist of blocks of material placed atop a pile during installation to minimize noise generated when driving the pile. Materials typically used for cushion blocks include wood, nylon, and micarta (a composite material).		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	(5) At least 48 hours prior to pile-driving activities, notify		
	building owners and occupants within 600 feet of the		
	project area of the dates, hours, and expected duration of		
	such activities.		
Impact NOI-3	No relevant mitigation measures were identified in the	No mitigation required.	Less Than Significant
Would the project be	GPU PEIR.		
located within the vicinity			
of a private airstrip or 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?			
Section 5.10, Population	and Housing		
Impact POP-1	No relevant mitigation measures were identified in the	No mitigation required.	Less Than Significant
Would the project induce	GPU PEIR.		
substantial unplanned			
population growth in an			
area, either directly (e.g., by			
proposing new homes and			
businesses) or indirectly			
(e.g., through extension of			
roads or other			
infrastructure)?			
Impact POP-2	No relevant mitigation measures were identified in the	No mitigation required	Less Than Significant
Would the project displace	GPU PEIR.		
substantial numbers of			
existing people or housing,			
necessitating the			
construction of			
replacement housing			
elsewhere?			

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation	
Section 5.11, Public Servi	Section 5.11, Public Services			
Impact PUB-1 Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection 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.	GPU PEIR MM 4.12-1 Subject to the city's annual budgetary process, which considers available funding and the staffing levels needed to provide acceptable response time for fire and police services, the city shall provide sufficient funding to maintain the city's standard, average level of service through the use of General Fund monies. GPU PEIR MM 4.12-2 The applicant of future individual development projects shall pay required development impact fees for fire suppression facilities, as required by HBMC §17.74. These fees are currently \$349.85 for any new attached dwelling unit, \$844.11 for any new detached dwelling unit, \$1,449.23 for each mobile home dwelling unit, \$0.00 per hotel/motel unit, \$0.301 per square	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant with Mitigation Incorporated	
Impact PUB-2 Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection 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.	foot of commercial/office uses, and \$0.0275 per square foot of industrial uses. See GPU PEIR MM 4.12-1 above. GPU PEIR MM 4.12-3 The applicant of future individual development projects shall pay required development impact fees for police facilities as required by HBMC §17.75. These fees are currently \$746.48 for any new attached dwelling unit, \$362.05 for any new detached dwelling unit, \$337.64 for each mobile home dwelling unit, \$0.00 per hotel/motel unit, \$0.953 per square foot of commercial/office uses, and \$0.406 per of industrial uses.	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant with Mitigation Incorporated	
Impact PUB-3 Would the Project result in substantial adverse physical impacts associated with the provision of new or	GPU PEIR MM 4.12-4 Project applicants for future development located within the Huntington Beach City School District shall pay all applicable development impact fees in effect at the time of building permit issuance to the Huntington Beach City School District to	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant with Mitigation Incorporated	

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
physically altered school	cover additional school services required by the new		
facilities, the construction	development. These fees are currently \$1.52 per square foot		
of which could cause	for any new multi-family attached residential unit, \$0.29 per of		
significant environmental	commercial/ industrial development, and \$0.25 per square		
impacts, in order to maintain acceptable service	foot of hotel/motel development.		
ratios, response times or	GPU PEIR MM 4.12-5		
other performance	Project applicants for future development located within the		
objectives for any of the	Ocean View School District shall pay all applicable		
public services.	development impact fees in effect at the time of building		
	permit issuance to the Ocean View School District to cover		
	additional school services required by the new development.		
	These fees are currently \$1.37 per square foot of accessible		
	interior space for any new residential unit and \$0.22 per square		
	foot of covered floor space for new commercial/retail		
	development.		
	GPU PEIR MM 4.12-6		
	Future project applicants shall pay all applicable development		
	impact fees in effect at the time of building permit issuance to		
	the Huntington Beach Union High School District to cover		
	additional school services required by the new development.		
	These fees are currently \$1.15 per square foot of accessible		
	interior space for any new residential unit and \$0.16 per square		
	foot of covered floor space for new commercial/retail		
	development.		
Impact PUB-4	See GPU PEIR MM 4.13-1 and MM 4.13-2 below.	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the Project result in			with Mitigation
substantial adverse physical			Incorporated
impacts associated with the			
provision of new or physically altered park/			
recreational facilities, the			
construction of which could			
cause significant			
environmental impacts, in			
order to maintain			
acceptable service ratios,			

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
response times or other			
performance objectives for			
any of the public services.			
Impact PUB-5	GPU PEIR MM 4.12-7	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the Project result in	The applicant of future individual development projects shall		with Mitigation
substantial adverse physical	pay required library development impact fees per §17.67 of		Incorporated
impacts associated with the	the city's Municipal Code (Library Development Fee), prior to		
provision of new or	issuance of building permits. These fees are currently \$866.48		
physically altered library	for any new attached dwelling unit, \$1,179.72 for any new		
facilities, the construction	detached dwelling unit, \$708.85 for each mobile home		
of which could cause	dwelling unit, \$0.041 per square foot of hotel/motel unit, with		
significant environmental	no fee for commercial/office and industrial uses.		
impacts, in order to			
maintain acceptable service			
ratios, response times or			
other performance			
objectives for any of the			
public services.			
I. Other public facilities or			
governmental services?			
Section 5.12, Recreation			
Impact REC-1	GPU PEIR MM 4.13-1	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant
Would the project increase	For future projects that require a subdivision map, prior to the		with Mitigation
the use of existing	issuance of building permits within the city, project applicants		Incorporated
neighborhood, community	shall demonstrate compliance with city parkland requirements		
and regional parks or other	identified in City of Huntington Beach Zoning and Subdivision		
recreational facilities such	Ordinance, §254.08 (or Ordinance No. 3596), either through		
that substantial physical	the dedication of onsite parkland or through payment of		
deterioration of the facility	applicable fees. Any on-site park provided in compliance with		
would occur or be	this section shall be improved prior to final inspection		
accelerated?	(occupancy) of the first residential unit (other than model		
	homes). Current fees per unit for projects with a subdivision		
Impact REC-2	map are \$13,385 for any new attached dwelling unit, \$17,857		
Does the project include	for any new detached dwelling unit, and \$11,169 for any new		
recreational facilities or	mobile home unit.		
require the construction or			
expansion of recreational			
facilities which might have			

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
an adverse physical effect on the environment?	GPU PEIR MM 4.13-2 Prior to the issuance of building permits within the city, project applicants shall pay the Park Land/Open Space and Facilities Development Impact Fees in effect at the time of permit. These fees are currently \$12,732.84 for any new attached dwelling unit, \$16,554.73 for any new detached dwelling unit, \$10,222.88 for each mobile home dwelling unit, \$0.234 per square foot of hotel/motel unit, \$0.897 per square foot of		
	commercial/office uses, and \$0.730 per square foot of industrial uses.		
Section 5.13, Transportat			I
Impact TRAN-1 Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?	GPU PEIR MM 4.14-1 For future projects that occur within proximity of the Gothard Street/Center Avenue intersection, the project applicant(s), as required by the Transportation Administrative Report at the time of application, shall make a fair share contribution for the addition of 1) a second westbound left turn lane (Buildout of the County Master Plan of Arterial Highways (MPAH) scenario, MPAH Amendment scenario) 2) a second southbound left turn lane (Buildout of the MPAH scenario, MPAH Amendment scenario) 3) an additional westbound left turn lane (MPAH Amendment scenario only) GPU PEIR MM 4.14-2 For future projects that occur within proximity of the Brookhurst Street/Adams Avenue intersection, the project applicant(s), as required by the Transportation Administrative Report at the time of application, shall make a fair share contribution for the addition of 1) conversion of the eastbound right turn lane to a fourth eastbound through lane (Buildout of the County Master Plan of Arterial Highways (MPAH) scenario, MPAH Amendment scenario)	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant with Mitigation Incorporated

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	an additional (fourth) westbound through lane (Buildout of the MPAH scenario, MPAH Amendment scenario)		
	GPU PEIR MM 4.14-3 For future projects that occur within proximity of the Beach Boulevard/Heil Avenue intersection, a project applicant(s), as required by the Transportation Administrative Report at the time of application, shall make a fair share contribution for the addition of 1) conversion of one eastbound through lane to a second eastbound left turn lane (County Master Plan of Arterial Highways Amendment scenario)		
Impact TRAN-2	No relevant mitigation measures were identified in the GPU	MM TRANS-1	Less Than Significant
Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	PEIR.	Vehicle Miles Traveled (VMT). Prior to issuance of a building permit, one or more of the following measures shall be implemented to reduce VMT-related impacts associated with future projects that are not able to be screened out of the VMT analysis process such that the development's VMT is below the low VMT thresholds recommended by the Office of Planning and Research or adopted by the City of Huntington Beach at the time of the development application: • Modify the project's-built environment characteristics to reduce VMT generated by a project.	With Mitigation Incorporated
		 Implement Transportation Demand Management strategies pursuant to General Plan Policy CIRC-5.A to reduce VMT generated by a project. Participate in a Fair Share Traffic Impact Fee program or VMT mitigation banking program, if available. Examples of potential measures to reduce VMT include, but are not limited to, the following: 	

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
		Improve or increase access to transit.	
		 Increase access to common goods and services, such as groceries, schools, and daycare. 	
		Incorporate affordable housing into the project.	
		 Orient the project toward transit, bicycle, and pedestrian facilities. 	
		 Improve pedestrian or bicycle networks, or transit service. 	
		Provide traffic calming.	
		Provide bicycle parking.	
		 Limit or eliminate parking supply. 	
		Unbundle parking costs.	
		 Implement or provide access to a commute reduction program. 	
		 Provide car-sharing, bike sharing, and ride-sharing programs. 	
		Provide transit passes.	
Impact TRAN-3 Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No relevant mitigation measures were identified in the GPU PEIR.	No mitigation required.	Less Than Significant
Impact TRAN-4 Would the project result in inadequate emergency access?	No relevant mitigation measures were identified in the GPU PEIR.	No mitigation required.	Less Than Significant

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation		
Section 5.14, Tribal Cultu	Section 5.14, Tribal Cultural Resources				
Impact TCR-1	GPU PEIR MM 4.4-2	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant		
Would the project cause a	Prior to any earth-disturbing activities (e.g., excavation,		with Mitigation		
substantial adverse change	trenching, grading) that could encounter undisturbed soils, the		Incorporated		
in the significance of a tribal	project-level applicant for future development shall retain an				
cultural resource, defined in	archaeologist who meets the Secretary of the Interior's				
Public Resources Code	Professional Qualifications Standards for Archaeology to				
section 21074 as either a	determine if site-specific development allowed under the GPU				
site, feature, place, cultural	PEIR could result in a substantial adverse change in the				
landscape that is	significance of an archaeological resource pursuant to				
geographically defined in	§15064.5 of the CEQA Guidelines or disturb human remains.				
terms of the size and scope	The investigation shall include, as determined appropriate by				
of the landscape, sacred	the archaeologist and the City of Huntington Beach, an				
place, or object with	updated records search of the South Central Coastal				
cultural value to a California	Information Center of the California Historical Resources				
Native American tribe, and	Information System, updated Native American consultation,				
that is:	and a pedestrian survey of the area proposed for development.				
a) Listed or eligible for	The results of the investigation shall be documented in a				
listing in the California	technical report or memorandum that identifies and evaluates				
Register of Historical	any archaeological resources within the development area and				
Resources, or in a local	includes recommendations and methods for eliminating or				
register of historical	avoiding impacts on archaeological resources or human				
resources as defined in	remains. The measures shall include as appropriate,				
Public Resources Code	subsurface testing of archaeological resources and/or				
section 5020.1(k)?	construction monitoring by a qualified professional and, if				
b) A resource determined	necessary, appropriate Native American monitors identified by				
by the lead agency, in its	the applicable tribe (e.g., the Gabrielino Tongva Nation) and/or				
discretion and	the Native American Heritage Commission. The methods shall				
supported by	also include procedures for the unanticipated discovery of				
substantial evidence, to	human remains, which shall be in accordance with §5097.98 of				
be significant pursuant	the State Public Resources Code and §7050.5 of California's				
to criteria set forth in	Health and Safety Code. The technical report or memorandum				
subdivision (c) of Public	shall be submitted to the City of Huntington Beach for				
Resources Code section	approval. As determined necessary by the city, environmental				
5024.1. In applying the	documentation (e.g., CEQA documentation) prepared for				
criteria set forth in	future development allowed under the GPU PEIR shall				
subdivision (c) of Public	reference or incorporate the findings and recommendations of				
Resources Code section	the technical report or memorandum. The project-level				

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
5024.1, the lead agency	applicant shall be responsible for implementing methods for		
shall consider the	eliminating or avoiding impacts on archaeological resources		
significance of the	identified in the technical report or memorandum. Projects		
resource to a California	that would not encounter undisturbed soils and would		
Native American tribe?	therefore not be required to retain an archaeologist shall		
	demonstrate non-disturbance to the city through the		
	appropriate construction plans or geotechnical studies prior to		
	any earth-disturbing activities. Projects that would include any		
	earth disturbance (disturbed or undisturbed soils) shall comply		
	with MM 4.4-3.		
	GPU PEIR MM 4.4-3		
	If evidence of an archaeological site or other suspected		
	historical resource as defined by CEQA Guidelines §15064.5,		
	including darkened soil representing past human activity		
	("midden"), that could conceal material remains (e.g., worked		
	stone, fired clay vessels, faunal bone, hearths, storage pits, or		
	burials) are discovered during any project-related earth-		
	disturbing activities (including projects that would not		
	encounter undisturbed soils), all earth-disturbing activity		
	within 100 feet of the find shall be halted and the City of		
	Huntington Beach shall be notified. The project-level applicant		
	shall retain an archaeologist who meets the Secretary of the		
	Interior's Professional Qualifications Standards for		
	Archaeology to assess the significance of the find. Impacts to		
	any significant resources shall be mitigated to a less than		
	significant level through data recovery or other methods		
	determined adequate by the archaeologist and that are		
	consistent with the Secretary of the Interior's Standards for		
	Archaeological Documentation. Any identified cultural		
	resources shall be recorded on the appropriate DPR 523 form		
	and filed with the appropriate Information Center.		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
Section 5.15, Utilities and	Service Systems		
Impact UTL-1 Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction of which could cause significant environmental	GPU PEIR MM 4.15-1 The City of Huntington Beach shall require that adequate capacity in the wastewater collection system is demonstrated from the specific development site discharge location to the nearest Orange County Sanitary District main or trunk line to accommodate discharges from the specific development project. If capacity and/or conditions are demonstrated to be adequate, upgrades may not be required. If capacity and/or condition is not adequate, the City of Huntington Beach shall identify corrective action(s) required by the specific development applicant to ensure adequate capacity. Corrective action could include, but is not limited to:	No mitigation beyond GPU PEIR mitigation required.	Less Than Significant with Mitigation Incorporated
effects?	 Upsize/replace new sewer pipes, as identified in sewer analysis Discharge assessment fees/districts to upsize/replace sewer lines at downstream locations or where contributing areas are large In-lieu fees to implement system-wide wastewater 		
	 collection infrastructure improvements Other mechanisms as determined by the City Department of Public Works. 		
	Because some wastewater collection system constraints may be located far down gradient from the actual development site, several properties may serve to contribute to system capacity constraints. Therefore, the City Department of Public Works shall assess each development and system characteristics to identify the best method for achieving adequate capacity in the wastewater collection system.		
	The City of Huntington Beach Department of Public Works shall review the sewer analysis and determine required corrective action(s) or if a waiver of corrective action is applicable. The site-specific development applicant shall incorporate required corrective actions into their project design and/or plan. Prior to Final Inspection, the City Department of Public Works shall ensure that required corrective action has been implemented.		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
Impact UTL-2 Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	Future projects under the General Plan Update shall incorporate the following measures to ensure that conservation and efficient water use practices are implemented. Project proponents, as applicable, shall: 1) Require employees to report leaks and water losses immediately and shall provide information and training & required to allow for efficient reporting and follow up. 2) Educate employees about the importance and benefits of water conservation. 3) Create water conservation suggestion boxes, and place	No feasible mitigation beyond GPU PEIR mitigation is available to reduce impacts to less than significant.	Significant and Unavoidable
	 them in prominent areas. Install signs in restrooms and cafeterias that encourage water conservation. Assign an employee to evaluate water conservation 		
	 opportunities and effectiveness. Develop and implement a water management plan for its facilities that includes methods for reducing overall water use. 		
	7) Conduct a water use survey to update current water use needs. (Processes and equipment are constantly upgrading, thus changing the need for water in some areas.)		
	Repair leaks. Check the water supply system for leaks and turn off unnecessary flows.		
	9) Utilize water-efficient irrigation systems and drought tolerant plant palette and ensure that sprinklers are directing water to landscape areas, and not to parking lots, sidewalks or other paved areas.		
	10) Adjust the irrigation schedule for seasonal changes.11) Install low-flow or waterless fixtures in public and employee restrooms.		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	12) Instruct cleaning crews to use water efficiently for mopping.		
	13) Use brooms, squeegees, and wet/dry vacuums to clean surfaces before washing with water; do not use hoses as brooms. Sweep or blow paved areas to clean, rather than hosing off (applies outside, not inside).		
	14) Avoid washing building exteriors or other outside structures.		
	15) Sweep and vacuum parking lots/sidewalks/window surfaces rather than washing with water.		
	16) Switch from "wet" carpet cleaning methods, such as steam, to "dry," powder methods. Change window-cleaning schedule from "periodic" to "as required."		
	17) Set automatic optic sensors on icemakers to minimum fill levels to provide lowest possible daily requirement. Ensure units are air-cooled and not water-cooled.		
	18) Control the flow of water to the garbage disposal		
	19) Install and maintain spray rinsers for pot washing and reduce flow of spray rinsers for prewash		
	20) Turn off dishwashers when not in use – wash only full loads		
	21) Scrape rather than rinse dishes before washing		
	22) Operate steam tables to minimize excess water use		
	23) Discontinue use of water softening systems where possible		
	24) Ensure water pressure and flows to dishwashers are set a minimum required setting. 25) Install electric eye sensors for conveyor dishwashers		
	25) Retrofit existing flushometer (tankless) toilets with water- saving diaphragms and coordinate automatic systems with work hours so that they don't run continuously		

Threshold	GPU PEIR Mitigation Measure(s) ¹	Mitigation Measure(s)	Level of Significance After Mitigation
	26) Use a shut-off nozzle on all hoses that can be adjusted down to a fine spray so that water flows only when needed.		
	27) Install automatic rain shutoff device on sprinkler systems		
	28) Launder hotel linens per room by request or after vacancy		
Impact UTL-3 Would the project 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?	No relevant mitigation measures were identified in the GPU PEIR.	No mitigation required.	Less Than Significant
Impact UTL-4 Would the project generate solid waste in excess of State and local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No relevant mitigation measures were identified in the GPU PEIR.	No mitigation required.	Less Than Significant

As discussed in Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162 above, this EIR is a SEIR to the City's GPU PEIR, and thus, relies as needed on the GPU PEIR's mitigation measures to avoid or lesson environmental impacts. Where updates to the GPU PEIR mitigation measures were necessary to ensure compliance with current City regulations, these are indicated by "deleted text" and "added text." For future residential development subject to discretionary review, compliance with the applicable GPU PEIR mitigation measures would be confirmed through the discretionary review process. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures.

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2.0 INTRODUCTION

In compliance with the California Environmental Quality Act (CEQA), this Draft Subsequent Environmental Impact Report (SEIR) has been prepared to evaluate the potentially significant, adverse, and beneficial environmental impacts associated with adoption and implementation of the 2021-2029 Huntington Beach Housing Element Update (HEU) Implementation Program (Project). CEQA requires local and state agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. The State CEQA Guidelines are located within California Code of Regulations, Title 14, Division 6, Chapter 3, §§15000-15387 (CCR or State CEQA Guidelines), while the CEQA statute is codified as Public Resources Code §§21000-21189.57 (PRC or CEQA Statute).

The Housing Element is a State-mandated policy document that is a component of the Huntington Beach General Plan. The Housing Element provides direction for implementation of various programs to meet existing and projected future housing needs for all income levels within Huntington Beach. The City's projected regional housing need for the 6th Cycle, as assigned by the Southern California Association of Governments (SCAG), is 13,368 dwelling units (11,743 units when accounting for existing applications and projects that are currently under review). To comply with State law, the City has developed a Housing Program to accommodate the lower-income RHNA units, including amendments to existing land use designations and zoning districts, an affordable housing overlay, and identification of underutilized, residentially-zoned parcels in an inventory of candidate housing sites. In total, the HEU identifies 378 candidate housing sites (approximately 419 acres). Therefore, this SEIR specifically addresses amendments to the Huntington Beach General Plan Update (GPU) and the City of Huntington Beach Zoning and Subdivision Ordinance of the City of Huntington Beach Municipal Code¹ (Zoning Text and Zoning Map amendments) for changes to land use designations and base/overlay districts, as well as ancillary amendments to other planning documents, as necessary for clarification and consistency purposes. These amendments are needed to accommodate future housing sites as part of the HEU's Implementation Program. As such, the Project analyzed in this SEIR is the HEU Implementation Program² and assumes 11,743 additional housing units which are comprised of the following:

- Rezones: Approximately 255 additional housing units;
- Housing Overlay Zones: Approximately 10,905 additional housing units;
- Hotel/Motel Conversions: Approximately 247 additional housing units; and
- Accessory Dwelling Units: Approximately 336 additional housing units.

See **Section 3.0: Project Description** for detailed information on the CEQA Project.

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¹ City of Huntington Beach Municipal Code Titles 20 through 25.

The 2021-2029 HEU policy plan (i.e., exclusive of the HEU Implementation Program) was previously evaluated pursuant to CEQA and determined to be exempt; Notice of Exemption 2022060241. June 13, 2022.

2.1 Subsequent EIR Scope, Issues, and Concerns

Pursuant to State CEQA Guidelines §15162(3)(A) and (B), this SEIR has been prepared to evaluate potential environmental impacts associated with adoption and implementation of the proposed Project. As defined in State CEQA Guidelines §15162, a SEIR is prepared when:

- 1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- 2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- 3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:
 - A. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
 - B. Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - C. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - D. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Regarding the adequacy of a SEIR, according to State CEQA Guidelines §15151, "An [S]EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an [S]EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an [S]EIR inadequate, but the [S]EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure."

The City's GPU Program EIR (August 2017; GPU PEIR) analyzed impacts associated with an overall development capacity of 7,228 residential units and 5,384,920 square feet of non-residential land uses above the City's existing (2014) conditions, over an approximate 25-year planning horizon (to 2040). The proposed Project, or the 6th Cycle HEU, accommodates an additional 13,368 dwelling units as required by the City's most recent Regional Housing Needs Assessment (RHNA). The RHNA assignment of 13,368

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dwelling units could not have been known at the time of the GPU PEIR certification and is in excess of the number of dwelling units analyzed in the GPU PEIR. In addition, the GPU PEIR did not evaluate recently adopted thresholds concerning Energy, Tribal Cultural Resources, and Wildfire. This SEIR will evaluate impacts associated with the additional 11,743 dwelling units (13,368 units less in-the-pipeline-units) and will provide an analysis of the proposed Project's impacts with respect to the recently adopted CEQA thresholds concerning Energy, Tribal Cultural Resources, and Wildfire. This SEIR also analyzes whether the changes resulting from the Project result in new significant impacts compared to the adopted GPU PEIR (https://www.huntingtonbeachca.gov/files/users/planning/Volume-II-Draft-Environmental-Impact-Report.pdf). In other words, this SEIR contains only the information necessary to make the previous PEIR adequate for the Project.

2.2 Scoping Meeting

The City circulated the Notice of Preparation (NOP) for the HEU SEIR on August 4, 2021. State CEQA Guidelines §15063 provides that if a lead agency determines that an EIR will clearly be required for a project, an Initial Study is not required. In this case, the City determined that a SEIR would be prepared based on the HEU's potential to create short-term, long-term, and cumulative impacts associated with HEU implementation. The NOP was circulated for 30 days through September 7, 2021. The NOP was distributed to interested parties, community groups, developers, school districts, and Native American tribal groups; filed with the County of Orange Recorder's Office and State Clearinghouse (SCH); made available on the City's website; and posted in the Huntington Beach Wave on August 5, 2021. The City also held a virtual SEIR Scoping Meeting on August 19, 2021 to receive comments from the public, interested parties, and agencies regarding the scope of the SEIR.

In total, five comment letters were received in response to the NOP within the review period. The NOP, comment letters received during the NOP review period, and Scoping Meeting Materials are included in **Appendix A: Notice of Preparation and Scoping Meeting Materials**.

Topics and areas of concern that were identified during the 30-day scoping period are summarized and listed below:

- A desire to utilize the local workforce in the construction of new housing
- Concerns related to high-density dwelling units
- Concerns related to impacts on utilities, water, and sewage
- Concerns related to impacts on emergency resources
- Concerns related to impacts on public education
- Concerns related to impacts on street traffic
- A desire for the subsidization of additional low-income housing
- Concerns related to impacts of rezoning for multi-story dwellings in single-unit zones
- Concerns related to CEQA air quality analysis and mitigation measures
- Concerns related to hazardous materials sites

- Consistency with Connect SoCal
- Consultation with Native American tribes

2.3 Environmental Review Process

The Draft SEIR is available to the general public for review on the City's website at:

- http://www.huntingtonbeachca.gov/government/departments/planning/major/
 and
- https://www.huntingtonbeachca.gov/government/departments/planning/environmentalreports/

and

https://www.huntingtonbeachca.gov/housing-element-update/

A hard copy of the Draft SEIR is also available during business hours at the following locations:

- Central Library, 7111 Talbert Avenue, Huntington Beach, California 92648
- City of Huntington Beach, Planning Division, 2000 Main Street, Huntington Beach, California 92648

In accordance with State CEQA Guidelines §15087 and §15105, the circulation and public review period for this Draft SEIR is 45 days. Interested agencies and members of the public are invited to provide written comments on the Draft SEIR and are encouraged to provide information that they believe should be included in the SEIR.

Comment letters sent by email should reference "Comment for Huntington Beach 6th Cycle Housing Element SEIR" and can be sent to:

Alyssa.Helper@surfcity-hb.org

Comment letters sent by mail or courier can be sent to:

City of Huntington Beach
Department of Community Development
Attn: Alyssa Helper, Associate Planner
2000 Main Street
Huntington Beach, California 92648

Final SEIR

Upon completion of the 45-day Draft SEIR public review period, the City will evaluate all written comments received during the public review period on the Draft SEIR. Pursuant to State CEQA Guidelines §15088, the City will prepare written responses to comments raising environmental issue(s) concerns. Pursuant to State CEQA Guidelines §15132 (Contents of Final Environmental Impact Report), the Final SEIR will be prepared and will include:

a) The draft SEIR or a revision of the draft.

- b) Comments and recommendations received on the draft SEIR either verbatim or in summary.
- c) A list of persons, organizations, and public agencies commenting on the draft SEIR.
- d) The Lead Agency's responses to significant environmental points raised in the review and consultation process.
- e) Any other information added by the Lead Agency.

Additionally, pursuant to State CEQA Guidelines §15088 (Evaluation of and Response to Comments), after the Final SEIR is completed and at least ten days prior to certifying the Final SEIR by the City's decision-maker (i.e., the City Council), the City will provide a copy of the written response to comment for each public agency on comments made by that public agency.

Certification of the Final SEIR

The Draft SEIR, as revised by the Final SEIR, will be considered by the City Planning Commission and City Council for certification, consistent with State CEQA Guidelines §15090.

State CEQA Guidelines §15090 states:

"Prior to approving a project, the lead agency shall certify that:

- 1. The final SEIR has been completed in compliance with CEQA;
- 2. The final SEIR was presented to the decision-making body of the lead agency, and that the decision-making body reviewed and considered the information contained in the final SEIR prior to approving the project; and
- 3. The final SEIR reflects the lead agency's independent judgment and analysis."

2.4 Report Organization

Pursuant to the State CEQA Guidelines, this Draft SEIR is organized into the following nine sections:

- **Section 1.0 Executive Summary:** summarizes the HEU, its environmental impacts, and the mitigation measures that have been proposed to reduce any significant impacts. This section also includes a summary of the alternatives that were considered as part of this SEIR.
- **Section 2.0 Introduction:** provides a discussion of the purpose and use of this SEIR, background information on the Project, areas of concern raised by the public, and CEQA compliance information.
- **Section 3.0 Project Description:** provides a discussion of the Project's (i.e., HEU's) history, environmental setting, characteristics, and objectives, phasing, and anticipated necessary approvals.
- **Section 4.0 Basis for Cumulative Analysis:** provides an explanation on the cumulative impacts analysis.

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- **Section 5.0 Environmental Analysis:** provides a discussion of the existing conditions for each of the environmental resource areas. This section also describes methodologies for significance determinations, identifies the Project's short-term and long-term environmental impacts, recommends mitigation measures to reduce the significance of environmental impacts, and identifies any areas of potentially significant unavoidable impacts. This section also includes a discussion of cumulative impacts that could result from the Project.
- **Section 6.0 Other CEQA Considerations**: summarizes significant unavoidable impacts, discusses significant irreversible environmental changes, and discloses potential growth-inducing impacts.
- **Section 7.0** Alternatives: describes a reasonable range of potential alternatives to the HEU, including alternatives considered but rejected from further consideration, the No Project Alternative, various Project Alternatives, and identifies the Environmentally Superior Alternative.
- **Section 8.0 Effects Found Not to be Significant:** identifies resources for which a finding of no impact was determined, and therefore, not discussed further in this SEIR.
- **Section 9.0 List of Preparers:** identifies the CEQA lead agency and SEIR preparation team.
- **Appendices** Contains the NOP and SEIR notification documents and associated technical documentation.

2.5 Responsible and Trustee Agencies

City of Huntington Beach

State CEQA Guidelines §15050 (Lead Agency Concept) specifies that where a project is to be carried out or approved by more than one public agency, one public agency shall be responsible for preparing an EIR or Negative Declaration for the project. This agency shall be called the Lead Agency. For the HEU, the City of Huntington Beach is the lead agency. With certain exceptions, the decision-making body of each Responsible Agency shall consider the Lead Agency's EIR or Negative Declaration prior to acting upon or approving the project. Each Responsible Agency is required to certify that its decision-making body reviewed and considered the information contained in the EIR or Negative Declaration on the project.

Trustee, Responsible, and Cooperating Agencies

Other Federal, State, and local agencies are involved in the review and approval of the HEU, including those agencies designated as trustee and responsible agencies. A trustee agency is a State agency that has jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State. A responsible agency is an agency, other than the lead agency, that has responsibility for carrying out or approving a project. Responsible and trustee agencies are consulted by the CEQA lead agency to ensure the opportunity for input and also review and comment on the Draft SEIR. Responsible agencies also use the CEQA document in their decision-making. Several agencies other than the City may require permits, approvals, and/or consultation to implement various HEU programs.

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Responsible/Trustee Agencies for the HEU include, but are not limited to:

- South Coast Air Quality Management District (SCAQMD);
- Santa Ana Regional Water Quality Control Board (RWQCB); and
- State Department of Housing and Community Development (HCD).

2.6 Incorporation by Reference

Pertinent documents relating to this SEIR are cited in accordance with State CEQA Guidelines §15148 or have been incorporated by reference in accordance with State CEQA Guidelines §15150, which encourages incorporation by reference as a means of reducing redundancy and the length of environmental reports. The following documents are hereby incorporated by reference into this SEIR and are available for review online at https://www.huntingtonbeachca.gov/. Information contained within these documents is utilized for various sections of this SEIR.

City of Huntington Beach General Plan. Adopted in October 2017, the City's General Plan serves as a blueprint for the community through the year 2040. The General Plan provides a roadmap for new housing and job growth, while protecting those characteristics and values that make Huntington Beach a desirable and distinctive place to live, work, and visit. The City's General Plan consists of nine elements: Land Use, Circulation, Environmental Resources and Conservation, Natural and Environmental Hazards, Noise, Public Services and Infrastructure, Housing, Coastal, and Historic and Cultural Resources. Each General Plan Element includes goals, policies, and implementation programs that create a roadmap for new housing and job growth, provide guidance for decision makers on allocating resources, and describe the utilization, management, and conservation of natural resources, public services, and infrastructure. This document is available for viewing on the City's website at:

https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU Adopted-October-2017.pdf

The General Plan was used in this SEIR as a source for existing environmental setting data and City policy.

City of Huntington Beach General Plan Update Program EIR (State Clearinghouse No. 2015101032) (Atkins, August 2017) (GPU PEIR). The Final Program EIR assesses the potentially significant environmental effects of the City of Huntington Beach General Plan Update. The GPU PEIR (August 2017) was used in this SEIR as a source for existing environmental setting data, buildout impact analyses, and City mitigation measures. This document is available for viewing on the City's website at:

https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf

Huntington Beach Municipal Code. The Huntington Beach Municipal Code (HBMC) regulates land use and activities within the City's jurisdiction including the City of Huntington Beach Zoning and Subdivision Code (codified in HBMC Titles 20-25). The Zoning and Subdivision Code is the primary tool for implementing the City's General Plan policies. In addition, HBMC Title 17 (Buildings and Construction) and HBMC Title 25 (Subdivisions) contain regulatory provisions that apply to residential development. The HBMC was used throughout this SEIR to establish the HEU's baseline requirements for local (City) regulatory compliance.

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The HBMC can be accessed online at:

- http://www.qcode.us/codes/huntingtonbeach/view.php?topic=municipal_code&frames=on
 and
- http://www.qcode.us/codes/huntingtonbeach/view.php?topic=zoning code&frames=on

3.0 PROJECT DESCRIPTION

This section describes the proposed HEU (Proposed Project) in a manner that is meaningful for review by the public, reviewing agencies, and decision-makers in accordance with the California Environmental Quality Act (CEQA), California Public Resources Code (PRC) §§21000 et seq., and the State CEQA Guidelines (14 California Code of Regulations §§15000 et seq.). The Project, as defined and evaluated in this SEIR, specifically addresses the changes that have occurred to the HEU as part of the City's 6th Cycle Housing Element (2021 to 2029). These changes, which are described below in **Section 3.4: Project Characteristics**, include data updates (e.g., demographic and housing needs), an analysis of available housing sites; an updated map of candidate housing sites to reflect properties that could accommodate additional housing; and amendments to the City's General Plan land use designations and zoning to accommodate the specific HEU changes.

3.1 Project Location

As illustrated by **Exhibit 3-1:** Regional Map and **Exhibit 3-2:** City Map, the City of Huntington Beach (City) is situated along the Pacific Coast in the County of Orange (County), approximately 90 miles north of the City of San Diego and 35 miles south of downtown Los Angeles. The City is bound by the City of Seal Beach to the north, the cities of Newport Beach and Costa Mesa to the south, the cities of Westminster and Fountain Valley to the east, and the Pacific Ocean to the west. The Project area includes the entire 27.3 square miles within the City limits.

Regional access to the City is provided by Interstate 405, Beach Boulevard (State Highway 39), and Pacific Coast Highway (State Highway 1).

3.2 Existing Environmental Setting

Physical Setting

In its existing setting, the City is primarily comprised of residential, commercial, industrial, mixed-use, parks, open space (e.g., wetlands, beaches), oil-related, and public/institutional land uses. Residential land uses are the most dominant land use within the City, with most residential land uses represented by single-family neighborhoods scattered across the City. In addition to single-family neighborhoods, the City also includes various high-density residential uses that are primarily located in or adjacent to the City's Downtown. Existing commercial uses are predominantly located in regional shopping centers (such as Bella Terra and the Five Points Plaza), in the Downtown area, and along Beach Boulevard, Edinger Avenue, and Warner Avenue. Most visitor-oriented commercial uses, including hotels, dining, and entertainment facilities, are concentrated along Beach Boulevard and Pacific Coast Highway. Industrial uses are located primarily in the City's northwestern portion, along the Gothard Street corridor, in the Holly-Seacliff area, and along Pacific Coast Highway. Detailed land use information is provided in Section 5.8: Land Use and Planning.

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City of Huntington Beach. 2017. City of Huntington Beach General Plan Update Program Environmental Impact Report SCH No. 2015101032, Volume II—Program Environmental Impact Report. https://www.huntingtonbeachca.gov/files/users/planning/Volume-II-Draft-Environmental-Impact-Report.pdf (accessed September 2021).

Population

According to the Department of Finance, the City's estimated 2021 population was 196,874 persons, which represented approximately six percent of the County's 2021 population of 3,153,764 persons. As a generally built out community with limited land resources to accommodate new growth, the City is expected to experience only slight growth between 2021 and 2045. This is indicative in growth forecasts developed by the Southern California Association of Governments (SCAG), which indicate that the City's population will experience 4.3 percent growth (approximately 205,300 persons) by 2045. Comparatively, the County's population will grow by 12 percent during the same period (from 3,153,764 persons in 2021 to 3,535,000 persons in 2045). Detailed City population data is provided in **Section 5.10: Population and Housing**.

Housing

According to the Department of Finance's population and housing estimates, the City had a total of 78,046 households and 82,620 dwelling units in 2021, with single detached dwelling units comprising the largest percentage of all housing types (approximately 48 percent).⁴ As a built-out community with limited land resources for residential development, the City is expected to experience only slight growth in housing between 2021 and 2045. This is indicative of SCAG growth forecasts, which indicate that the City's households will grow only approximately 2.9 percent (to 80,300 households) by 2045.⁵ Comparatively, the County's households will grow approximately 9.1 percent during the same period (from 1,058,090 households in 2021 to 1,154,000 households in 2045). Detailed City population data is provided in Section 5.10: Population and Housing.

Candidate Housing Sites

California Government Code (CGC) §65583(a)(3) requires local governments to prepare an inventory of land suitable for residential development, including vacant sites and sites having the potential for redevelopment, and an analysis of the relationship of zoning and public facilities and services to these sites. The inventory of land suitable for residential development shall be used to identify sites that can be developed for housing within the planning period (§65583.2). Land suitable for residential development includes all of the following:

- Vacant sites that are zoned for residential development.
- Vacant sites that are not zoned for residential development, but that allow residential development.
- Underutilized sites that are zoned for residential development and capable of being developed at a higher density or with greater intensity.

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State of California Department of Finance. 2021. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/ (accessed June 2021).

³ SCAG. 2020. Demographics and Growth Forecast Technical Report. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal demographics-and-growth-forecast.pdf?1606001579 (accessed June 2021).

State of California Department of Finance. 2021. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/ (accessed June 2021).

⁵ SCAG. 2020. Demographics and Growth Forecast Technical Report. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579 (accessed June 2021).

- Sites that are not zoned for residential development, but can be redeveloped for, and/or rezoned for, residential use (via program actions).
- Sites owned or leased by a city, county, or city and county. If using these types of sites, the element must include a description of whether there are any plans to sell the property during the planning period and how the jurisdiction will comply with the Surplus Land Act Article 8 (commencing with §54220) of Chapter 5 of Part 1 of Division 2 of Title 5.

Assembly Bill (AB) 686, Statutes 2018 now requires that a jurisdiction identify sites throughout the community, in a manner that is consistent with its duty to affirmatively further fair housing (AFFH) pursuant to §65583(c)(10)(A). In the context of AFFH, the site identification requirement involves not only an analysis of site capacity to accommodate the Regional Housing Needs Assessment (RHNA) allocation, but also whether the identified sites serve the purpose of replacing segregated living patterns with truly integrated and balanced living patterns, transforming racially and ethnically concentrated areas of poverty into areas of opportunity. At the most basic level, this requirement suggests two courses of action relating to the identification of sites:

- i. Ensure that sites zoned to accommodate housing for lower-income households are not concentrated in lower resource areas and segregated concentrated areas of poverty, but rather dispersed throughout the community, including in areas with access to greater resources, amenities, and opportunity.
- ii. Where sites zoned to accommodate housing for lower-income households are located in lower resource areas and segregated concentrated areas of poverty, incorporating policies and programs in the housing element that are designed to remediate those conditions, including place-based strategies that create opportunity in areas of disinvestment (such as investments in enhanced infrastructure, services, schools, jobs, and other community needs).

As previously stated, the proposed Project includes an update to the City's Housing Element map of candidate housing sites to reflect properties that could accommodate future housing development. In total, the HEU identifies 378 candidate housing sites (approximately 419 acres), which are detailed in **Appendix B: Candidate Housing Sites Inventory**. The Project area and candidate housing site locations are illustrated on **Exhibit 1-1: Candidate Housing Sites**. In addition to the identified candidate housing sites, it is important to note that future development of accessory dwelling units (ADUs) could occur on residential sites throughout the City and would not be limited to the candidate housing sites.

The candidate housing sites vary in sizes, ranging from a minimum of approximately 0.03 acre to a maximum of approximately 37.4 acres. Of the 378 candidate housing sites, only two sites (Sites 83 and 129) are vacant, comprising less than one-half percent (approximately 0.18 acre) of the approximately 419 acres. The remaining 376 candidate housing sites are developed with residential and non-residential land uses (e.g., commercial and industrial) to varying degrees. Approximately 312 existing dwelling units are located on two candidate housing sites (Site 6 [311 dwelling units] and Site 86 [1 dwelling unit]).

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⁶ Solely for analysis purposes, the candidate housing sites identified in Appendix B have been assigned a numeric label.

Existing General Plan Land Use Designations

The General Plan Land Use Element (LUE) describes the City's existing land use characteristics and development patterns and establishes a plan for future development and redevelopment. The existing General Plan land use designations for the 378 candidate housing sites are based on General Plan Figure LU – 2: Land Use Plan, are specified in **Appendix B**, and described in **Table 3-1: Existing General Plan Land Use Designations – Candidate Housing Sites**.

Table 3-1: Existing General Plan Land Use Designations – Candidate Housing Sites

Land Use Designation	Description			
Low Density Residential (RL)	Density range: up to 7.0 units/acre Provides for traditional detached single-family housing, zero-lot-line developments, mobile home parks, low-density senior housing, and accessory dwelling units.			
High Density Residential (RH)	Density range: >30.0 units/acre Provides for uses allowed in the Low, Medium, and Medium High Density Residential designations as well as a broad range of multiple-family housing types.			
Neighborhood Commercial (CN)	FAR range: up to 0.35 Provides for small-scale retail commercial, professional offices, eating and drinking establishments, financial institutions, household goods, food sales, drugstores, personal services, cultural facilities, institutional, health, government offices, and similar uses designed to serve the needs of the surrounding residential area. The maximum building height is two stories.			
General Commercial (CG)	FAR range: up to 1.5 Provides for retail commercial, professional offices, eating and drinking establishments, financial institutions, automobile sales, household goods, food sales, drugstores, building materials and supplies, personal services, recreational commercial, hotels/motels, timeshares, cultural facilities, institutional, health care, government offices, educational, and similar uses designed to serve the needs of the community. The maximum building height is two stories.			
Office (CO)	FAR range: up to 1.0 Provides for professional offices, ancillary commercial services (e.g., financial institutions, print shops), eating and drinking establishments, and similar uses designed to serve the needs of businesses and employees.			
Mixed-Use (M)	Building FAR range and residential densities are established per specific plan and shown on the Land Use Map for specific areas. Provides for a wide variety of nonresidential mixed-use development in industrial areas that are undergoing or poised for transformation to support changing employment demand.			
Research and Technology (RT)	FAR range: up to 1.0 Provides sites for manufacturing, research and development, technology, and professional offices in addition to traditional industrial uses. Uses include clean and green manufacturing (e.g., medical devices, solar panels), research and development, technology, warehousing, business parks, professional offices, limited eating and drinking establishments that have an industrial component (e.g., a brewery), restaurants and cafes to accommodate employment uses and surrounding residential neighborhoods, and similar neighborhood commercial uses.			
Industrial (I)	FAR range: up to 0.75 Provides for manufacturing (e.g., assembly, fabrication), construction, transportation, logistics, auto repair, research and development, warehousing, business parks, professional offices, ancillary commercial services (e.g., financial institutions, print shops), warehouse and sales outlets, and similar uses.			

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Land Use Designation	Description		
Public (P)	Provides for government administrative (e.g., City Hall) and related facilities, such as public utilities, public parking lots, and similar uses.		
Public-Semipublic (PS)	Provides for public and private schools, hospitals, churches, cultural facilities, institutional, and similar semi-public community service uses.		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	each. 2017. City of Huntington Beach General Plan, Land Use Element. s/users/planning/HB-GPU Adopted-October-2017.pdf (accessed September 2021).		

Existing Zoning Districts

The Huntington Beach Zoning and Subdivision Ordinance (HBZSO; Municipal Code Title 20-25) defines the City's allowed land uses and establishes development standards for each land use district. The HBZSO regulates the use of real property and the buildings, structures, and improvements located thereon to implement the General Plan's provisions and carry out its objectives. Development standards established in the HBZSO provide density, floor area, setbacks, height, development intensity, and other such standards that help maintain the City's General Plan vision for a parcel. The existing zoning for each of the candidate housing sites is specified in **Appendix B** and described in **Table 3-2: Existing Zoning Districts – Candidate Housing Sites**.

Table 3-2: Existing Zoning Districts – Candidate Housing Sites

Zone	Description		
RM Medium Density Residential District	Provides opportunities for housing of a more intense nature than single-family detached dwelling units, including duplexes, triplexes, town houses, apartments, multi-dwelling structures, or cluster housing with landscaped open space for residents' use. Single-family homes, such as patio homes, may also be suitable. Maximum density is 15 units per acre.		
RMH Medium High Density Residential District	Provides opportunities for a more intensive form of development than is permitted under the medium density designation while setting an upper limit on density that is lower than the most intense and concentrated development permitted in the City. One subdistrict has been identified with unique characteristics where separate development standards shall apply: RMH-A Small Lot. Maximum density is 25 units per acre.		
CG General Commercial District	Provides opportunities for the full range of retail and service businesses deemed suitable for location in Huntington Beach.		
IG General Industrial District	Provides sites for the full range of manufacturing, industrial processing, resource and energy production, general service, and distribution.		
IL Limited Industrial District	Provides sites for moderate- to low-intensity industrial uses, commercial services and light manufacturing.		
PS Public – Semipublic District	Provides areas for large public or semipublic uses. The intent of this district in the coastal zone is to implement the public, quasi-public, and institutional land use designation of the certified Local Coastal Program Land Use Plan.		
RT Research and Technology District	Provides sites for manufacturing, research and development, technology, and professional offices in addition to traditional industrial uses.		
SP Specific Plan District	Provides areas for the development and administration of specific plans, prepared in accord with the City of Huntington Beach Charter, consistent with the General Plan and, for specific plans located within the coastal zone, the Local Coastal Program.		
"O" Oil Production Overlay	HBMC Title 22: Zoning Code – Overlay Districts establishes the City's nine overlay		
District and "O1" Subdistrict	districts, and provides the area requirements, criteria for approval and site compliance, and land use controls, among other provisions for each. Eight candidate housing sites (Sites 199, 200, 237, 281, 291, 300, 322, and 325) are located within the Oil Production Overlay District's O1 Subdistrict. The O1 Subdistrict provides areas where oil drilling is allowed, subject to a conditional use permit.		
Source: City of Huntington Beach. 202 June 2021).	1. Title 21 Zoning Code – Base Districts http://www.qcode.us/codes/huntingtonbeach/ (accessed		

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In addition to the above-listed zoning districts, various candidate housing sites are also within the following four specific plan areas:

- Beach and Edinger Corridors Specific Plan (SP14): This Specific Plan encompasses 459 acres and presents the community's vision for the evolution and continued growth along Beach Boulevard and Edinger Avenue, and establishes the primary means of regulating land use and development within the Specific Plan Area. This Specific Plan allows for a variety of land uses including, but not limited to, commercial, retail, hotel/lodging, civic/cultural, office, personal services, personal enrichment uses, and residential. There are 141 candidate housing sites within SP14.
- North Huntington Center Specific Plan (SP1): This Specific Plan encompasses 30 acres and provides for the orderly development of North Huntington Center Specific Plan area, which is bound by McFadden Avenue to the north, San Diego Freeway to the east, Center Drive to the south and the Southern Pacific Railroad to the west. This Specific Plan allows for a variety of land uses including residential, commercial, personal enrichment, and retail/services. There is one candidate housing site within SP1.
- Holly-Seacliff Specific Plan (SP9): This Specific Plan encompasses 565 acres and provides for the
 distribution of planned residential uses in the Holly Seacliff Specific Plan area, which is generally
 bound by Seapoint Street to the West, Garfield Avenue to the north, Main Street to the East, and
 Yorktown Avenue to the south. This Specific Plan allows for a variety of land uses including
 residential, commercial, industrial, open space, and mixed-use. There are 38 candidate housing
 sites within SP9.
- Ellis-Goldenwest Specific Plan (SP7): This Specific Plan encompasses 160 acres and provides for the distribution of equestrian amenities, open space, recreational uses, and single-family detached residences on large lots within Specific Plan area. The Specific Plan area is bound by Ellis Avenue to the north, Edwards Street to the west, Garfield Avenue to the south, and Goldenwest Street to the east. The maximum density of any project within the Specific Plan area is three units per acre. There are 54 candidate housing sites within SP7.

Of the total 378 candidate housing sites, 372 sites would be assigned an overlay to permit housing by right⁷ and three sites would involve hotel conversions, and thus would retain their underlying zoning. Therefore, the estimated existing development capacity of these 378 candidate housing sites was not needed for the CEQA Project. However, three candidate sites (Sites 3, 4, and 5) would be rezoned to accommodate future housing development opportunities. The estimated existing development capacity of these three candidate housing sites was determined based on existing zoning and is detailed in **Table 3-3: Candidate Housing Sites Involving Rezoning**. The existing development capacity of these three sites was used to develop the CEQA Project. As detailed in **Table 3-3**, the estimated development capacity of Sites 3, 4, and 5 is approximately 765,458 square feet of non-residential uses (i.e., approximately 643,272 square feet of industrial uses and approximately 122,186 square feet of commercial uses).

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⁷ By-right means local government review must not require a CUP, planned unit development permit, or other discretionary review or approval.

Maximum Development Site ID (Address) **Site Acres Existing Zoning** FAR¹ Capacity (sf) Site 3 9.52 IL Limited Industrial District 0.75 311,018 (7600 Redondo Circle) Site 4 IG General Industrial District 10.17 0.75 332,254 (7292 Slater Avenue) Subtotal Industrial 19.69 643,272 Site 5 CG General Commercial District 1.87 1.5 122,186 (15511 Edwards Street) Subtotal Commercial 1.87 122,186 Total 21.56 765,458

Table 3-3: Candidate Housing Sites Involving Rezoning

FAR=floor to area ratio; sf=square feet

Source: City of Huntington Beach. 2021. Title 21 Zoning Code - Base Districts http://www.gcode.us/codes/huntingtonbeach/ (accessed June 2021).

3.3 **Project Background**

California State law (CGC §65302 et seq.) requires each city and county to prepare and adopt a long-term General Plan to guide the physical development within its jurisdictional boundaries and any land outside its boundaries that bears relation to its planning. State law also requires that each General Plan be comprised of the following seven mandatory elements: Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety. While these seven elements are required, State law provides flexibility in how each local jurisdiction structures these elements within its respective General Plan. In compliance with State law, the General Plan consists of the following elements: Land Use Element, Circulation Element, Environmental Resources and Conservation Element, Natural and Environmental Hazards Element, Noise Element, Public Services and Infrastructure, Historic and Cultural Resources Element, Housing Element, and the Coastal Element.

Unlike the other six mandated elements of the General Plan, CGC §65588 requires local governments to regularly review and revise their General Plan Housing Elements, with each Housing Element update subject to detailed statutory requirements and a mandatory review by the State Department of Housing and Community Development (HCD). The specific timing for a jurisdiction to update its housing element is based on the schedule for federally designated metropolitan planning organizations (MPOs) to update their Regional Transportation Plans/Sustainable Communities Strategy (RTPs/SCS). MPOs are required to update their RTPs every four years, which puts each jurisdiction on an eight year Housing Element cycle.

SCAG is the MPO for the County of Orange, which includes the City of Huntington Beach. SCAG adopted the 2020-2045 RTP/SCS ("Connect SoCal") on September 3, 2020, thereby requiring all SCAG member jurisdictions to have a 6th Cycle Housing Element planning period from 2021-2029 and to complete the 6th Cycle HEU (i.e., the HEU) by October 15, 2021 (statutory deadline). Adoption of the City's HEU extended beyond the statutory deadline as well as the February 11, 2022 deadline.8 As such, any rezoning to accommodate the RHNA, including for lower-income households, is required to be completed no later than one year from the statutory deadline. Otherwise, the City's housing element would no longer comply

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 $^{^{8}\,}$ Senate Bill 375 permits a 120-day deadline, which ends February 11, 2022.

with State Housing Element Law, and HCD may revoke its finding of substantial compliance pursuant to CGC §65585, subdivision (i).

The proposed Project is an update of the City's previous Housing Element, which was last amended in 2020 as part of the 5th Cycle for the 2013 to 2021 planning period. Multiple amendments have been made to Housing Element law since adoption of the City's 5th Cycle Housing Element. These new statutory provisions change the Housing Element's analysis reporting and policy requirements. For example, Senate Bill 6 establishes default densities which are deemed appropriate for low and very low income housing and Assembly Bill 671 requires local jurisdictions to encourage affordable accessory dwelling units (ADU) rentals in their housing plans. The 6th Cycle Housing Element for the 2021 – 2029 planning period complies with these amendments to state housing law and all other federal, state, and local requirements.

Regional Housing Needs Assessment

In addition to adopting the 2020-2045 RTP/SCS, SCAG conducts a RHNA to determine each city's share of the affordable housing needs for the SCAG region. The RHNA allocation for Huntington Beach is the City's share of housing needs by income category. Income categories are based on the most current Median Family Income (MFI) for the Santa Ana-Anaheim-Irvine, CA HUD Metro FMR Area, to which Orange County belongs. The State has identified the following income categories based on Orange County's Area Median Income (AMI):

- Very Low-income: households earning between 0 and 50 percent of the AMI
- Low-income: households earning between 51 percent and 80 percent of the AMI
- Moderate Income: households earning between 81 percent and 120 percent of the AMI
- Above Moderate Income: households earning over 120 percent of the AMI

Combined, the extremely low, very low, and low-income groups are referred to as lower income. According to the American Community Survey (ACS), 37.2 percent of households in the City had incomes in the extremely low, very low, and low-income levels, whereas 62.7 percent of households earned moderate or above moderate incomes in 2018 (latest data available) (Table 3-4: Households by Income Category in Huntington Beach (2018)).

Table 3-4: Households by Income Category in Huntington Beach (2018)

Income Category (% of County AMI)	Households	Percent		
Extremely Low (30% AMI or less)	9,090	11.8%		
Very Low (31 to 50% AMI)	7,680	10.0%		
Low (51 to 80% AMI)	11,860	15.4%		
Moderate or Above (over 80% AMI)	48,185	62.7%		
Total	76,815	100%		
Source: Department of Housing and Urban Development (HUD), Consolidated Planning/Comprehensive Housing				

Affordability Strategy (CHAS), 2014-2018. https://www.huduser.gov/portal/datasets/cp.html (accessed February 2022).

The City's projected regional housing need for the 6th Cycle RHNA planning period (2021-2029), as assigned by SCAG in accordance with State law, is 13,368 dwelling units. **Table 3-5: City of Huntington Beach 2021-2029 RHNA**, outlines the City's RHNA allocation by income category for the 2021-2029

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Housing Element and indicates the City's projected housing need for the 6th Cycle RHNA planning period is 13,368 dwelling units.

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Income Level	% of Median Family	Incom	RHNA Allocation		
ilicome Level	Income (MFI) ¹	Min.	Max.	(Housing Units)	
Very Low Income	0-50%	\$0	\$53,350	3,661	
Low Income	51-80%	\$53,351	\$85,360	2,184	
Moderate Income	81-120%	\$85,361	\$128,040	2,308	
Above Moderate	>120%	\$128,041	>\$128,041	5,215	
Total				13,368	

Table 3-5: City of Huntington Beach 2021-2029 RHNA

3.4 Project Characteristics

Project Overview

The Housing Element is a State-mandated policy document that is a component of the Huntington Beach General Plan. The Housing Element provides direction for implementation of various programs to meet existing and projected future housing needs for all income levels within Huntington Beach. It provides policies, programs, and actions that support and create the framework for production, preservation, and maintenance of the City's housing stock for all income levels. The Housing Element is updated every eight years and is based on the Regional Housing Needs Assessment (RHNA) allocation for that planning period (the 6th Cycle is the current planning period, which is 2021-2029). The City of Huntington Beach 2021 – 2029 Housing Element is being prepared to ensure adequate, safe, and affordable housing conditions and accommodate housing needs based on a comprehensive analysis of the City's current and projected demographic, economic, and housing characteristics and needs, including its identified RHNA requirement. The City's projected regional housing need for the 6th Cycle RHNA planning period (2021-2029), as assigned by the Southern California Association of Governments (SCAG) in accordance with State law, is 13,368 dwelling units (11,743 units when accounting for existing applications and projects, that are currently under review).

As required by State Housing Law, the City must specify the number of units that can realistically be accommodated on each candidate housing site and identify whether the site is adequate to accommodate lower-income housing in accordance with existing regulations or if future implementation actions could accommodate these lower-income units by amending the land use designation and applicable zoning for selected sites. If adequate sites cannot be identified within the existing zoning, the City is required to identify various strategies to accommodate the lower-income RHNA units. The City is not required to build dwelling units in order to meet its RHNA allocation, only to identify potential sites and create the framework to allow the market the opportunity to develop these units. It is unlikely that the City would be able to accommodate its RHNA allocation for lower-income housing within existing residential neighborhoods based on the existing regulatory context. Therefore, to comply with State law, the City has developed a Housing Program to accommodate the lower-income RHNA units, including amendments to existing land use designations and zoning districts, an affordable housing overlay, and identification of

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¹ Income Range is based on the FY 2021 HUD Median Family Income (MFI) for the Santa Ana-Anaheim-Irvine, CA HUD Metro FMR Area which Orange County is a part of, of \$106,700. https://www.huduser.gov/portal/datasets/il/il2021/2021MedCalc.odm (accessed September 2021).

underutilized, residentially-zoned parcels in an inventory of candidate housing sites. In total, the HEU identifies 378 candidate housing sites (approximately 419 acres).

To begin assessing options to meet RHNA, the City compiled an inventory of candidate housing sites with the potential to accommodate the City's RHNA, shown on **Exhibit 1-1: Candidate Housing Sites**. The candidate housing sites inventory includes properties that are dispersed throughout the City to minimize the potential for adverse neighborhood changes and adverse environmental impacts. The intent of the Implementation Program is to minimize impacts by placing housing near public transportation and recreation opportunities and away from environmentally sensitive resources.

It is noted that General Plan and Zoning and Subdivision Code amendments will be required pursuant to the HEU's Implementation Programs for clarification and consistency purposes. Ancillary amendments to other planning documents may also be required for clarification and consistency purposes. Similarly, discretionary permits and future CEQA evaluation will be required prior to approval of future housing development facilitated by the HEU, except for development permitted by right, which includes housing projects within overlay zones, emergency shelters, low barrier navigation centers, and small licensed residential care facilities for six or fewer persons; and ADUs and Junior ADUs, which are exempt from CEQA, pursuant to State CEQA Guidelines §15268 (Ministerial Projects) and PRC §21080(b)(1) and discretionary permits per CGC §§65852.2 and 65852.22. In addition, ADUs can be categorically exempt from CEQA pursuant to State CEQA Guidelines §§15301 and 15303, authority cited under PRC §§21083 and 21087.

Under the HEU, the Programs will be considered in addition to various other strategies to increase housing capacity and production of affordable dwelling units; see HEU Section 4 for additional details on the HEU Implementation Programs. Additional affordable units can also be accommodated through future ADU development, which is anticipated to occur on sites throughout the community, in addition to the candidate housing sites. To meet the City's very-low and low-income RHNA need, the City has identified non-vacant parcels currently zoned for non-residential uses. These parcels are located primarily within the Beach and Edinger Corridors Specific Plan, the Research and Technology Land Use District, the North Huntington Center Specific Plan, the Holly-Seacliff Specific Plan, and the Ellis-Goldenwest Specific Plan.

To comply with Assembly Bill (AB) 1397, the City must specify the number of units that can realistically be accommodated on each candidate housing site; and identify whether the site is adequate to accommodate lower-income housing in accordance with existing regulations or if future implementation actions are needed. As discussed above, and recognizing that not all candidate housing sites will ultimately be included in the HEU, the 378 candidate housing sites addressed in the SEIR account for a 60 percent buffer (an additional 7,995 dwelling units [60 percent of the 13,368 RHNA units]), which is intended to serve as a sites contingency that may be considered after HEU certification to address future "no net loss," if it becomes necessary to identify a replacement site during the 6th Cycle (2021-2029). Therefore, while likely fewer than 378 candidate housing sites would be developed to meet the 13,368 RHNA units (11,743 units when accounting for existing applications and projects that are currently under review), this SEIR considers potential housing development on all 378 candidate housing sites, as well as on ADU sites throughout the City.

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This SEIR specifically addresses amendments to the Huntington Beach General Plan Update (GPU) and the City of Huntington Beach Zoning and Subdivision Ordinance of the City of Huntington Beach Municipal Code (Zoning Text and Zoning Map amendments) for changes to land use designations and base/overlay districts, as well as ancillary amendments to other planning documents, as necessary for clarification and consistency purposes. These amendments are needed to accommodate future housing sites as part of the HEU's Implementation Program. As such, the Project analyzed in the SEIR is the HEU Implementation Program and assumes 11,743 additional housing units.

The Project does not propose new residential or other development on the 378 candidate housing sites evaluated in this SEIR; rather, it provides capacity for future development of approximately 19,738 housing units to meet the City's remaining unmet RHNA of 11,743 housing units, consistent with state law.

AB 1233 states that if a jurisdiction fails to provide adequate sites in the prior planning period, which in the City's case is the 5th Cycle covering 2013-2021, the jurisdiction must also include HEU action programs (i.e., zoning code amendments or rezones) to accommodate the shortfall within one year of the new cycle's commencement. The City's no net loss housing obligation per AB 1233 is referred to as the 5th Cycle "carryover" housing program, which is required to be addressed in addition to the 6th Cycle RHNA. There is no carryover from the 5th Cycle RHNA.

Project Components

As previously stated, the Housing Element addresses any changes that have occurred since the adoption of City's 5th Cycle Housing Element (2013 to 2021). These changes include updates to demographic information, housing needs data, and the analysis of available housing sites. As required by State law, the HEU consists of the following primary components, which together comprise the proposed Project that is being evaluated in this SEIR:

- Candidate Housing Sites
- Amendments to the General Plan Land Use Element
- Rezoning Program
- Housing Constraints
- Goals, Policies, and Housing Programs
- Amendments to Titles 20-25 (HBZSO) of the City of Huntington Beach Municipal Code

Candidate Housing Sites

To comply with State law (CGC §65583), the City prepared an inventory of candidate housing sites that may be suitable for residential development, including the lower-income dwelling units allocated to the City in the 6th Cycle RHNA. **Appendix B: Candidate Housing Sites Inventory** includes a parcel-specific listing of candidate housing sites that are available to accommodate the City's full share of the regional housing need (i.e., RHNA allocation) during the 2021-2029 planning period. Ultimately, the Huntington Beach City Council will decide which housing sites from the candidate housing sites inventory will be identified in the

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6th Cycle Housing Element, as action programs to accommodate the assigned affordable housing obligations.

Table 3-6: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units) shows the City's 2021-2029 RHNA need by income category and a summary of the sites identified to meet that need. The analysis shows that the City has the capacity to meet its 2021-2029 RHNA allocation through various methods, including the following:

- Identification of development capacity on sites to permit the development of residential uses at or above 30 dwelling units per acre,
- Identification of properties suitable for hotel/motel conversion to housing, and
- Future development of ADUs

As shown in Table 3-6, the City's total potential development capacity for all candidate housing sites, in addition to the 565 ADUs that could be developed during the 2021-2029 planning period, is approximately 19,738 housing units (rezones only). This would exceed the City's unmet RHNA of 11,743 housing units by approximately 7,995 dwelling units (or approximately 60 percent).

Table 3-6: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units)

	Very Low Income	Low Income	Moderate Income	Above Moderate Income	Total
RHNA (2021-2029)	3,661	2,184	2,308	5,215	13,368
Units Issued Building Permits in Projection Period (Begins June 31, 2021)	0	43	0	449	492
Applications and Pipeline Projects	17	242	61	813	1,133
Sum of Pipeline	17	285	61	1,262	1,625
Remaining Unmet RHNA	3,644	1,899	2,247	3,953	11,743
Sites Inventory – Rezones					
Sites Identified for Rezone	0		128	300	428
Sites Identified for Overlay	5,611		2,685	10,033	18,329
Hotel/Motel Conversion	416		0	0	416
Accessory Dwelling Units (ADU)	385		169	11	565
Sum of Sites Inventory - Rezones	6,412		2,982	10,344	19,738
Sum of Total Sites*	6	5,714	3,043	11,606	21,363
RHNA (2021-2029)	5	,845	2,308	5,215	13,368
Sites Surplus/Remaining		869	735	6,391	7,995
Percent Above/Below RHNA	15%		32%	123%	60%
Source: City of Huntington Beach. 2022. 2021-2029 Housing Element. Table B-2.					

* = Sum of Rezones and Pipeline Projects.

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Amendments to Base and Overlay Zoning Districts

The HEU Implementation Program establishes a total potential development capacity of approximately 428 units (128 moderate income and 300 above moderate) provided by sites that would be rezoned and 18,329 units (5,611 very low/low income, 2,685 moderate income and 10,033 above moderate) provided by sites within proposed housing overlay zones. This includes a buffer, in this case 60 percent, sufficient to accommodate the RHNA during the entire planning period given the requirements of the "no net loss" statute. The purpose of No Net Loss Law (CGC §65863) is to ensure development opportunities remain available throughout the planning period to accommodate a jurisdiction's RHNA, especially for lower- and moderate-income households. Potential development capacity from rezoning alone could accommodate the RHNA allocation for moderate and above moderate income, but could not meet the total need for the very low and low income RHNA allocation. Therefore, the application of housing overlay zones, the hotel/motel conversion to housing strategy, and the development of ADUs would be required to meet the City's RHNA allocation for these income levels.

As previously stated, rezoning would occur across sites for moderate and above moderate income categories and a zoning overlay would occur across sites for all income categories. In order to accommodate the rezoning/overlay effort, the HEU would involve Zoning Code/Specific Plan Amendments to as many as 378 sites, shown on **Exhibit 1-1: Candidate Housing Sites**, within the City (as many as 378 parcels). Although it is likely that not all the candidate sites included in the Project will be included in the final HEU, this SEIR evaluates development of all 378 candidate sites to provide a conservative analysis of potential environmental impacts.

The Project proposes Zoning Text Amendments to revise applicable HBZSO and Specific Plan sections affected by the Project's rezoning/overlay program; and a Zoning Map Amendment to resolve any resolve potential zoning inconsistencies resulting from adoption of the Project's rezoning/overlay program. The Project proposes to amend HBMC Titles 20-25 (the HBZSO) to reflect the following rezoning and overlay strategies intended to create and encourage the residential infill strategies:

- Beach and Edinger Corridors Specific Plan (SP14) 20 Affordable Overlay: This strategy would increase affordable housing options in the SP14 by expanding the 20 percent Affordable Overlay that was established in 2020. The 20 percent overlay would permit residential projects that propose at least 20 percent lower income units on-site by-right. The SP14 Affordable Housing Overlay would expand the provisions of the existing affordable housing overlay to 151 additional sites within SP14, which can accommodate the following housing units: 3,276 low and very low-income units; 1,539 moderate income units; and 5,827 above moderate-income units. A complete description of the overlay unit calculation is available within Appendix B.
- Affordable Housing Overlay: The Affordable Housing Overlay would create housing opportunities
 primarily in the City's well-connected nonresidential areas. The City has identified 167 sites to
 apply the Affordable Housing Overlay, which can accommodate the following housing units: 2,222

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Galifornia Department of Housing and Community Development. 2021. Accountability and Enforcement. https://www.hcd.ca.gov/community-development/accountability-enforcement.shtml (accessed January 2022).

low and very low-income units; 1,083 moderate income units; and 3,889 above moderate-income units.

- Ellis Goldenwest Specific Plan (SP7) High Density Residential RH Overlay: This strategy utilizes the City's existing RH High Density Residential District (maximum 35.0 dwelling units per acre) to create housing opportunities within SP7. This area is approximately 18 acres (Sites 395 through 448) and is mostly vacant. The sites in SP7 are currently designated as low density estate residential (maximum 3.0 dwelling units per acre) and are surrounded by residentially developed and/or designated land uses. The City has identified 53 parcels to be zoned RH Overlay to increase residential development opportunities within the specific plan area, which can accommodate the following housing units: 111 low and very low-income units, 89 moderate income units, and 291 above moderate-income units.
- Medium High Density Residential RMH: This rezone strategy utilizes the City's existing RMH
 Zoning District to create housing opportunities in areas where residential development is
 appropriate. The City has identified three candidate housing sites (Sites 3, 4, and 5) for rezoning.
 The sites can accommodate the following housing units: 128 moderate income units; and 300
 above moderate-income units.

The existing and proposed Zoning for the 378 candidate housing sites are specified in **Appendix B**. Of the 378 candidate housing sites, 372 sites would be assigned an overlay, as described above, to permit housing by right. These 372 sites, as well as the three sites that involve hotel conversions (Sites 69, 116, and 118), would retain their underlying zoning. Only three sites (Sites 3, 4, and 5) propose zone changes.

Amendments to the General Plan Land Use Element

The Project proposes to add the overlay designations listed below to the GP Land Use Element and to redesignate three sites as detailed below. The GP land use designation amendments are required for consistency with the HEU Implementation Program's proposed zoning and overlays, as discussed above. Further, Land Use Element updates are required to ensure consistency between General Plan elements (i.e., the Housing Element and the Land Use Element) in compliance with State law. The following land use overlay designations would be added to the GP Land Use Element:

- Beach and Edinger Corridors Specific Plan (SP14) 20 percent Affordable Overlay: The Project would increase affordable housing options in existing SP14 by expanding the 20 percent Affordable Overlay that was established in 2020. The 20 percent overlay would permit residential projects that propose at least 20 percent lower income units on-site by-right (ministerial approval rather than discretionary approval subject to an entitlement process). The SP14 Affordable Housing Overlay would expand the provisions of the existing affordable housing overlay to 151 additional sites within SP14.
- Affordable Housing Overlay: The Affordable Housing Overlay would create housing opportunities
 primarily in the City's well-connected nonresidential areas. The City has identified 167 sites to
 apply the Affordable Housing Overlay.
- Ellis Goldenwest Specific Plan (SP7) High Density Residential RH Overlay: This strategy utilizes the City's existing High Density Residential (RH) land use designation to create housing

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opportunities within SP7. The City has identified 53 sites to designate as RH Overlay to increase residential development opportunities within SP7.

Medium High Density Residential Redesignations: This strategy utilizes the City's existing
Medium High Density Residential (RMH) land use designation (density range 15.0 to 25.0 dwelling
units/acre) to create housing opportunities in areas where residential development is
appropriate. For consistency with the proposed rezoning, the City proposes to redesignate three
candidate housing sites to RMH.

Housing Constraints

The HEU also includes the identification and an analysis of non-governmental and governmental constraints to providing adequate housing at all income levels, including housing for people with disabilities. Governmental constraints include, but are not limited to, development standards and building codes, land use controls, and permitting processes. Nongovernmental or market constraints, include but are not limited to land costs, construction costs, and availability of finances. Combined, these factors create barriers to availability and affordability of new housing, especially for lower and moderate-income households. The HEU identifies specific standards and methods to evaluate the impact of each of these constraints to the supply and affordability of housing.

3.5 City Housing Element Organization

The Housing Element, which has been prepared in compliance with State Housing Element law, contains the following components:

Section 1: Introduction: contains a summary of the content, organization, and statutory considerations of the Housing Element;

Section 2: Community Profile: contains an analysis of the City's population, household and employment base, and the characteristics of the housing stock;

Section 3: Housing Constraints, Resources, and Affirmatively Furthering Fair Housing examines governmental and non-governmental constraints on production, maintenance, and affordability of housing and provides a summary of housing resources, including sites identification and funding and financial considerations; and

Section 4: Policy Plan addresses Huntington Beach's identified housing needs, including housing goals, policies, and programs.

Appendices provides various appendices with supplementary background resources including:

- Appendix A, Review Past Performance of 5th Cycle Housing Element Programs
- Appendix B, Summary of Adequate Sites Analysis
- Appendix C, Summary of Community Outreach and Engagement

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Goals and Programs

As required by State Housing Element law, the HEU includes a Housing Plan to facilitate and encourage the provision of housing to meet the City's RHNA requirement. The Housing Plan includes specific goals, policies, and programs intended to address the City's housing needs and meet the City's current housing goals, which are:

Housing Goal #1: Maintain and enhance the quality and affordability of existing housing in Huntington Beach.

- Program 1A Housing Rehab Loan Program
- Program 1B Multi-Family Acquisition and Rehabilitation
- Program 1C Neighborhood Preservation Program
- Program 1D Preservation of Assisted Rental Housing
- Program 1E. Housing Authority Rental Assistance
- Program 1F Tenant-Based Rental Assistance
- Program 1G Mobile Home Park Preservation

Housing Goal #2: Provide adequate sites to accommodate projected housing unit needs at all income levels identified by the 2021-2029 RHNA.

- Program 2A Adequate Sites
- Program 2B Establish Affordable Housing Overlay Zone
- Program 2C Replacement Housing
- Program 2D Actively Promote, Encourage, and Facilitate the Development of Accessory Dwelling Units
- Program 2E ADU Monitoring Program
- Program 2F Candidate Sites Identified in Previous Housing Elements
- Program 2G Safety Element Update and Environmental Justice Policies
- Program 2H Water and Sewer Service Providers

Housing Goal #3: Provide for safe and decent housing for all economic segments of the community.

- Program 3A Affordable Housing Program and Housing Trust Fund
- Program 3B Affordable Housing Development Assistance

Housing Goal #4: Reduce governmental constraints to housing production with an emphasis on improving processes for projects that provide on-site affordable units.

Program 4A Actively Promote the City's Development Assistance Team

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- Program 4B Actively Promote and Improve the Electronic Permitting Process (Online Permit Center).
- Program 4C Monitor Legislative Changes
- Program 4D Small Lot Ordinance Amendment
- Program 4E Zoning Code Maintenance

Housing Goal #5: Promote equal housing opportunities for all residents, including Huntington Beach's special needs populations.

- Program 5A Housing Opportunities for Persons Living with Special Needs and/or Developmental Disabilities
- Program 5B Low Barrier Navigation Center
- Program 5C Farmworker Housing
- Program 5D Group Homes

Housing Goal #6: Promote a healthy and sustainable Huntington Beach through support of housing at all income levels that minimizes reliance on natural resources and automobile use.

Program 6A Green Building and Sustainability

Housing Goal #7: Maximize solutions for those experiencing or at risk of homelessness.

- Program 7A System of Care and Housing for People Experiencing Homelessness
- Program 7B Homeless Task Force
- Program 7C Mobile Crisis Response Program
- Program 7D Services for People Experiencing or At-Risk of Homelessness
- Program 7E Huntington Beach Navigation Center and Permanent Supportive Housing
- Program 7F Proactively Seek and Leverage All Funding Options to Increase the Supply of Affordable Housing
- Program 7G Proactively Seek Funding for Hotel/Motel Conversions to Transitional and Supportive Housing

Housing Goal #8: Improve quality of life and promote placemaking with an emphasis on improving access to opportunities in low-resource areas.

- Program 8A Implement Funded Projects that Improve Quality of Life, Placemaking, and Access to Opportunity in Low Resource Areas
- Program 8B Proactively Seek all Funding Sources to Improve Quality of Life, Placemaking, and Access to Opportunity in Low Resource Areas
- Program 8C Childcare Facilities

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Housing Goal #9: Affirmatively further fair housing.

- Program 9A Provide Fair Housing Information and Education to Residents on the City's Website in English and Spanish
- Program 9B Actively Engage with Community Members and Organizations in Low Resource Areas
- Program 9C Density Bonus Projects
- Program 9D Coordinate with School Districts to Promote Access to Resources and Opportunities for Students Experiencing or At-Risk of Homelessness
- Program 9E Fair Housing Outreach and Enforcement

The goals and programs listed above are described throughout the Housing Plan with accompanying policies to achieve them. The goals, policies, and programs are provided in their entirety in Housing Element Update Section 4.

3.6 Housing Element Update – CEQA Project

The State CEQA Guidelines (§15378[a]) defines a "project" as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." The proposed HEU (i.e., the Project) does not propose new residential or other development on the 378 candidate housing sites evaluated in this SEIR; rather, it provides capacity for future development of approximately 19,738 housing units to meet the City's remaining unmet RHNA of 11,743 housing units (when accounting for 1,625 units associated with existing applications and projects that are currently under review), consistent with state law.

As discussed previously, only three candidate housing sites (Sites 3, 4, and 5) are proposed for rezoningall other sites would retain their existing underlying zoning. The development capacity of these three sites based on existing zoning is approximately 643,272 square feet of industrial uses and approximately 122,186 square feet of commercial uses; see **Table 3-3**. Because the HEU proposes to rezone Sites 3, 4, and 5, the Project would result in the following development capacity changes on these three sites:

- Approximately 643,272 square feet less of industrial uses;
- Approximately 122,186 square feet less of commercial uses; and
- Approximately 428 additional housing units.

However, to provide a conservative analysis, the CEQA Project analyzed in this SEIR does not take credit for the reduced industrial and commercial use development capacities. That is, the Project's impacts are not offset/decreased by the impacts that would otherwise be associated with the industrial and commercial uses being replaced by the HEU's anticipated residential uses.

It is noted, while the candidate housing sites' development capacity totals 19,738 housing units, this includes a 60 percent buffer, which is intended to serve as a sites contingency. Therefore, the CEQA Project analyzed in this SEIR assumes 11,743 additional housing units over existing conditions, which excludes the 60 percent buffer, and existing applications and current projects, since these have previously received CEQA clearance. The precise distribution of housing units on the candidate housing sites is not

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known. Therefore, for analysis purposes, the CEQA Project analyzed in this SEIR assumes the 11,743 additional housing units are comprised of the following:

- Rezones: Approximately 255 additional housing units;
- Housing Overlay Zones: Approximately 10,905 additional housing units;
- Hotel/Motel Conversions: Approximately 247 additional housing units; and
- Accessory Dwelling Units: Approximately 336 additional housing units.

These additional housing units are anticipated to result in a population growth of approximately 29,475 persons, assuming 2.51 persons per household.¹⁰

3.7 Future Development

Future housing development in the City will be processed in accordance with the applicable zoning regulations and development standards in effect at the time a project is submitted. Accessory dwelling units and hotel/motel conversions would be subject to a ministerial building permit unless they include a request for discretionary permit such as a variance, subdivision map, or other use permit.

The majority of new residential units would be accommodated through proposed HEU implementation programs, which would establish a new Affordable Housing Overlay in the Huntington Beach Zoning and Subdivision Ordinance (HBZSO) and amend the existing Affordable Housing Overlay within SP14. Both Affordable Housing Overlay zones would establish land use controls and development standards applicable to future residential projects. The Affordable Housing Overlay zones would also provide for ministerial development review of qualifying residential projects that provide at least 20 percent of the units for lower income households on site. These projects would be subject to a "by right" site plan review process. As part of the site plan review process, residential projects submitted pursuant to the Affordable Housing Overlay zones would be required to submit a Mitigation Measure Checklist identifying how the project would comply with the adopted City of Huntington Beach General Plan Update Program Environmental Impact Report (GPU PEIR) mitigation measures. Residential projects determined to be consistent with the Affordable Housing Overlay and other applicable HBZSO provisions identified by the City would not require a public hearing or further environmental/CEQA review. Residential project proposals not consistent with the provisions of the Affordable Housing Overlay and other applicable HBZSO provisions identified by the City may require discretionary and environmental reviews, including additional mitigation measures, as required by CEQA. Other residential projects not within the Affordable Housing Overlay zones would be subject to the applicable discretionary process required by the HBZSO and subsequent environmental review pursuant to CEQA.

Subdivisions

Subdivisions would be reviewed and approved in accordance with HBZSO Title 25 - *Subdivisions* and the Subdivision Map Act.

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State of California. May 2021. Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State — January 1, 2011-2021.

Subsequent Environmental Review

All future discretionary actions, including among others certain subdivision actions and use permits, to entitle future development would be subject to subsequent environmental review. Future discretionary actions must be examined in the light of this SEIR to determine whether any further environmental clearance is required. Future projects may tier from this program SEIR or the City may make a finding that sufficient environmental clearance is provided by this program SEIR, pursuant to State CEQA Guidelines §§15152, 15162 and 15168). The purpose of using a program EIR is to comprehensively consider a series of related projects and to streamline subsequent review of development projects.

3.8 Project Phasing

The Housing Element is a policy level document that presents the City's proposed policies and programs to achieve the City's housing objectives within the 2021-2029 planning period. Growth assumptions included in the HEU represent a theoretical development capacity (based on the City's RHNA allocation as determined by SCAG), which, consistent with the Housing Element planning period, is estimated to occur by 2029. The Project does not propose development, but rather is intended to accommodate and encourage housing development to accommodate projected housing needs at all income levels within the City. The 19,738 dwelling unit development capacity, inclusive of the buffer needed to meet the remaining unmet RHNA of 11,743 dwelling units, and planning period are based on theoretical conditions used to conduct a thorough and conservative analysis of potential environmental impacts that would result from future development accommodated by the HEU and corresponding updates to the LUE. The development capacity and planning period do not consider factors that influence the timing of development, such as economics and market forces, among others. Individual projects would occur incrementally over time, largely based on economic conditions, market demand, and other planning considerations.

The actual rate of housing development would be outside of the City's control and would be dictated by factors that influence development, as described above. Therefore, while the City's remaining unmet RHNA is 11,743 dwelling units, it is unlikely that the anticipated development would occur within the Housing Element's 2029 planning horizon. The HEU's intent is to provide the capacity (i.e., through modifications to existing land use designations and zoning classifications) for the housing market to adequately address housing needs for all income groups, rather than generating the full development capacity housing within the planning cycle. The HEU further directs the development capacity to occur where planned growth is best suited to occur. Therefore, to provide a conservative analysis of potential environmental impacts associated with the HEU implementation (i.e., a "worst-case" scenario environmentally) and corresponding updates to the LUE, this SEIR assumes Project buildout of all 11,743 dwelling units on any combination of the candidate housing sites by 2029.

3.9 Project Objectives

- Adopt State-mandated and locally desired programs to implement the City's Housing Element.
- Maintain and enhance the quality and affordability of existing housing in Huntington Beach.
- Provide adequate sites to accommodate projected housing unit needs at all income levels identified by the 2021-2029 RHNA.

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- Provide for safe and decent housing for all economic segments of the community.
- Reduce governmental constraints to housing production, with an emphasis on improving processes for projects that provide on-site affordable units.
- Promote equal housing opportunities for all residents, including Huntington Beach's special needs populations.
- Promote a healthy and sustainable Huntington Beach through support of housing at all income levels that minimizes reliance on natural resources and automobile use.
- Maximize solutions for those experiencing or at risk of homelessness.
- Improve quality of life and promote placemaking.
- Affirmatively further fair housing.

3.10 Discretionary Actions, Permits and other Project Approvals

This General Plan SEIR analyzes and discloses the environmental impacts associated with implementation of the HEU and all discretionary actions associated with the project in compliance with CEQA. In accordance with State CEQA Guidelines §§15050 and 15367, the City of Huntington Beach is the designated Lead Agency for the HEU/Project and as such, has principal authority and jurisdiction for the CEQA actions and HEU approval. Responsible agencies are agencies that have jurisdiction or some authority over one or more aspects of a project and/or identified mitigation measures. Trustee Agencies are State agencies that have jurisdiction over natural resources affected by a project.

As the Lead Agency, the City has jurisdiction over the following legislative and discretionary actions associated with the HEU:

- 1. **General Plan Amendment:** The HEU would require approval to replace the existing General Plan Housing Element with a new Housing Element and would require approval to amend the existing General Plan Land Use Element to reflect updated land use designations for specific properties to ensure compliance with the HEU rezoning/overlay program.
- 2. **Zoning Text Amendment:** The HEU would require approval of a Zone Text Amendment to revise applicable sections of both the City's Subdivision and Zoning Ordinance and applicable sections of Specific Plans affected by the HEU rezoning/overlay program.
- 3. **Zoning Map Amendment:** The HEU would require approval of a Zoning Map Amendment to resolve potential zoning inconsistencies resulting from adoption of the HEU rezoning/overlay program.

As the Trustee Agency, the California Department of Housing and Community Development has legislative authority over the following components associated with the HEU:

1. **Review and certify the Huntington Beach HEU**: CGC §65585 requires that all California localities adopt housing elements, as part of their general plans, and submit draft and adopted elements to HCD for review of consistency with State law.

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Additional Responsible/Trustee Agencies include the South Coast Air Quality Management District (SCAQMD) and the Santa Ana Regional Water Quality Control Board (Santa Ana RWQCB). SCAQMD works with the Lead Agencies to ensure that air quality, greenhouse gas, and health risk impacts from proposed projects are accurately evaluated and mitigated where feasible. The Santa Ana RWQCB is responsible for the protection, and where applicable, the enhancement of the quality of waters within the Santa Ana River Basin. The Santa Ana RWQCB also implements state and federal laws and regulations as they pertain to water quality.

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4.0 BASIS FOR CUMULATIVE ANALYSIS

4.1 Introduction

The California Environmental Quality Act (CEQA) Statute and Guidelines (State CEQA Guidelines) §15355 provides the following definition of cumulative impacts:

"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

- The individual effects may be changes resulting from a single project or a number of separate projects.
- The cumulative impact from several projects is the change in the environment which results from the HEU's incremental impact when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

State CEQA Guidelines §15130 further addresses the discussion of cumulative impacts, as follows:

- An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.
- If the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR should briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR.
- The EIR may conclude the project's contribution to a significant cumulative impact is less than cumulatively considerable and thus is not significant if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

Pursuant to State CEQA Guidelines §15130(b), the discussion of cumulative impacts shall be guided by the standards of practicality and reasonableness, and should include the following elements:

1. Either:

- A. A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
- B. A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projections may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.

- 2. When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.
- 3. Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.
- 4. A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available.
- 5. A reasonable analysis of the cumulative impacts of the relevant projects, including examination of reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

To determine the Project's potential cumulative impacts, this Subsequent Environmental Impact Report (SEIR) uses a summary of projections contained in an adopted plan (i.e., the *City of Huntington Beach General Plan*).

4.2 General Plan 2040 Projections – City of Huntington Beach Buildout

As noted above, CEQA allows the discussion of cumulative impacts to be based upon a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. The City of Huntington Beach General Plan, which was adopted in October 2017, contains land use, population, and employment growth projections for the City of Huntington Beach ("City" or "Huntington Beach") and its sphere of influence (SOI) area at buildout in 2040. Utilizing the General Plan allows for a broad, comprehensive projection of growth within the City's planning area.

Table 4-1: General Plan 2040 Buildout Land Use and Population Projections, presents the projected maximum residential land use and population at City buildout in 2040. As indicated in **Table 4-1**, at buildout in 2040, the City's housing stock is forecast to total approximately 85,403 dwelling units and population is forecast to total 211,051 persons. As also shown in **Table 4-1**, the City's housing stock and population are anticipated to grow approximately 3.4 percent and 7.2 percent, respectively, between 2021 and buildout in 2040.

Table 4-1: General Plan 2040 Buildout Land Use and Population Projections

Description	Existing Conditions (2021) ¹	General Plan Buildout (2040) ²	Estimated Future Growth (2021 - 2040) ⁴
Residential Land Uses (Dwelling Units)	82,620 Dwelling Units	85,403 Dwelling Units	+2,783 Dwelling Units (+3.4 %)
Persons per Household	2.51	2.47 ³	Not Applicable
Population (Persons)	196,874 Persons	211,051 Persons	+14,177 Persons (+7.2 %)

Notes:

- 1. State of California Department of Finance. 2021. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark*. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/ (accessed June 2021).
- City of Huntington Beach. 2017. City of Huntington Beach General Plan. https://www.huntingtonbeachca.gov/files/users/planning/HB-gPU Adopted-October-2017.pdf (accessed January 2022). Refer to Table LU-2: General Plan Development Capacity on page 2-25 for buildout residential dwelling units and discussion on page 4-8 for buildout population.
- 3. 211,051 persons / 85,403 Dwelling Units = 2.47 persons per household
- 4. Difference between 2040 forecast and 2021 existing.

The environmental impacts resulting from General Plan buildout were evaluated in the City of Huntington Beach General Plan Update Final Program Environmental Impact Report (GPU PEIR) (Atkins, August 2017) (State Clearinghouse No. 2015101032), which was certified by City Resolution No. 2017-40 on September 18, 2017.

4.3 Cumulative Buildout Assumptions

A key concept framing this SEIR's analysis is that growth projections reflect a theoretical buildout of the proposed Project's full capacity, which, is estimated to occur in 2029 consistent with the Housing Element planning period. However, the Southern California Association of Governments' (SCAG) 6th planning cycle (October 2021 to October 2029) is not intended to represent a time frame of when growth resulting from Project implementation is anticipated to occur, but rather, is a state-mandated planning period for housing needs. The actual rate of housing development would not be under the City's control, and rather would be driven by the factors that influence development. As discussed in detail in **Section 3.7: Project Phasing**, the Project's intent is not to generate the full buildout housing within the planning cycle, but to provide the capacity (i.e., land use designation and zoning) for the housing market to adequately address housing needs for all income groups and direct that capacity where planned growth is best suited to occur. Notwithstanding, this SEIR assumes full buildout of Project capacity by 2029 to provide a conservative analysis (i.e., a "worst-case" scenario environmentally).

Table 4-2: General Plan 2040 Buildout Plus Project Land Use and Population Projections, presents the projected maximum residential land use and population at City buildout in 2040 including the proposed Project. As indicated in **Table 4-2**, the City's housing stock is forecast to total approximately 97,146 dwelling units and the City's population is forecast to total 240,526 persons in 2040 with buildout of the General Plan and the proposed Project. These projections represent the cumulative development assumed in this SEIR.

240,526 Persons

General Plan Buildout Proposed Project Cumulative Development Description $(2040)^{1}$ $(2029)^2$ $(2040)^3$ **Residential Land Uses** 85,403 Dwelling Units 11,743 Dwelling Units 97,146 Dwelling Units (Dwelling Units) 2.47^{4} 2.51^{5} 2.48^{6} Persons per Household

29,475 Persons

Table 4-2: General Plan 2040 Buildout Plus Project Land Use and Population Projections

Notes:

Population (Persons)

- City of Huntington Beach. 2017. City of Huntington Beach General Plan. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU Adopted-October-2017.pdf (accessed January 2022). Refer to Table LU-2: General Plan Development Capacity on page 2-25 for buildout residential dwelling units and discussion on page 4-8 for buildout population.
- 2. Table 3-6: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units)

211,051 Persons

- 3. General Plan Buildout + Proposed Project
- 4. 211,051 persons / 85,403 Dwelling Units = 2.47 persons per household
- 5. State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State January 1, 2011-2021.* Sacramento, California, May 2021.
- 6. 240,526 persons / 97,146 Dwelling Units = 2.48 persons per household

4.4 Cumulative Buildout Approach

As discussed above, this SEIR uses a summary of projections contained in an adopted plan (see **Table 4-1**). **Section 5.0**: **Environmental Analysis**, assesses the cumulative impacts for each applicable environmental issue, and does so to a degree that reflects each impact's severity and likelihood of occurrence. As also discussed throughout **Section 5.0**, the geographic areas considered for the cumulative analyses vary according to environmental issue area and were determined based upon the Project's scope and anticipated area in which the Project could contribute to an incremental increase in cumulatively considerable impacts. Certain issues areas are most appropriately addressed at the local level, while other issue areas necessitate the consideration of regional, State, and/or national-scale implications. For example, the air quality considers the South Coast Air Basin (with discussions, where relevant, of Statewide and global conditions related to climate change). The Project's operational effects also have geographic scopes that are global (such as greenhouse gases), regional (such as air quality), and local (such as noise).

4.5 Significant Unavoidable Impacts¹

The GPU PEIR concluded the following significant unavoidable impacts would result from future development associated with the GPU, referenced below as "project."

Air Quality

Project Specific

Due to the theoretical nature of approximating emissions from individual projects at the programmatic level of the GPU, emissions could not be quantified (as there was no project-level data) to establish whether the South Coast Air Quality Management District (SCAQMD) thresholds would have been exceeded. Therefore, the GPU PEIR concluded that the project would result in a significant unavoidable

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City of Huntington Beach. 2017. City of Huntington Beach General Plan Update Final Program Environmental Impact Report. Page 2-4. https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08_04_17.pdf (accessed January 2022). Atkins: San Diego, CA.

air quality impact due to the violation of an air quality standard and exposure of sensitive receptors to substantial pollutant concentrations.

Cumulative

Due to the theoretical nature of approximating emissions from individual projects at the programmatic level of the GPU, emissions could not be quantified (as there was no project-level data) to establish whether the SCAQMD thresholds would have been exceeded in a region deemed to be in nonattainment. Therefore, the GPU PEIR concluded that the project would result in a cumulative contribution to an air quality impact, resulting in a significant unavoidable cumulative impact to air quality.

Cultural Resources

Project Specific

The GPU PEIR concluded that buildout of the GPU would not result in a project-specific significant unavoidable impact to cultural resources.

Cumulative

The GPU PEIR concluded that it was infeasible to determine whether future development associated with the GPU would result in demolition or removal of historical, archaeological, and paleontological resources within the planning area. Therefore, the GPU PEIR concluded that the incremental contribution of the GPU to these cumulative effects would be cumulatively considerable and would result in a significant unavoidable cumulative impact to cultural resources.

Greenhouse Gas Emissions

Project Specific

The GPU PEIR noted that topic of greenhouse gas (GHG) emissions is fundamentally a cumulative impact. As such, the GPU PEIR concluded that the GPU would not result in a project-specific significant unavoidable impact to GHG.

Cumulative

As previously stated, the GPU PEIR noted that the topic of GHG emissions is fundamentally a cumulative impact. The GPU PEIR concluded that the while full implementation of the draft Greenhouse Gas Reduction Program (GGRP) would reduce emissions below reduction targets, as the City is not bound by laws or regulations to implement the draft GGRP, there is no certainty that emissions would be reduced to necessary levels. The GPU PEIR also concluded that the draft GGRP does not analyze GHG emissions associated with specific potential future development projects; therefore, forecasted GHG emissions may differ substantially from actual future emissions when implementation of the GPU initiates. As such, the GPU PEIR concluded that the GPU would result in a significant unavoidable cumulative impact due to the generation of GHG emissions and the potential conflict with an applicable plan.

Noise

Project Specific

The GPU PEIR noted that the GPU would result in an increase in average daily trips (ADT) associated with future development, thereby increasing ambient noise levels across the City due to roadway noise levels. Some of roadway noise levels would exceed established thresholds. As the increase in ambient noise levels is vehicle-related, GPU PEIR determined that there are no feasible mitigation measures that would reduce ambient noise levels and exposure below the identified thresholds. Therefore, the GPU PEIR concluded that the GPU would result in a project-specific significant unavoidable noise impact.

Additionally, GPU PEIR noted that the future development under the GPU has the potential to generate construction vibration levels in exceedance of established thresholds at nearby sensitive receptors (i.e., those within 50 feet of piling activities). Although future development would comply with General Plan Policies N-4.A and N-4.D and implementation of Mitigation Measure (MM) 4.10-5 would help to reduce impacts, the GPU PEIR determined that construction vibration levels would not be reduced to a level that would be less than significant. Therefore, the GPU PEIR concluded that the GPU would result in a project-specific (and temporary) significant unavoidable impact due to construction vibration levels.

Cumulative

The GPU PEIR noted that the GPU would result in an increase in average daily trips (ADT) associated with future development, thereby increasing ambient noise levels across the City due to roadway noise levels, some of which exceed established thresholds. As the increase in ambient noise levels is vehicle-related, GPU PEIR determined that there are no feasible mitigation measures that would reduce ambient noise levels and exposure below the identified thresholds and the GPU PEIR determined that GPU would result in a cumulatively considerable contribution to noise levels in the region. Therefore, the GPU PEIR concluded that the GPU would result in a significant unavoidable cumulative noise impact.

Ultimately, the GPU PEIR concluded that the project would expose persons to or generate excessive groundborne vibration or groundborne noise levels due to construction, and that the project would result in a substantial permanent increase in ambient noise levels in the project area above levels existing without the project.

Utilities and Service Systems

Project Specific

Given the uncertainty of water supply across the western United States and throughout California, the GPU PEIR determined that a future supply deficit would result in a significant unavoidable impact. Until such time that greater confidence in and commitment from water suppliers can be made, the GPU PEIR concluded that the GPU would result in a significant unavoidable project-specific impact.

Cumulative

As with the project-specific impact, given the uncertainty of water supply across the western United States and throughout California, the GPU PEIR determined that a future supply deficit would result in a significant unavoidable impact. Until such time as greater confidence in and commitment from water suppliers can be made, the GPU PEIR concluded that the GPU would result in a cumulatively considerable contribution to water demand, therefore, resulting in a significant unavoidable cumulative impact.

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5.0 ENVIRONMENTAL ANALYSIS

Sections 5.1 through **5.15** evaluate the potential environmental impacts that could result from implementation of the proposed Project (i.e., Housing Element Update (HEU)), which would facilitate housing development on the candidate housing sites and accessory dwelling unit sites throughout the City. Implementation of the HEU is anticipated to occur over the next eight years, which constitutes the City's planning period from 2021 to 2029 to meet the State's Regional Housing Needs Assessment (RHNA) allocation. Potential impacts are assessed against the existing conditions, long-term implementation horizon year of 2029, criteria for determining the significance of potential environmental impacts, analyses of the type and magnitude of environmental impacts, and feasible mitigation measures that would avoid or reduce significant environmental impacts.

5.0.1 Subsequent Environmental Impact Report and State CEQA Guidelines §15162

This Subsequent Environmental Impact Report (SEIR) is being prepared pursuant to State California Environmental Quality Act (CEQA) Guidelines §15162(3)(A) and (B). The City's General Plan Update (GPU) Program EIR (PEIR) (State Clearinghouse No. 2015101032) (Atkins, August 2017) analyzed impacts associated with an overall development capacity of 7,228 residential units and 5,384,920 square feet of non-residential land uses above the City's existing (2014) conditions, over an approximate 25-year planning horizon (to 2040). The 6th Cycle HEU RHNA of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. In addition, the GPU PEIR did not evaluate recently adopted thresholds concerning Energy, Tribal Cultural Resources, and Wildfire. This SEIR will contain only the information necessary to make the previous GPU PEIR adequate for the Project (i.e., residential development). Key to this SEIR's analysis is to evaluate whether the changes resulting from the Project result in new significant impacts compared to GPU (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIRthe adopted PEIR 08 04 17.pdf).

5.0.2 Program Environmental Impact Report and State CEQA Guidelines §15168

This EIR is both a SEIR, as discussed above, and a "Program EIR" (Program SEIR). This Program SEIR analyzes the potential environmental impacts that could result from Project implementation at a programmatic level. That is, this Program SEIR assesses future development of 11,743 dwelling units on any combination of the 378 candidate housing sites, without assessing any individual projects. This Program SEIR differs from a "Project EIR" in that no specific projects will be analyzed/approved by this SEIR. Further analysis of the future housing development was not conducted because the City had no further information and would be too speculative to base an analysis of potential impacts resulting from future housing development facilitated by the HEU. In general, the degree and depth of analyses was conducted commensurate with the degree of detail available concerning the future housing development

(e.g., location, land use type, and density). As such, potential changes that were considered speculative or unlikely to occur were therefore, considered not reasonably foreseeable.

5.0.3 Section Content and Definition of Terms

The environmental setting, potential environmental impacts, and mitigation measures related to each environmental resource area are described in the following sections:

- Section 5.1: Air Quality
- Section 5.2: Cultural Resources
- Section 5.3: Energy
- Section 5.4: Geology and Soils
- Section 5.5: Greenhouse Gas Emissions
- Section 5.6: Hazards and Hazardous Materials
- Section 5.7: Hydrology and Water Quality

- Section 5.8: Land Use and Planning
- Section 5.9: Noise
- Section 5.10: Population and Housing
- Section 5.11: Public Services
- Section 5.12: Recreation
- Section 5.13: Transportation
- Section 5.14: Tribal Cultural Resources
- Section 5.15: Utilities and Service Systems

Each potentially significant environmental issue area is addressed in **Sections 5.1** through **5.15**, which are organized into the following Subsections:

- "Existing Regulatory Setting" identifies the plans, policies, laws, and regulations that are relevant to each resource area and describes permits and other approvals necessary to implement future housing projects. Applicable federal, state, regional and local plans, policies, and regulations are identified. This subsection summarizes or lists the potentially relevant policies and regulations, such as from the City of Huntington Beach GPU, Huntington Beach Municipal Code, and regional plans applicable to the respective environmental issue areas. Compliance with these applicable regulations and policies is compulsory unless otherwise noted. Therefore, as it relates to the impact analysis, compliance with relevant policy and standards is assumed because the regulatory framework that is in effect requires it, and mitigation would generally not be required when compliance with the established regulatory framework would either avoid or reduce a significant impact to a level below significance.
- "Existing Environmental Setting" provides an overview of the existing physical environmental conditions in the study area that could be affected by implementation of the Project (i.e., the "affected environment"). In accordance with CEQA Statute and Guidelines (State CEQA Guidelines §15125), each environmental resource section includes a description of the existing physical environmental conditions in the Project area to provide the "baseline condition" against which Project-related impacts are compared. Typically, the baseline condition is the physical condition that exists when the Notice of Preparation (NOP) is published; however, a different baseline may be used in specific cases where it is deemed appropriate. For the Project, the environmental setting described in each of the following sections is that which existed on August 4, 2021, the date the NOP was published.

- "Impact Thresholds and Significance Criteria" provides the impact thresholds and significance criteria used to define the level at which an impact would be considered significant in accordance with CEQA and based on the type, amount, and/or extent of impact that would be considered a significant adverse change in the environment. Significance criteria are based on the City's Environmental Checklist Form, factual or scientific information and data, and regulatory federal, state, and local agency standards. For some resource areas, the thresholds are quantitative (e.g., transportation), while for other resource areas, the thresholds are qualitative (e.g., aesthetics). The thresholds of significance are intended to assist the reader in understanding how an impact is determined to be significant or less than significant.
- "Methodology" describes the means by which environmental impacts are determined.
- "Project Impacts and Mitigation" are listed numerically and sequentially throughout each section, for each threshold issue and question.
 - "GPU PEIR" identifies the volume and page number where each threshold issue is addressed in the GPU PEIR and provides a summary of the conclusions found in the GPU PEIR.
 - "Impact Analysis" evaluates, as appropriate, the direct, indirect, short-term, long-term, on-site, and/or off-site Project impacts for the environmental issue being analyzed.

The following terms are used to describe the level of significance of impacts identified by the environmental analysis:

- **No Impact:** This term is used when the Project would have no adverse effect on an environmental resource.
- Less than Significant: This term is used to refer to impacts resulting from Project implementation that are not likely to exceed a defined threshold of significance. This term is also used to refer to potentially significant impacts that are reduced to a level that does not exceed the defined thresholds of significance after implementation of mitigation measures.
- Significant Impact: This term is used to refer to impacts resulting from Project implementation that exceed a defined threshold of significance before identification of any mitigation measures. State CEQA Guidelines §15382 states that a "significant effect" is "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the Project including land, air, water, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment [but] may be considered in determining whether the physical change is significant." For impacts that exceed a threshold of significance, mitigation measures that avoid or reduce the potential impact are identified, which may cause the impact to be reclassified as follows:
 - No impact if it is avoided,
 - Less than significant if the severity of the impact is sufficiently reduced to below a threshold of significance, or

- Significant unavoidable if the severity of the impact is not sufficiently reduced to below a threshold of significance and the impact remains significant despite mitigation.
- "Mitigation Measures" "describes feasible measures which could minimize significant adverse impacts" as required by State CEQA Guidelines §15126.4. The State CEQA Guidelines define feasibility as "capable of being accomplished in a successful manner within a reasonable period of time taking into account economic, legal, social, technological, or other considerations." This subsection lists the mitigation measures that could avoid or reduce the severity of impacts. Each mitigation measure is identified by resource area, numerically, and sequentially if proposed.

As discussed in Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162 above, this EIR is a SEIR to the City's GPU PEIR, and thus, relies as needed on the GPU PEIR's mitigation measures to avoid or lessen environmental impacts. Where updates to the GPU PEIR mitigation measures were necessary to ensure compliance with current City regulations, these are indicated by "deleted text" and "added text." For future residential development subject to discretionary review, compliance with the applicable GPU PEIR mitigation measures would be confirmed through the discretionary review process. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures.

- "Cumulative Impacts" identifies potential environmental impacts resulting from General Plan buildout, as concluded in the GPU PEIR, combined with the proposed Project.
- **Significant Unavoidable Impact"** presents significant unavoidable impacts, if any, resulting from Project implementation.
- "References" contains references and links that cite public information and/or technical studies that were used to write the respective sections.

5.1 AIR QUALITY

5.1.1 Introduction

The section identifies existing air quality conditions in the Project area and evaluates the Project's potential to conflict with an air quality plan; violate any air quality standards; result in a cumulative increase of a criteria pollutant; expose sensitive receptors to pollutants; and create objectionable odors. Mitigation to avoid/reduce impacts is identified, as needed.

The Subsequent Environmental Impact Report (SEIR) evaluates the candidate housing sites based on information available to the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect impacts to air quality could be considered. More specifically, the information in this section is based on the City of Huntington Beach General Plan (General Plan) and the Huntington Beach General Plan Update Program Environmental Impact Report (GPU PEIR), the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP), the California Air Resources Board (CARB), and U.S. Environmental Protection Agency (EPA).

5.1.2 Existing Regulatory Setting

As discussed below, the federal and State governments have been empowered by the Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA), respectively, to regulate airborne pollutant emissions and have established ambient air quality standards for the protection of public health. The U.S. EPA is the federal agency designated to administer air quality regulation, while CARB is the state equivalent. Local control in air quality management is provided by CARB through county-level or regional (multi-county) air pollution control districts (APCDs). CARB establishes air quality standards and is responsible for control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. CARB has established 14 air basins statewide.

Federal

Federal Clean Air Act

The Federal Clean Air Act (FCAA), passed in 1970 and last amended in 1990, is the basis for national air pollution control. The U.S. EPA is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for major air pollutants; setting hazardous air pollutants (HAPs) standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric O_3 protection measures, and enforcement provisions. The 1990 FCAA amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the U.S. The FCAA allows states to adopt more stringent standards or to include other pollution species.

National Ambient Air Quality Standards

The FCAA requires the U.S. EPA to establish primary and secondary NAAQS for a number of criteria air pollutants. The air pollutants for which standards have been established are considered the most

prevalent air pollutants that are known to be hazardous to human health. NAAQS have been established for the following pollutants: O_3 , CO, SO_2 , PM_{10} , $PM_{2.5}$, and lead.

Title III of the Federal Clean Air Act

As discussed above, HAPs are the air contaminants identified by the U.S. EPA as known or suspected to cause cancer, other serious illnesses, birth defects, or death. The FCAA requires the U.S. EPA to set standards for these pollutants and reduce emissions of controlled chemicals. Specifically, Title III of the FCAA requires the U.S. EPA to promulgate National Emissions Standards for Hazardous Air Pollutants (NESHAP) for certain categories of sources that emit one or more pollutants that are identified as HAPs. The FCAA also requires the U.S. EPA to set standards to control emissions of HAPs through mobile source control programs. These include programs that reformulated gasoline, national low emissions vehicle standards, Tier 2 motor vehicle emission standards, gasoline sulfur control requirements, and heavy-duty engine standards.

HAPs tend to be localized and are found in relatively low concentrations in ambient air. However, they can result in adverse chronic health effects if exposure to low concentrations occurs for long periods. Many HAPs originate from human activities, such as fuel combustion and solvent use. Emission standards may differ between "major sources" and "area sources" of the HAPs/toxic air contaminants (TACs). Under the FCAA, major sources are defined as stationary sources with the potential to emit more than 10 tons per year (tpy) of any one HAP or more than 25 tpy of any combination of HAPs; all other sources are considered area sources. Mobile source air toxics (MSATs) are a subset of the 188 HAPs. Of the 21 HAPs identified by the U.S. EPA as MSATs, a priority list of six HAPs was identified that include: diesel exhaust, benzene, formaldehyde, acetaldehyde, acrolein, and 1, 3-butadiene. While vehicle miles traveled (VMT) in the United States are expected to increase by 45 percent over the period 2010 to 2050, a combined reduction of 91 percent in the total annual emissions for the priority MSAT is projected for the same time period.

State

California Clean Air Act

The CCAA, signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. CARB is the state air pollution control agency and is a part of the California Environmental Protection Agency (CalEPA). CARB is the agency responsible for coordination and oversight of state and local air pollution control programs in the state, and for implementing the requirements of the CCAA. CARB overseas local district compliance with state and federal laws, approves local air quality plans, submits the State Implementation Plans (SIPs) to U.S. EPA, monitors air quality, determines and updates area designations and maps, and sets emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

California Ambient Air Quality Standards

The CCAA requires CARB to establish CAAQS. Similar to the NAAQS, CAAQS have been established for the following pollutants: O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, lead, vinyl chloride, hydrogen sulfide, sulfates, and visibility-reducing particulates. In most cases, the CAAQS are more stringent than the NAAQS. The CCAA

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requires that all local air districts in the state endeavor to achieve and maintain the CAAQS by the earliest practical date. The CCAA specifies that local air districts should focus particular attention on reducing the emissions from transportation and area-wide emission sources and provides districts with the authority to regulate indirect sources. The CAAQS and NAAQS are presented in **Table 5.1-1: National and California Ambient Air Quality Standards**.

Table 5.1-1: National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California Chandanda	Federal Standards			
Pollutant	Averaging time	California Standards	Primary ¹	Secondary ²		
0	1 Hour	0.09 ppm (180 μg/m³)	-	-		
O ₃	8 Hour	0.070 ppm (137 μm/m³)	0.070 ppm (137 μg/m³)	Same as Primary		
PM ₁₀	24 Hour	50 μg/m³	150 μg/m³	Same as Primary		
PIVI ₁₀	AAM	20 μg/m³	-	-		
DNA	24 Hour	_	35 μg/m³	Same as Primary		
PM _{2.5}	AAM	12 μg/m³	12.0 μg/m³ 35 ppm (50 mg/m³) 9 ppm (10 mg/m³) (m³) 0.100 ppm (188 μg/m³) (m³) 0.053 ppm (100 μg/m³) (m³) 0.075 ppm (196 μg/m³) –	15.0 μg/m³		
СО	1 Hour	20 ppm (23 mg/m ³)	12.0 μg/m³ 35 ppm (50 mg/m³) 9 ppm (10 mg/m³) 0.100 ppm (188 μg/m³) 0.053 ppm (100 μg/m³) 0.075 ppm (196 μg/m³) - 0.14 ppm (365 μg/m³) 0.030 ppm (80 μg/m³)	-		
	8 Hour	9.0 ppm (10 mg/m³)	9 ppm (10 mg/m³)	-		
NO ₂	1 Hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	-		
1002	AAM	0.030 ppm (57 μg/m³)	$0.053 \text{ ppm} (100 \mu\text{g/m}^3)$	Same as Primary		
	1 Hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m³)	-		
so	3 Hour	_	1	0.5 ppm (1,300 μg/m³)		
SO ₂	24 Hour	0.04 ppm (105 μg/m³)	0.14 ppm (365 μg/m³)	_		
	AAM	-	$0.030 \text{ppm} (80 \mu\text{g/m}^3)$			
	30-day Avg.	1.5 μg/m³	_	-		
Lead	Calendar Quarter	-	1.5 μg/m³	- Same as Primary		
	Rolling 3-month Avg.	_	0.15 μg/m³			
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles				
Sulfates	24 Hour	24 μg/m3	No Fodoral Standards			
Hydrogen Sulfide (H₂S)	1 Hour	0.03 ppm (42 μg/m³)	No Federal Standards			
Vinyl Chloride	24 Hour	0.01 ppm (26 μg/m³)				
Source: CARB, 20	16					

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¹ National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

² National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

³ O₃: ozone; PM₁₀: large particulate matter; PM_{2.5}: fine particulate matter; CO: carbon monoxide; NO₂: nitrogen dioxide; SO₂: sulfur dioxide; ppm: parts per million; ②g/m³: micrograms per cubic meter; mg/m³: milligrams per cubic meter; km: kilometer; -: No Standard.

Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act

TACs in California primarily are regulated through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588, also known as the Hot Spots Act). As discussed above, HAPs/TACs are a broad class of compounds known to cause morbidity or mortality (i.e., cancer risk). HAPs/TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. Research, public participation, and scientific peer review are necessary before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted the U.S. EPA's list of HAPs as TACs. In 1998, DPM was added to CARB's TACs list. Once a TAC is identified, CARB adopts an Airborne Toxic Control Measure for sources that emit that particular TAC. If a safe threshold exists at which no toxic effect occurs from a substance, the control measure must reduce exposure below that threshold. If no safe threshold exists, the measure must incorporate Best Available Control Technology (BACT) to minimize emissions.

The Hot Spots Act requires existing facilities that emit toxic substances above a specified level to prepare a toxic emissions inventory and a risk assessment if the emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

CARB Air Quality and Land Use Handbook

In April 2005, CARB released the final version of its Air Quality and Land Use Handbook: A Community Health Perspective. This guidance document is intended to encourage local land use agencies to consider the risks from air pollution before they approve the siting of sensitive land uses (e.g., residences) near sources of air pollution, particularly TACs (e.g., freeway and high traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities). These advisory recommendations include general setbacks or buffers from air pollution sources. However, unlike industrial or stationary sources of air pollution, the siting of new sensitive land use does not require air quality permits or approval by air districts, and as noted above, the CARB handbook provides guidance only rather than binding regulations.

CARB 2017 Technical Advisory (Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways)

CARB published a Technical Advisory in 2017 to provide planners and other stakeholders involved in land use planning and decision-making with information on scientifically based strategies to reduce exposure to traffic emissions near high-volume roadways. Near-roadway development is a result of a variety of factors, including economic growth, demand for built environment uses, and the scarcity of developable land in some areas. The Technical Advisory notes that research has demonstrated the public health, climate, financial, and other benefits of compact, infill development along transportation corridors, and demonstrates that planners, developers, and local governments can pursue infill development while simultaneously reducing exposure to traffic-related pollution. On-site strategies to remove air pollution

identified in the Technical Advisory include the use of particle filtration systems (i.e., high efficiency filtration in mechanical ventilation systems), solid barriers, and vegetation.

CAPCOA Health Risk Assessments for Proposed Land Use Projects

The California Air Pollution Control Officer's Association (CAPCOA), which is a consortium of air district managers throughout the state, provides guidance material to addressing air quality issues in the state. As a follow up to CARB's 2005 Air Quality and Land Use Handbook, CAPCOA prepared the Health Risk Assessments for Proposed Land Use Projects. CAPCOA released this guidance document to ensure that the health risk of projects be identified, assessed, and avoid or mitigated, if feasible, through the CEQA process. The CAPCOA guidance document provides recommended methodologies for evaluating health risk impacts for development projects.

CalEnviroScreen

OEHHA has developed CalEnviroScreen 4.0, which is a mapping tool that helps identify California communities that are most affected by many sources of pollution, and where people are often especially vulnerable to pollution's effects. CalEnviroScreen uses environmental, health, and socioeconomic information to produce scores for every census tract in the State. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores.

According to CalEnviroScreen, Huntington Beach has one Census Tract (6059099402) bordered by Warner Avenue, Beach Boulevard, Talbert Avenue and Goldenwest Street that ranks in the 73rd percentile for environmental justice considerations in the state and the 93rd pollution burden percentile.⁴ It is noted that the CalEnviroScreen scores are not an expression of health risk, and do not provide quantitative information on increases in cumulative impacts for specific sites or projects. In the case of Census Tract 6059099402, these results mean that in the State, 27 percent of the census tracts have higher environmental justice consideration scores and only 7 percent of census tracts have higher pollution burden scores. However, this does not mean that this area is inherently unhealthy or unsafe. As a comparative screening tool, these results do not provide a basis for determining when differences between scores are significant in relation to public health or the environment.

Assembly Bill 117

State law (AB 117) allows local governments to form Community Choice Energy (CCE), also known as Community Choice Aggregation (CCA), programs that offer an alternative electric power option to constituents (i.e., customers) currently served electric power by investor-owned utilities (IOUs), such as SoCal Gas. Under the CCE model, local governments purchase and manage their community's electric power supply by sourcing power from a preferred mix of traditional and renewable generation sources, while the incumbent IOU (SoCal Gas) continues to provide distribution service. This gives CCEs the opportunity to design and potentially reduce retail rates for their constituents, provide customer choice,

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⁴ California Office of Health Hazard Assessment, CalEnviroScreen 4.0, https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40, accessed May 2022.

promote local economic development, and offer a cleaner power supply. See **Section 4.11: Energy** for a further discussion of AB 117 and potential energy impacts.

California Public Utilities Code Section 366.2

The State Public Utilities Code Section 366.2, or Community Choice Aggregation (CCA) Program, requires an ordinance from participating member agencies authorizing the implementation of a CCA Program for the respective jurisdiction. See **Section 4.11: Energy** for a further discussion of the CCA program.

Regional

South Coast Air Quality Management District

The SCAQMD is one of 35 air districts in California and is the agency principally responsible for comprehensive air pollution control in the South Coast Air Basin (SCAB). To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and cooperates actively with all federal and state government agencies.

The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

The SCAQMD and SCAG prepared the 2016 AQMP, which addresses federal and state CAA requirements. The 2016 AQMP was approved on March 3, 2017, by the SCAQMD Governing Board. It should be noted that SCAQMD is in the process of preparing the 2022 AQMP, but it has not been adopted yet. Therefore, the appropriate document regulating air quality in region at this time is still the 2016 AQMP. The purpose of the AQMP is to set forth a comprehensive and integrated program that will lead the SCAB into compliance with the national 24-hour PM_{2.5} air quality standard, to provide an update to the SCAB's commitments toward meeting the national 8-hour ozone standards, and to establish programs and integrate planning efforts of all levels of government to reduce levels of common air pollutants. The AQMP also serves to satisfy the EPA as the State Implementation Plan and serves as the SCAQMD portion of the official SIP submittal for the national 2006 24-hour PM_{2.5} standard. Finally, the AQMP updated specific new control measures and commitments for emissions reductions to implement that attainment strategy for the 8-hour ozone State Implementation Plan and helped to reduce reliance on long-term measures. The AQMP established programs which require integrated planning efforts and the cooperation of all levels of government: local, regional, state, and federal in order to reduce levels of common air pollutants.

The AQMP includes new information on key elements such as current air quality; improved emission inventories, especially significant increases in mobile source emissions; an overall control strategy comprised of stationary and mobile source control measures, SCAQMD, federal and state stationary and mobile source control measures, and the SCAG Regional Transportation Strategy and Control Measures; new attainment demonstration for PM_{2.5} and ozone; milestones to the Federal Reasonable Further Progress Plan; and preliminary motor vehicle emission budgets for transportation conformity purposes.

In addition to the AQMP, and rules and regulations set by the SCAQMD, the SCAQMD published the California Environmental Quality Act (CEQA) Air Quality Handbook, which provides guidance to assist local

government agencies and consultants in developing the environmental documents required by CEQA. With the help of the CEQA Air Quality Handbook, local land use planners and other consultants are able to analyze and document how proposed and existing projects affect air quality and should be able to fulfill the requirements of the CEQA review process. SCAQMD is in the process of developing an Air Quality Analysis Guidance Handbook to replace the current CEQA Air Quality Handbook approved by the SCAQMD Governing Board in 1993.

Multiple Air Toxics Exposure Study

The SCAQMD conducted an in-depth analysis of the toxic air contaminants and their resulting health risks for all of southern California. The Multiple Air Toxics Exposure Study in the SCAB (MATES V) (August 2021) shows that carcinogenic risk from air toxics in the SCAB, based on the average concentrations at the 10 monitoring sites, is approximately 40 percent lower than the monitored average in the MATES IV study (published May 2015) and 84 percent lower than the average in the MATES II study (published March 2000).

MATES V is the most comprehensive dataset documenting the ambient air toxic levels and health risks associated with the SCAB emissions. Therefore, MATES V study represents the baseline health risk for a cumulative analysis. MATES V estimates the average excess cancer risk level from exposure to TACs is 424 in one million basins wide. In comparison, the MATES IV basin average risk was 897 per million. These model estimates were based on monitoring data collected at 10 fixed sites within the SCAB. None of the fixed monitoring sites are near any of the candidate housing sites. However, MATES V has extrapolated the excess cancer risk levels throughout the SCAB by modeling the specific grids. MATES V modeling predicted an excess cancer risk of 410 in one million for the Project area. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68.5 percent of the total risk shown in MATES V in this area.

Southern California Association of Governments

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and serves as a forum for regional issues relating to transportation, the economy, community development and the environment. SCAG serves as the federally designated metropolitan planning organization for the southern California region, and is the largest metropolitan planning organization in the United States. Concerning air quality planning, SCAG has prepared the Regional Comprehensive Plan and Guide for the region, which includes Growth Management and Regional Mobility chapters that form the basis for the land use and transportation control portions of the AQMP. SCAG is responsible under the CAA for determining transportation conformity of projects, plans, and programs with the SCAQMD.

Lead State Implementation Plan

The 2012 Lead State Implementation Plan for Los Angeles County outlines the control strategies for lead emission sources, describes lead air quality and inventory, and describes planning and pollution control

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South Coast Air Quality Management District, MATES V Estimated Risk, https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/Main-Page/?data_id=dataSource_105-a5ba9580e3aa43508a793fac819a5a4d%3A429&views=Cancer-Risk%2CClick-the-map-to-see-data

activities to demonstrate attainment of the Lead NAAQS no later than December 31, 2015. Rule 1420, "Emissions Standards for Lead," was adopted September 11, 1992, and its goal is to reduce emissions of lead from non-vehicular sources. Rule 1420.1 was adopted to establish additional requirements for large facilities that process more than 50,000 tons of lead annually, including an ambient lead concentration limit of $0.15 \, \mu g/m^3$.

SCAQMD Rules and Regulations

All projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules that may be applicable in the planning area include the following:

- Rule 401—Visible Emissions. A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines, or of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (b)(1)(A) of this rule.
- Rule 402—Nuisance. A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.
- Rule 403—Fugitive Dust. This rule is intended to reduce the amount of particulate matter
 entrained in the ambient air as a result of man-made fugitive dust sources by requiring actions to
 prevent, reduce or mitigate fugitive dust emissions. Rule 403 applies to any activity or man-made
 condition capable of generating fugitive dust.
- Rule 445—Wood-Burning Devices. This rule prohibits permanently installed wood burning devices
 in any new development. A wood burning device means any fireplace, wood burning heater, or
 pellet-fueled wood heater, or any similarly enclosed, permanently installed, indoor or outdoor
 device burning any solid fuel for aesthetic or space-heating purposes, which has a heat input of
 less than one million British thermal units per hour.
- Rule 1113—Architectural Coatings. No person shall apply or solicit the application of any architectural coating within SCAQMD, with VOC content in excess of the values specified in a table incorporated in the Rule.
- Rule 1146.2—Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters. This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NO_X emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.

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- Rule 1120—Asphalt Pavement Heaters. A person shall not operate an asphalt pavement surface
 heater or an asphalt heater-remixer for the purpose of maintaining, reconditioning,
 reconstructing, or removing asphalt pavement unless certain criteria are met.
- Rule 1186–PM₁₀ Emissions from Paved and Unpaved Roads. This rule applies to owners and owners of paved and unpaved roads. The rule is intended to reduce PM₁₀ emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads.
- Rule 1401—New Source Review of Toxic Air Contaminants. This rule specifies limits for maximum
 individual cancer risk (MICR) cancer burden, and non-cancer acute and chronic hazard index (HI)
 from new sources which emit TACs.

In addition to the rules listed above, SCAQMD has developed an air quality guidance document with suggested measures to reduce the amount of fugitive dust that is re-entrained into the atmosphere from unpaved areas, parking lots and construction sites.⁶

Local

City of Huntington Beach General Plan

Environmental Resources and Conservation Element⁷

The General Plan Environmental Resources and Conservation Element establishes goals and policies to protect and conserve Huntington Beach's environmental resources and address air quality and greenhouse gas emissions. The following Environmental Resources and Conservation Element goals and policies are relevant to the proposed Project:

Goal ERC-4: Air quality in Huntington Beach continues to improve through local actions and

interagency cooperation

Policy B: Continue to require construction projects to carry out best available air quality

mitigation practices, including use of alternative fuel vehicles and equipment as

feasible.

Policy C: Enforce maximum idling time regulations for off-road equipment.

Policy D: Require grading, landscaping, and construction activities to minimize dust while using

as little water as possible.

Huntington Beach Zoning Code

The Huntington Beach Municipal Code (HBMC) Titles 20 through 25 are known and cited as the "Zoning and Subdivision Code of the City of Huntington Beach" (or the Huntington Beach Zoning and Subdivision Ordinance [HBZSO]). HBZSO §230.82(B): Air Contaminants, requires every use to comply with SCAQM rules, regulations, and standards. An applicant for a zoning permit or a use, activity, or process requiring

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South Coast Air Quality Management District. 2005. Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning. http://www.agmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf (accessed May 2022).

City of Huntington Beach. 2017. City of Huntington Beach General Plan - Environmental Resources and Conservation Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf (accessed December 2021).

SCAQMD approval of a permit to construct must file a copy of the SCAQMD permit with the director. An applicant for a use, activity, or process that requires SCAQMD approval of a permit to operate must file a copy of such permit with the director within 30 days of its approval.

5.1.3 Existing Environmental Setting

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, this an SEIR to the GPU PEIR. The 6th Cycle Housing Element Update (HEU) Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous GPU PEIR adequate for the Project. The regional and local air quality settings are described in detail in GPU PEIR Section 4.2.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf).

Candidate Housing Sites

As previously stated, the Project includes an update to the City's Housing Element map of candidate housing sites to reflect properties that could accommodate future housing development. In total, the HEU identifies 378 candidate housing sites (approximately 419 acres), which are detailed in **Appendix B: Candidate Housing Sites Inventory** and illustrated on **Exhibit 1-1: Candidate Housing Sites**. In addition to the identified candidate housing sites, future development of accessory dwelling units (ADUs) could occur on residential sites throughout the City and would not be limited to the candidate housing sites. Of the 378 candidate housing sites identified in the HEU, only two sites (Sites 83 and 129) are vacant, comprising less than one-half percent (approximately 0.18 acre) of the approximately 419 acres. Only two sites totaling approximately 14 acres and 312 dwelling units are developed with residential uses (Site 6, 14 acres with 311 dwelling units, and Site 86, 0.06 acre with 1 dwelling unit); see also **Table 5.10-5: Existing Housing - Candidate Housing Sites**. The remaining 374 developed sites include various non-residential land uses (i.e., commercial, office, research/technology, industrial, and public and semipublic).

5.1.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning air quality. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Conflict with or obstruct implementation of the applicable air quality plan.
- 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.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

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5.1.5 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds, as described above, in determining whether Project implementation would create a significant impact concerning air quality. The evaluation was based on a review of regulations and determining their applicability to the Project.

The City is under the jurisdiction of the SCAQMD which is principally responsible for comprehensive air pollution control in the SCAB. SQAQMD recommends that projects be evaluated in terms of air pollution control thresholds established by SCAQMD and published in the CEQA Air Quality Handbook. The City utilizes SCAQMD's thresholds to assess the significant of quantifiable impacts. Consistent with the GPU PEIR, the thresholds shown in **Table 5.1-2: South Coast Air Quality Management District Emissions Threshold**, recommended by SCAQMD were used to determine the significance of air quality impacts associated with the Project.

Table 5.1-2: South Coast Air Quality Management District Emissions Thresholds (Maximum Pounds Per Day)

Criteria Air Pollutants and Precursors	Construction-Related	Operational-Related				
Volatile Organic Compounds (VOC)	75	55				
Carbon Monoxide (CO)	550	550				
Nitrogen Oxides (NO _x)	100	55				
Sulfur Oxides (SO _x)	150	150				
Respirable Particulate Matter (PM $_{10}$)	150	150				
Fine Particulate Matter (PM _{2.5})	55	55				
Source: South Coast Air Quality Management District. 2019. South Coast AQMD Air Quality Significance Thresholds						

Localized Significance Thresholds

In addition to the daily thresholds listed in **Table 5.1-2** above, future housing development associated with the Project would be subject to SCAQMD's LSTs for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at the future development sites. LSTs represent the maximum emissions that can be generated at a Project without expecting to cause or substantially contribute to an exceedance of the most stringent FAAQS and SAAQS. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb 5 acres or less on a single day.

Since this Project would not directly result in the development of future housing, each specific development housing project proposed in the future would prepare site-specific air quality technical reports and separate air quality analyses.

Toxic Air Contaminants

There is currently no federal or state threshold for air toxic emissions or concentrations. However, the California Air Resources Board (CARB) Air Quality and Land Use Handbook: A Community Health Perspective offers advisory recommendations for locating sensitive receptors near uses associated with

toxic air contaminants (TACs), such as freeways and high traffic roads, commercial distribution centers, rail yards, ports, refineries, chrome platers, dry cleaners, gasoline stations, and other industrial facilities, to reduce exposure of sensitive populations.⁸

5.1.6 Project Impacts and Mitigation

Impact AQ-1 Would the Project conflict with or obstruct the implementation of the applicable air quality plan?

Level of Significance Before Mitigation: Less than Significant Impact

GPU PEIR (Volume II, pages 4.2-6 to 4.2-8)

The GPU PEIR concluded that the Huntington Beach GPU would be consistent with the 2012 and 2016 AQMP in the reduction of vehicle miles traveled and the 2012 and 2016 AQMP forecasts for population/employment/housing levels, and therefore would not conflict or obstruct the implementation of an applicable air quality plan. Impacts were anticipated to be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons.

As described further in Impact AQ-2, estimated construction and operational emissions associated with residential development facilitated by the Project are anticipated to exceed SCAQMD's project-level significance thresholds. However, the threshold used for determining whether the proposed Project would conflict with or obstruct an applicable air quality plan is qualitative and is based on whether it would be consistent with the AQMP's assumed growth, applicable control measures, and air emission reduction policies.

The 2016 AQMP was prepared to bring the SCAB into compliance with the 24-hour $PM_{2.5}$ NAAQS and to reduce NO_X emissions sufficiently to meet the upcoming 8-hour O_3 NAAQS by 2023. In analyzing future pollutant emissions in the SCAB, the 2016 AQMP relies upon growth projections in SCAG's 2016-2040 RTP/SCS. Since the GPU's approval, SCAG adopted the 2020-2045 RTP/SCS (Connect SoCal) in September 2020. Connect SoCal includes a regional growth forecast that was developed by working with local jurisdictions using the most recent land use plans, policies, and assumptions at the time. The 2020-2045 RTP/SCS was determined to conform to the federally mandated SIP for the attainment and maintenance of the NAAQS. On October 30, 2020, CARB also accepted SCAG's determination that the RTP/SCS met the applicable state GHG emissions targets. When SCAG adopted Connect SoCal, SCAG

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Environmental-Impact-Report. 2017. City of Huntington Beach General Plan Update Program Environmental Impact Report SCH No. 2015101032, Volume II—Program Environmental Impact Report. https://www.huntingtonbeachca.gov/files/users/planning/Volume-II-Draft-Environmental-Impact-Report.pdf (accessed July 2021).

recognized that cities and counties will foreseeably update their housing elements and amend their zoning, as necessary, to accommodate the 6th Cycle RHNA. A draft form of South Coast AQMD's 2022 AQMP was released in May 2022 and incorporates the latest growth estimates from SCAG's Connect SoCal. However, the plan has not yet been formally adopted. Both the RTP/SCS and AQMP are based, in part, on projections originating with county and city general plans.

As discussed in detail in **Section 5.10: Population and Housing**, implementation of the Project would not, in and of itself, construct new housing in the City but would facilitate the development of up to 11,743 residential units by providing programs and policies that would promote housing for all persons. The HEU implementation program addresses a planning period horizon of 2029; therefore, General Plan forecasts extrapolated to 2030 are considered because they are most relevant to the Project's 2029 planning period horizon. **Table 5.10-9: General Plan Plus Project Growth Projections**, addresses the Project's consistency with General Plan population and housing forecasts. As indicated in **Table 5.10-9**, the City's forecast 2030 housing and population would be approximately 95,659 dwelling units and 233,064 persons, respectively, with Project implementation. Comparatively, future housing facilitated by the Project would result in housing and population growth of approximately 14 percent and 14.4 percent, respectively, over extrapolated General Plan 2030 forecasts without Project implementation. As such, Project implementation would facilitate future housing development, and thus indirectly induce population growth in the City, beyond the General Plan 2030 extrapolated forecast population of 203,588 persons.

Because both the RTP/SCS and AQMP are based, in part, on projections originating with the City's General Plan, RTP/SCS and AQMP growth projections would similarly be exceeded. However, the discrepancy between the AQMP and RTP/SCS growth forecasts and growth projections associated with Project implementation would not result in a conflict with the South Coast AQMP. The 2016 AQMP was prepared to accommodate growth, reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. The determination of whether the Project would conflict with the AQMP is based on consistency with the AQMP policies and standards rather than population assumptions that do not account for growth required by State and the City's 6th Cycle RHNA and consistency with growth projections included in the AQMP. The proposed Project would not conflict with the growth forecasts of the 2016 AQMP or the forthcoming 2022 AQMP nor would the Project be inconsistent with policies set forth in the AQMP aimed at reducing air quality impacts in the region. Consistent with the GP PEIR, the Project would not conflict with the AQMP and would result in a less than significant impact.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation measures are required.

Level of Significance After Mitigation: Less than Significant Impact

Impact AQ-2

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

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.2-14 through 4.2-15)

Impacts to air quality associated with the Huntington Beach GPU are considered cumulative in nature. SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions, nor provides methodologies or thresholds of significance to be used to assess cumulative construction or operational impacts. Instead, SCAQMD recommends that a Project be analyzed individually. Thus, the GPU PEIR concluded that individual projects would potentially exceed the SCAQMD recommended daily thresholds for project-specific impacts and would also potentially cause a cumulatively considerable increase in emissions for those pollutants, for which the SCAB is in nonattainment.

The GPU PEIR anticipated that construction and operation of development projects under the Huntington Beach GPU could generate emissions that exceed the thresholds of significance recommended by the SCAQMD for VOC, NO_X , CO, and PM_{10} , and $PM_{2.5}$. Because the SCAB is in nonattainment for $PM_{2.5}$, PM_{10} and ozone, and because both VOC and NO_X are precursors of ozone, for which the SCAB is also in nonattainment, buildout of the Huntington Beach GPU could result in a cumulatively considerable contribution to these emissions. Furthermore, the GPU PEIR noted that because construction and operational emissions generated by projects cumulatively was not known, future projects would be required to undergo separate environmental review processes to determine whether each project would result in a significant air quality impact and would also adhere to implement GPU policies to the extent feasible.

Nevertheless, because construction and operational emissions were determined by the GPU PEIR to be unquantifiable, this impact was deemed potentially significant and unavoidable.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City, but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons. This analysis focuses on the air quality impacts that could occur from air pollutant emissions associated with housing development facilitated by the Project (i.e., the HEU) and other regional growth and development. Consistent with SCAQMD guidance, this analysis evaluates the Project's contribution to cumulative air quality impacts by comparing estimated construction and operational emissions against the SCAQMD's thresholds of significance. Construction and operational emissions that would be generated under buildout of the proposed Project were estimated using

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California Emissions Estimator Model (CalEEMod) Version 2020.4.0 developed for SCAQMD. Calculation details are provided in the CalEEMod worksheet results in **Appendix C**: **Air Quality Data/Greenhouse Gas Emissions Data**.

Construction

Anticipated construction emissions were estimated using CalEEMod, which assesses emissions from each phase of construction, including demolition, excavation and site preparation, building construction, paving, and architectural coating activities associated with future housing developments facilitated by the Project. CalEEMod estimates typical construction equipment required for a project based on the results of construction surveys conducted by SCAQMD. Heavy construction equipment could include diesel-powered graders, excavators, dump trucks, cranes, and bulldozers. As a result, construction activities would temporarily increase diesel emissions from equipment and vehicle exhaust and would generate particulate matter in the form of fugitive dust.

Depending on the timing of entitlements and permit processing, construction activities for individual residential development projects in the City could begin shortly after adoption of the proposed Project. CalEEMod calculates the peak day construction emissions to represent the potential worst-case maximum daily emissions of a construction day. However, it is noted that estimated construction emissions on a peak day do not represent emissions that would typically occur during every day of construction associated with the individual development projects under the proposed Project. The estimated maximum daily construction emissions are then compared to the SCAQMD daily significance thresholds to identify any exceedances of thresholds, which could result in a significant impact. However, because the specific construction details (e.g., scheduling/phasing, equipment, building construction size, grading) for future projects in the City are unknown at this time and would vary annually, it is difficult to quantify the construction-related emissions that may potentially occur. For example, construction activities for some individual residential development projects may involve excavation of soil that would generate emissions while others may not. Furthermore, because CalEEMod only generates emissions for a single development project, this analysis utilized a range of different scenarios to estimate the range of construction emissions that could occur from future development. Since CalEEMod incorporates the reductions in vehicle and construction equipment emissions over time, this analysis also assumes a worstcase scenario of construction activities in 2022, since construction emissions in later years will most likely produce lower emissions levels in CalEEMod.

Construction activities associated with future development facilitated by the Project would occur in incremental phases over time based upon numerous factors, including market demand, and economic and planning considerations. Construction-related emissions are typically site-specific and depend upon multiple variables. Quantifying individual future development's air emissions from short-term, temporary construction-related activities is not possible due to project-level variability and uncertainties concerning locations, detailed site plans, construction schedules/duration, equipment requirements, etc., among other factors, which are presently unknown. Depending on how development proceeds, construction-related emissions associated with future housing development could exceed SCAQMD thresholds of significance. To provide a reference of the types of air quality emissions associated with representative individual construction activities, three hypothetical scenarios were modeled for different residential

development capacities anticipated from implementation of the proposed Project. Modeling was conducted for construction of the following three residential development scenarios:

- Mean Development Scenario (Site 53): 51 dwelling units on 0.67 acres;
- 95th Percentile Development Scenario (Site 70): 183 dwelling units on 2.32 acres;⁹ and
- Maximum Development Scenario (Site 217): 601 dwelling units on 7.55 acres.

This approach allows for an estimate of the range of construction emissions that could occur under the proposed Project. Table 5.1-3: Typical Project Construction Emissions, presents the estimated daily shortterm construction emissions for the three hypothetical scenarios. For the three modeled scenarios in Table 5.1-3, construction emissions would result from typical construction activities involving on-site demolition, grading activities, transport of materials to and from the site, building construction, paving, and architectural coating associated with the individual developments. As shown in Table 5.1-3, Site 217, which provides the greatest/maximum development capacity with 601 dwelling units (i.e., the most dwelling units) of all 378 candidate housing sites, is anticipated to generate construction emissions that would exceed SCAQMD thresholds for ROG. The 95th percentile site (Site 70 with 183 dwelling units), is also anticipated to generate emissions that would exceed SCAQMD thresholds for ROG. The 95th percentile site was provided to communicate that 95 percent of the sites would have development capacities with corresponding emissions that are anticipated to be less than this site. In contrast, Site 53 with 51 dwelling units, which is representative of an average-sized residential development, or what is reasonably expected for typical candidate housing site development, is anticipated to generate construction emissions that are reflective of the development anticipated to occur on the majority of the candidate housing sites, which would not exceed any SCAQMD thresholds.

Table 5.1-3: Typical Project Construction Emissions

	Maximum Pounds Per Day						
Representative Development Scenario	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO₂)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})	
Mean Development (Site 53 with 51 DU)	64	12	8	0.02	3	2	
95 th Percentile Development (Site 70 with 183 DU)	115	17	19	0.04	4	2	
Maximum Development (Site 217 with 601 DU)	188	33	32	0.08	9	5	
SCAQMD Threshold	75	100	550	150	150	55	
Exceed SCAQMD Threshold?	Yes	No	No	No	No	No	

Note: **BOLD** identifies emission threshold exceedance

Source: CalEEMod version 2020.4.0. Refer to Appendix C: Air Quality Data/Greenhouse Gas Emissions Data, for model outputs.

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⁹ The 95th percentile was selected to represent a more conservative analysis for air quality emissions evaluation. The 95th percentile captures more dwelling units and emissions associated with the Project- the 90th percentile would be incrementally less.

Future project-level assessments of construction-related air quality impacts would be conducted on a case-by-case basis as individual future development projects associated the proposed Project proceed, and would be required to mitigate construction-related emissions to below SCAQMD's thresholds of significance.

In addition to site-specific mitigation that would be determined on a project-by-project basis, existing City practices, and SCAQMD rules would reduce construction-related emissions. However, even where such measures would reduce an individual project's emissions to less than significant levels, none of the measures serve to prevent individual actions from being constructed concurrently and thus resulting in cumulatively significant impacts. Additionally, neither the amount of construction occurring nor the exact location within the City is foreseeable, thus, it cannot be determined if the resultant construction emissions could be adequately controlled or reduced to below regulatory thresholds. Without such information, it is not possible to conclude that air pollutant emissions resulting from construction activities would be adequately reduced. Moreover, mitigation requiring that the Project reduce its development potential to densities/intensities that would yield emissions below the significance thresholds would be infeasible, given State law requires that the City accommodate their RHNA "fair share" of the region's housing needs. Future housing development would be subject to compliance with applicable GP policies and GP PEIR mitigation measures. Pursuant to General Plan Policies ERC-4.B, C, and D, the City will continue to implement the following policies, respectively: to require construction projects to carry out best available air quality mitigation practices, including use of alternative fuel vehicles and equipment as feasible; to enforce maximum idling time regulations for off-road equipment; and to require grading, landscaping, and construction activities to minimize dust while using as little water as possible. Future housing development would also be subject to GP EIR Mitigation Measure (MM) 4.2-1 through MM 4.2-14, which have been identified to minimize construction emissions to the extent feasible. Nonetheless, the Project's short-term construction-related air emissions would exceed SCAQMD thresholds for ROG during construction of 95th percentile development and maximum development scenarios, as indicated in Table 5.1-3 above. Furthermore, because the potential reductions resulting from implementation of MM 4.2-1 through MM 4.2-14 cannot be quantified for individual residential development projects facilitated by the Project, it is impossible to conclude that air pollutant emissions resulting from construction activities would be reduced to below SCAQMD significance thresholds. Therefore, consistent with GPU PEIR findings, the Project's impacts associated with short-term construction-related air emissions would remain significant and unavoidable.

Operations

Residential development facilitated by the Project would generate long-term operational emissions. Because the SCAB is in nonattainment for O_3 , PM_{10} and $PM_{2.5}$, the proposed Project could result in a contribution to existing nonattainment status for these pollutants. Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities. Stationary area source emissions would be generated by space and water heating devices, consumer products and the operation of landscape maintenance equipment. Energy emissions are associated with building electricity and natural gas. Mobile emissions would be generated by the vehicles traveling to and from potential development and destination sites within the City.

The total daily operational emissions that could potentially be generated over the life of the proposed Project were estimated using the CalEEMod Version 2020.4.0. Specific data for the types and amounts of future development were entered into CalEEMod to determine the pollutant emissions anticipated at full buildout of the City's unmet RHNA of 11,743 housing units. This data includes dwelling units, average daily trips, vehicle miles traveled, and average trip lengths. Where Project-specific data was not available, CalEEMod defaults were used. The results of the CalEEMod calculations for the daily operational emissions of the proposed Project are presented in **Table 5.1-4: Long-Term Operational Air Emissions**, and discussed below.

Table 5.1-4: Long-Term Operational Air Emissions

	Maximum Pounds Per Day						
Scenario	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})	
Area	282	11	968	0.05	5	5	
Energy	4	33	14	0.21	3	3	
Mobile	173	189	1,754	4.21	463	125	
Total	459	233	2,736	4.50	471	133	
SCAQMD Threshold	55	55	550	150	150	55	
Exceed SCAQMD Threshold?	Yes	Yes	Yes	No	Yes	Yes	

Note: **BOLD** identifies emission threshold exceedance

Source: CalEEMod version 2020.4.0. Refer to Appendix C: Air Quality Data/Greenhouse Gas Emissions Data, for model outputs.

As shown in **Table 5.1-4**, the total net emissions from future housing development facilitated by the Project would exceed the SCAQMD thresholds for ROG, NO_X , CO, PM_{10} , and $PM_{2.5}$. While some of the individual development projects may be able to incorporate design and reduction features that would reduce emissions to below SCAQMD thresholds, the overall Project must be evaluated for significance consideration.

As previously noted, SCAQMD significance thresholds for criteria pollutants do not distinguish between land use plans/programs and individual development projects. The proposed Project is a component of the City's General Plan that addresses residential development on a programmatic level and would involve several simultaneous developments throughout the planning horizon (2029). Therefore, the application of the SCAQMD thresholds to a program-level EIR is highly conservative. However, when evaluating the Project against SCAQMD's project-level thresholds, the combined operational emissions of potential land use changes anticipated to occur exceed SCAQMD's project-specific thresholds. Consistent with the GPU PEIR findings, the Project would potentially violate NAAQS/SAAQS or contribute substantially to an existing or projected air quality violation even with adherence to the General Plan policies and compliance with State and local regulations. Therefore, the Project operational impacts on air quality would be significant and unavoidable.

GENERAL PLAN POLICIES

See **Section 5.1.2: Existing Regulatory Setting** for complete policy text.

- Policy ERC-4.B
- Policy ERC-4.C
- Policy ERC-4.D

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.2-1

Project applicants shall require by contract specifications that all diesel-powered equipment used will be retrofitted with after-treatment products (e.g., engine catalysts). Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

GPU PEIR MM 4.2-2

Project applicants shall require by contract specifications that all heavy-duty diesel-powered equipment operating and refueling at the project site use low nitrogen oxides diesel fuel to the extent that it is readily available and cost effective in the Basin (this does not apply to diesel-powered trucks traveling to and from the project site). Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

GPU PEIR MM 4.2-3

Project applicants shall require by contract specifications that construction equipment engines be maintained in good condition and in proper tune per manufacturer's specification for the duration of construction. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

GPU PEIR MM 4.2-4

Project applicants shall require by contract specifications that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

GPU PEIR MM 4.2-5

As required by South Coast Air Quality Management District Rule 403—Fugitive Dust, all construction activities that are capable of generating fugitive dust are required to implement dust control measures during each phase of project development to reduce the amount of particulate matter entrained in the ambient air. These measures include the following:

- (1) Application of soil stabilizers to inactive construction areas
- (2) Quick replacement of ground cover in disturbed areas

- (3) Watering of exposed surfaces three times daily
- (4) Watering of all unpaved haul roads three times daily
- (5) Covering all stock piles with tarp
- (6) Reduction of vehicle speed on unpaved roads
- (7) Post signs on-site limiting traffic to 15 miles per hour or less
- (8) Sweep streets adjacent to the project site at the end of the day if visible soil material is carried over to adjacent roads
- (9) Cover or have water applied to the exposed surface of all trucks hauling dirt, sand, soil, or other loose materials prior to leaving the site to prevent dust from impacting the surrounding areas
- (10) Install wheel washers where vehicles enter and exit unpaved roads onto paved roads to wash off trucks and any equipment leaving the site each trip

GPU PEIR MM 4.2-6

Project applicants shall require by contract specifications that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes. Diesel-fueled commercial motor vehicles with gross vehicular weight ratings of greater than 10,000 pounds shall be turned off when not in use for more than 5 minutes. Contract specifications shall be included in future project construction documents, which shall be approved by the City of Huntington Beach.

GPU PEIR MM 4.2-7

Project applicants shall require by contract specifications that construction parking be configured to minimize traffic interference during the construction period and, therefore, reduce idling of traffic. Contract specifications shall be included in future project construction documents, which shall be approved by the City of Huntington Beach.

GPU PEIR MM 4.2-8

Project applicants shall require by contract specifications that temporary traffic controls are provided, such as a flag person, during all phases of construction to facilitate smooth traffic flow. Contract specifications shall be included in future project construction documents, which shall be approved by the City of Huntington Beach.

GPU PEIR MM 4.2-9

Project applicants shall require by contract specifications that construction activities that affect traffic flow on the arterial system be scheduled to off-peak hours (10:00 a.m. to 4:00 p.m.). Contract specifications shall be included in future project construction documents, which shall be approved by the City of Huntington Beach.

GPU PEIR MM 4.2-10

Project applicants shall require by contract specifications that dedicated on-site and off-site left-turn lanes on truck hauling routes be utilized for movement of construction trucks and equipment on site and off site to the extent feasible during construction activities. Contract specifications shall be included in future project construction documents, which shall be approved by the City of Huntington Beach.

GPU PEIR MM 4.2-11

Upon issuance of building or grading permits, whichever is issued earlier, notification shall be mailed to owners and occupants of all developed land uses within 300 feet of a project site providing a schedule for major construction activities that will occur through the duration of the construction period. In addition, the notification will include the identification and contact number for a community liaison and designated construction manager that would be available on site to monitor construction activities. The construction manager shall be responsible for complying with all project requirements related to PM10 generation. The construction manager will be located at the on-site construction office during construction hours for the duration of all construction activities. Contract information for the community liaison and construction manager will be located at the construction office, City Hall, the police department, and a sign on site.

GPU PEIR MM 4.2-12

Project applicants shall require by contract specifications that the architectural coating (paint and primer) products used would have a volatile organic compound rating of 125 50 grams per liter or less. Contract specifications shall be included in future project construction documents, which shall be reviewed and approved by the City of Huntington Beach.

GPU PEIR MM 4.2-13

Project applicants shall require by contract specifications that materials that do not require painting be used during construction to the extent feasible. Contract specifications shall be included in future project construction documents, which shall be reviewed and approved by the City of Huntington Beach.

GPU PEIR MM 4.2-14

Project applicants shall require by contract specifications that pre-painted construction materials be used to the extent feasible. Contract specifications shall be included in future project construction documents, which shall be reviewed and approved by the City of Huntington Beach.

MITIGATION MEASURES

No feasible mitigation beyond GPU PEIR mitigation is available to reduce impacts to less than significant.

Level of Significance After Mitigation: Significant and Unavoidable

Impact AQ-3 Would the Project expose sensitive receptors to substantial pollutant concentrations?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.2-15 through 4.2-18)

Localized Significance Thresholds

LSTs are applicable at the project-specific level and generally are not applicable to regional projects such as local General Plans unless specific projects are identified in the General Plans. The GPU PEIR concluded that specific construction and operational activity under the General Plan Update could not be determined at the time and because the GPU did not contain any specific projects, there was no impact to LSTs due from the GPU. Once projects under the GPU are identified and the entitlement processes begin, the GPU PEIR noted that project-specific environmental analysis would be completed to determine whether construction and/or operations would result in a significant impact with respect to localized significance thresholds.

Carbon Monoxide Hotspots

The GPU PEIR concluded that implementation of the Huntington Beach GPU was not anticipated to expose sensitive receptors to substantial CO concentrations because CO concentrations would be substantially below the 20.0 ppm 1-hour CAAQS, and the 9.0 ppm 8-hour NAAQS and CAAQS for growth identified in the Huntington Beach GPU. Thus, the GPU PEIR concluded that sensitive receptors in the City (i.e., residential, schools) would not be exposed to substantial CO concentrations.

Toxic Air Contaminants

The GPU PEIR noted that the main source of TACs within the City occur at Interstate 405 (I-405) where diesel-fuel vehicles and trucks emit diesel particulate matter, also identified as a carcinogen. Other TACs in the City consist of heavily traveled roads, distribution centers, rail yards, fueling stations and dry cleaners. The GPU PEIR concluded that implementation of the Huntington Beach GPU would potentially expose sensitive receptors to substantial pollutant concentrations, specifically fueling stations and distribution centers; therefore, impacts on air quality would be significant and unavoidable.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Localized Significance Thresholds

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised July 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects. The SCAQMD provides the LST lookup tables based on distance from the project (meters) for one-, two-, and five-acre projects emitting CO, NO_X, PM_{2.5}, or PM₁₀. The LST methodology and associated mass rates are

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not designed to evaluate localized impacts from mobile sources traveling over the roadways. The candidate housing sites are located within Sensitive Receptor Area (SRA) 18, North Coastal Orange County.

It is noted that because site-specific details (acreages, uses, distances to sensitive receptors, construction phasing, equipment, intensity, etc.) for each individual development project are unknown at this time, a project-level analysis of localized pollutant concentrations at sensitive receptors resulting from each candidate site cannot be accurately determined using SCAQMD's localized significance thresholds (LST) analysis methodology.¹⁰ Therefore, this analysis estimates potential construction impacts on sensitive receptors resulting from construction of housing for the 95th percentile development scenario (i.e., Site 70 with 183 dwelling units on 2.32 acres). The 95th percentile site was provided to communicate that 95 percent of the sites would have development capacities with corresponding emissions that are anticipated to be less than Site 70. As presented in Table 5.1-5: Localized Significance Analysis for Construction - Two Acre Site, the two-acre LST thresholds were used in Table 5.1-5 because 350 of the 380 candidate sites (approximately 92 percent) are two acres (rounded to the nearest whole number) or less. As indicated in Table 5.1-5, the construction emissions for the scenario analyzed would not exceed the LSTs for NOx, CO, PM_{10} , or $PM_{2.5}$ at all distances (i.e., 25 to 500 meters to the nearest receptor). Therefore, for future housing development on sites two acres or less, the LST impacts are anticipated to be less than significant. Further, all future housing development would be subject to compliance with applicable General Plan policies and GPU PEIR mitigation measures. Pursuant to General Plan Policies ERC-4.B, C, and D, the City will continue to implement the to require construction projects to carry out best available air quality mitigation practices, including use of alternative fuel vehicles and equipment as feasible; to enforce maximum idling time regulations for off-road equipment; and to require grading and construction activities to minimize dust while using as little water as possible. Future housing development would also be subject to GP EIR Mitigation Measure (MM) 4.2-1 through MM 4.2-14, which have been identified to minimize construction emissions to the extent feasible. The remaining 30 sites greater than two acres in size would also be subject to General Plan policies and mitigation measures. Because each individual development project at these 30 sites is unknown at this time, project-level analysis for impacts regarding localized pollutant concentrations cannot be accurately determined. Therefore, LST impacts would remain significant and unavoidable.

Table 5.1-5: Localized Significance Analysis for Construction – Two-Acre Site

	Maximum Pounds Per Day						
Distance from Site to Receptor	Nitrogen Oxide (NOx)	Carbon Monoxide (CO)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})			
25 Meter Threshold	131	962	7	5			
50 Meter Threshold	128	1,089	21	7			
100 Meter Threshold	139	1,506	35	12			
200 Meter Threshold	165	2,615	62	26			
500 Meter Threshold	235	7,493	144	83			
95 th Percentile Development Scenario Emissions	17	14	4	2			
Exceed LST Threshold?	No	No	No	No			
Source: South Coast Air Quality Management District. 2006. South Coast AQMD Localized Significance Thresholds							

Sensitive population groups include children, the elderly, and the acutely ill and the chronically ill, especially those with cardio-respiratory diseases. Sensitive receptors are those areas where sensitive populations may be for extended periods of time, resulting in sustained exposure to any pollutants present.

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Carbon Monoxide Hotspots

Future development under the HEU is not anticipated to expose sensitive receptors to substantial CO concentrations because CO concentrations would be substantially below the 20.0 ppm 1-hour CAAQS, and the 9.0 ppm 8-hour NAAQS and CAAQS for growth facilitated by the HEU. Impacts related to carbon monoxide hotspots would be less than significant.

Toxic Air Contaminants

The Project includes multiple candidate sites that are along State Route 39 (SR-39) and Interstate 405 (I-405). Based on California Department of Transportation (Caltrans) Traffic Census, SR-39 traffic volumes in 2020 totaled 67,100 daily vehicles in the Project vicinity, including 833 daily trucks and I-405 traffic volumes total 190,500 daily vehicles including 6,980 daily trucks. It is noted that in 2019, pre-pandemic conditions, traffic volumes on SR-39 were the same, while traffic volumes on I-405 included an additional 83,000 trips. The proximity of existing and proposed sensitive uses to these freeways poses concerns for potential exposure of future development to toxic air contaminants (TAC) from these sources. As previously noted, the MATES V is a TAC monitoring and evaluation study conducted by the SCAQMD. The MATES V study consists of a monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk throughout the Basin. The study concentrates on the carcinogenic risk from exposure to air toxics.

The carcinogenic risk from air toxics in the SCAB, based on average concentrations at the fixed monitoring locations, is about 387 per million. This risk refers to the expected number of additional cancers in a population of one million individuals that are exposed over a 70-year lifetime. Under the MATES V methodology, approximately 50 percent of the average cancer risk is attributed to diesel particulate emissions. This is a lower portion of the overall risk compared to the MATES IV estimate of about 68 percent. Overall, the MATES V Study found a decreasing risk for air toxics exposure compared to previous MATES studies.

The CARB Air Quality and Land Use Handbook (April 2005) recommends avoiding siting new sensitive land uses within 500 feet of a freeway or urban road with 100,000 vehicles per day, and/or within 1,000 feet of a distribution center that accommodates more than 100 trucks per day. This limit for trucks applies to diesel trucks with a gross vehicle weight rating (GVWR) greater than 14,000 pounds (GVWR Classes 4 through 8). Future development includes new sensitive land uses (i.e., residential uses) that could be located within 500 feet of SR-39 and I-405, and/or within 1,000 feet of an industrial use/distribution center that generates more than 100 truck trips per day. Therefore, Project implementation could expose sensitive receptors to substantial pollutant concentrations associated with existing land uses, which could result in health effects. As a result, a project-specific Health Risk Assessment (HRA) shall be required for residential uses that could be located within 500 feet of I-405, (SR-39 does not meet the 100,000 vehicles per day criteria) in compliance with MM AQ-1. MM AQ-2 requires similar standards for sensitive receptors

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¹¹ California Department of Transportation, 2020 Annual Average Daily Truck Traffic on the California State Highway System. https://dot.ca.gov/programs/traffic-operations/census

South Coast Air Quality Management District, MATES V Multiple Air Toxics Exposure Study. http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v

that would be located within 1,000 feet of a distribution center/warehouse facility. With implementation of **MM AQ-1** and **MM AQ-2**, impacts related to toxic air contaminants would be less than significant.

GENERAL PLAN POLICIES

See **Section 5.1.2: Existing Regulatory Setting** for complete policy text.

- Policy ERC-4.B
- Policy ERC-4.C
- Policy ERC-4.D

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

MM AQ-1

During the site-specific entitlement and/or the design review process, the City of Huntington Beach Community Development Department shall require that a project-specific Health Risk Assessment is to be conducted for future residential development proposed within 500 feet of the I-405 freeway right-of-way, pursuant to the recommendations set forth in the CARB Air Quality and Land Use Handbook. The Health Risk Assessment shall evaluate a project per the following SCAQMD thresholds:

- Cancer Risk: Emit carcinogenic or toxic contaminants that exceed the maximum individual cancer risk of 10 in one million.
- Non-Cancer Risk: Emit toxic contaminants that exceed the maximum hazard quotient of one in one million.

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Noncarcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index less of than one (1.0) means that adverse health effects are not expected.

If projects are found to exceed the SCAQMD's Health Risk Assessment thresholds, mitigation measures, such as requiring MERV 13 air filters in all dwelling units, shall be incorporated to reduce impacts to below SCAQMD thresholds.

MM AQ-2

During the site-specific entitlement and/or the design review process, the City of Huntington Beach Community Development Department shall ensure that Residential development shall not be located closer than 1,000 feet from any existing or proposed distribution center/ warehouse facility which generates a minimum of 100 heavy truck trips per day, or 40 truck trips with transport refrigeration units (TRUs) per day, or TRU operations exceeding 300 hours per week, pursuant to the

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recommendations set forth in the CARB Air Quality and Land Use Handbook. If future residential development cannot meet this setback, a project-specific Health Risk Assessment shall be prepared to evaluate a project for the SCAQMD thresholds (i.e., carcinogenic risk equals or exceeds 10 in one million; acute non-carcinogenic hazard index equals or exceeds one; and/or if chronic non-carcinogenic hazard index equals or exceeds one, as outlined above). If projects are found to exceed the SCAQMD's Health Risk Assessment thresholds, mitigation measures, such as requiring MERV 13 air filters in all dwelling units, shall be incorporated to reduce impacts to below SCAQMD thresholds.

Level of Significance After Mitigation: Less than Significant Impact with Mitigation Incorporated

Impact AQ-4 Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Level of Significance Before Mitigation: Less than Significant Impact

GPU PEIR (Volume II, page 4.2-4 through 4.2-5)

The GPU PEIR concluded that implementation of the Huntington GPU would not propose or directly facilitate, land uses that would be considered significant sources of objectionable odor; and would not include expansion of any specific land uses that currently generate odors. Potential sources of odor associated with implementation of the Huntington Beach GPU would result from construction equipment exhaust and application of asphalt and architectural coatings during construction activities, the temporary storage of typical household solid waste (refuse) associated with residential (long-term operational) uses, as well as odors produced from various commercial uses, including restaurants. Standard construction requirements would be imposed on a project-by-project basis minimize odors from construction. The GPU PEIR noted that construction odor emissions would be temporary, short-term, and intermittent in nature, and impacts associated with construction-generated odors were expected to be less than significant. Further, future projects developed under the GPU would be required to adhere to rules established by the Huntington Beach Municipal Code and Zoning and Subdivision Ordinance, as well as those from SCAQMD. Therefore, odors associated with the construction and operation of development under the GPU would be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Potential sources of odor associated with implementation of the Project may result from construction equipment exhaust and application of asphalt and architectural coatings during construction activities. Construction-related odors would be short-term in nature and cease upon construction completion. Standard construction requirements, such as prohibiting the discharge of air contaminants that can cause annoyance to a considerable number of people (SCAQMD Rule 402) and limiting the amount of volatile organic compounds from paints and solvents to reduce emissions of odorous compounds

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(SCAQMD Rule 1113), would be imposed upon project applicants to minimize odors from construction. Any impacts to existing adjacent land uses would be short-term and are considered less than significant.

Operationally, odors that would be expected from residential development facilitated by the proposed Project would typically include temporary storage of typical household solid waste (refuse), typical of urban uses. However, these odors would be consistent with existing odors generated by existing residential uses throughout the City and would be confined to the immediate vicinity of new residential development. Additionally, it is expected that any individual project-generated refuse would be stored in covered containers and removed regularly consistent with the City's solid waste and recycling pick-up requirements. Therefore, residential developments facilitated by the Project would not generate odors affecting a substantial number of sensitive receptors and impacts would be less than significant.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation measures are required.

Level of Significance After Mitigation: Less than Significant Impact

5.1.7 Cumulative Impacts

For purposes of the air quality impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0**: **Basis for Cumulative Analysis**.

Consistency with AQMP

Anticipated Project impacts associated with the HEU and corresponding LEU, including future development on candidate housing sites facilitated by the Project, in conjunction with cumulative development in the City, would increase urbanization in an already urbanized area and could result in increased emissions of pollutants from construction and operations. Growth considered inconsistent with the AQMP could interfere with attainment of NAAQS and CAAQS because this growth is not included in the projections utilized in the formulation of the AQMP. Consequently, as long as growth in the SCAB is within the projections for growth identified in the 2020 RTP/SCS, implementation of the AQMP would not be obstructed by such growth. Although the proposed Project would indirectly increase the City's population by accommodating additional housing in compliance with State law, the Project not conflict with implementation of the 2016 AQMP or the forthcoming 2022 AQMP because it would help achieve regional sustainability goals and pollutant emission reduction targets of the 2016 AQMP. The Project would not result in a cumulatively considerable contribution to air quality and would result in a less than significant cumulative impact associated with inconsistency with the AQMP.

Increase of Criteria Pollutants

Cumulative development could violate an air quality standard or contribute to an existing or projected air quality violation because SCAB is currently in nonattainment for ozone, PM₁₀, and PM_{2.5}. Concerning daily emissions and the cumulative net increase of any criteria pollutant for which the region is in nonattainment, the Project would result in a cumulatively considerable increase to nonattainment of ozone, PM_{2.5}, and PM₁₀ standards in the SCAB. Concerning the contribution of the Project, the SCAQMD has recommended methods to determine the cumulative significance of new land use projects. The SCAQMD methods are based on performance standards and emission reduction targets necessary to attain NAAQS and CAAQS as predicted in the AQMP. Because no information on individual projects is currently available, cumulative construction and operational emissions cannot be accurately quantified. Therefore, the Project-related contribution of daily construction and operational emissions from is considered cumulatively significant and unavoidable.

Expose Sensitive Receptors to Substantial Pollutant Concentrations

Cumulative development has the potential to expose sensitive receptors to substantial pollutant concentrations. However, future projects facilitated by the Project would be subject to regulations regarding emissions in effect at the time of project application. Furthermore, for future residential development subject to discretionary review, compliance with the applicable GPU PEIR mitigation measures would be confirmed through the discretionary review process. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, the Project would result in less than significant cumulative impact associated with the exposure of sensitive receptors to substantial pollutant concentrations.

Objectionable Odors

Current projects anticipated for construction under the Project involve residential developments. Odors resulting from the construction of projects facilitated by the Project are not likely to affect a substantial number of people, given that construction activities are localized, and odors would cease upon completion of construction. Other odor impacts resulting from these projects are also not expected to affect a substantial amount of people, as solid waste from these projects would be stored in areas and in containers as required by the City. Therefore, construction and operation activities associated with the Project would result in a less than significant cumulative impact related to objectionable odors affecting a substantial number of people

5.1.8 Significant Unavoidable Impacts

Despite compliance with GPU policies, PEIR mitigation, and **MM AQ-1** and **MM AQ-2**, the Project would result in significant and unavoidable impacts concerning construction-related ROG emissions and operational ozone, PM_{2.5}, and PM₁₀ emissions. In addition, sites over two acres could expose sensitive receptors to significant impacts by exceeding construction LST thresholds.

5.1.9 References

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5.2 CULTURAL RESOURCES

5.2.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to cause a substantial adverse change in the significance of a historical resource and/or archaeological resource, or to disturb any human remains. Mitigation to avoid/reduce impacts is identified as necessary.

Historically, the term "cultural resources" encompassed archaeological, historical, paleontological, and tribal cultural resources, including both physical and intangible remains, or traces left by historic or prehistoric peoples. However, with changes to most recent State California Environmental Quality Act (CEQA) Guidelines Appendix G, paleontological resources are now addressed in **Section 5.4: Geology and Soils** and tribal cultural resources are now addressed in **Section 5.14: Tribal Cultural Resources**.

This Subsequent Environmental Impact Report (SEIR) evaluates the candidate housing sites based on information available to the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect impacts to cultural resources could be considered. More specifically, the cultural resources information in this section is based on the City of Huntington Beach General Plan (General Plan) and the Huntington Beach General Plan Update Program Environmental Impact Report (GPU PEIR).

5.2.2 Existing Regulatory Setting

Federal

National Historic Preservation Act of 1966

Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of the Interior, to encourage the achievement of preservation goals at the Federal, State, and local levels. The NHPA authorized the expansion and maintenance of the Natural Register of Historic Places (NRHP), established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage and created the Advisory Council on Historic Preservation (ACHP).

National Register of Historic Places

The NRHP was established by the NHPA of 1966, as "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the Nation's historic resources and to indicate what properties should be considered for protection from destruction or impairment" (Code of Federal Regulations [CFR] 36 Section 60.2). The NRHP recognizes both historical-period and prehistoric archaeological properties that are significant at the national, state, and local levels.

National Register Criteria for Evaluation. To be eligible for listing in the NRHP, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria:

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- 1. Are associated with events that have made a significant contribution to the broad patterns of our history;
- 2. Are associated with the lives of persons significant in our past;
- 3. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- 4. Have yielded, or may be likely to yield, information important in prehistory or history.

Unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for listing in the NRHP. In addition to meeting the criteria of significance, a property must have integrity of location, design, setting, materials, workmanship, feeling, and association. Sites that meet one or more NRHP eligibility criteria but do not retain integrity are not eligible for the NRHP. Guidance regarding integrity of location, design, setting, materials, workmanship, feeling and association is provided by National Register Bulletin (NRB) 15.1

Executive Order 11593 (May 13, 1971), 36 Code of Federal Regulations, §8921 as incorporated into Title 7, United States Code

Executive Order 11593, Protection of the Cultural Environment, orders the protection and enhancement of the cultural environment through providing leadership, establishing state offices of historic preservation, and developing criteria for assessing resource values.

State

California Environmental Quality Act

Pursuant to CEQA Guidelines, all California public agencies must consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to Public Resource Code (PRC) §21084.1, a "project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment." Public Resource Code § 21083.2 additionally requires agencies to determine whether proposed projects would have effects on "unique archaeological resources." Unique archaeological resources are further defined in CEQA to include the following:

- "Historical resource" is a term with a defined statutory meaning. Under California Code of Regulations (CCR), Title 14, Chapter 3 (CEQA Guidelines), §15064.5 (a) "historical resource" includes the following:
- A resource listed in, or determined to be eligible by the State Historical Resources Commission (SHRC), for listing in the California Register of Historic Resources (CRHR) (PRC §5024.1 and Title 14 CCR, §4850 et seq.).
- A resource included in a local register of historical resources, as defined in §5020.1(k) of the PRC or identified as significant in a historical resource survey meeting the requirements of §5024.1(g)

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¹ NRHP (2002). National Register Bulletin 15. Retrieved from: https://www.nrc.gov/docs/ML1912/ML19120A529.pdf. (accessed March 2022).

of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

- Any object, building, structure, site, area, place, record, or manuscript which a Lead Agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the Lead Agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the Lead Agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC §5024.1 and Title 14 CCR §4852) including the following:
 - Criterion 1 Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - Criterion 2 Is associated with the lives of persons important in our past;
 - Criterion 3 Embodies the distinctive characteristics of a type, period, region, or method
 of construction, or represents the work of an important creative individual, or possesses
 high artistic values; or
 - Criterion 4 Has yielded, or may be likely to yield, information important in prehistory or history.

CEQA addresses significant impacts to historical resources by clearly stating that "a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired" (CEQA Guidelines §15064.5(b)(1)).

CEQA also requires agencies to consider whether projects will affect "unique archaeological resources." PRC §21083.2, subdivision (g), states that "unique archaeological resources' means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized, important prehistoric or historic event or person."

Assembly Bill 52

Assembly Bill (AB) 52 requires that lead agencies undertaking CEQA review must, upon request of a California Native American tribe, begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Where a tribe requests, in

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writing, that a public agency inform it of proposed projects, the lead agency must notify the tribe within 14 days of determining that a project application is complete or deciding to undertake a project. If the tribe responds by requesting consultation within 30 days of the notification, the lead agency must begin the consultation process within 30 days of receiving the request. In addition, under AB 52, lead agencies must evaluate a project's potential impact to a "tribal cultural resource." A tribal cultural resource is defined as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe.

Senate Bill 18

Senate Bill (SB) 18 requires that cities and counties contact, and consult with, California Native American tribes before adopting or amending general plans, specific plans, or when designating land as open space. The intent of SB 18 is to establish meaningful consultation between tribal governments and local governments at the earliest possible point in the planning process, to avoid potential conflicts, and to allow tribes to manage and act as caretakers of cultural places. A Native American cultural place is defined in Public Resources Code §§5097.9 and 5097.995 as "any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine" (PRC §5097.9), or as "a Native American historic, cultural or sacred site, that is listed or may be eligible for listing in the California Register of Historical Resources...including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site" (PRC §5097.995).

Health and Safety Code Section, 7050.5 and 7052

State Health and Safety Code (HSC), §7050.5, declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease, and the county coroner must be notified. Health and Safety Code §7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives. If human remains are encountered during future housing development facilitated by the Housing Element Update (HEU), State HSC § 050.5 states that:

- a) "Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the Public Resources Code. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (I) of Section 5097.943 of the Public Resources Code or to any person authorized to implement Section 5097.984 of the Public Resources Code.
- b) In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing

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² State of California. 2011. PRC Section 5097.99.

http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=5097.99.&lawCode=PRC (accessed January 2022).

³ State of California. 2019. *PRC Section 5097.94*.

http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=5097.94.&lawCode=PRC (accessed January 2022).

State of California 2010. PRC Section 5097.98. http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=5097.98.&lawCode=PRC (accessed January 2022).

with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code,⁵ that the remains are not subject to the provisions of Section 27491⁶ of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98⁷ of the Public Resources Code. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.

c) If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission."8

California Register of Historic Resources

The CRHR, implemented in 1998, is "an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC §5024.1). Certain properties, including those listed in or formally determined eligible for listing in the NRHP and California Historical Landmark (CHL) numbered 770 and higher, are automatically included in the CRHR. Other properties recognized under the California PHI program, identified as significant in historical resources surveys or designated by local landmarks programs, may be nominated for inclusion in the CRHR. A resource, either an individual property or a contributor to a historic district, may be listed in the CRHR if the SHRC determines that it meets any of the following criteria, which are modeled on NRHP criteria:

- Criterion 1: It is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Criterion 2: It is associated with the lives of persons important in our past.
- Criterion 3: It embodies the distinctive characteristics of a type, period, region, or method of
 construction; represents the work of an important creative individual; or possesses high artistic
 values.
- Criterion 4: It has yielded, or may be likely to yield, information important in history or prehistory.

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State of California. 1947. GC Chapter 10. https://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?lawCode=GOV&division=2.&title=3.&part=3.&chapter=10.&art_icle=1.&goUp=Y (accessed January 2022).

⁶ State of California. 2016. GC Section 27491.

https://leginfo.legislature.ca.gov/faces/codes displaySection.xhtml?sectionNum=27491.&lawCode=GOV. (accessed January 2022).

⁷ State of California. 2010. PRC Section 5097.98

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=5097.98.&lawCode=PRC (accessed January 2022).

State of California. 1987. Health and Safety Code Section 7050.5. http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum=7050.5 (accessed January 2022).

According to 14 CCR §4852(a), types of resources eligible for nomination:

- <u>Building</u>. A resource, such as a house, barn, church, factory, hotel, or similar structure created principally to shelter or assist in carrying out any form of human activity. "Building" may also be used to refer to an historically and functionally related unit, such as a courthouse and jail or a house and barn;
- <u>Site.</u> A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historical, cultural, or archaeological value regardless of the value of any existing building, structure, or object. A site need not be marked by physical remains if it is the location of a prehistoric event, and if no buildings, structures, or objects marked it at that time. Examples of such sites are trails, designed landscapes, battlefields, habitation sites, Native American ceremonial areas, petroglyphs, and pictographs;
- <u>Structure</u>. The term "structure" is used to describe a construction made for a functional purpose rather than creating human shelter. Examples of structures include mines, bridges, and tunnels;
- Object. The term "object" is used to describe those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed, as opposed to a building or a structure. Although it may be moveable by nature or design, an object is associated with a specific setting or environment. Objects should be in a setting appropriate to their significant historic use, role, or character. Objects that are relocated to a museum are not eligible for listing in the California Register. Examples of objects include fountains, monuments, maritime resources, sculptures, and boundary markers; and
- <u>Historic district</u>. Historic districts are unified geographic entities which contain a concentration of historic buildings, structures, objects, or sites united historically, culturally, or architecturally. Historic districts are defined by precise geographic boundaries. Therefore, districts with unusual boundaries require a description of what lies immediately outside the area, in order to define the edge of the district and to explain the exclusion of adjoining areas. The district must meet at least one of the criteria for significance discussed in Section 4852(b)(1)-(4) of this chapter.

Under PRC §5024.1 and 14 CCR §4852(c), a cultural resource must retain integrity to be considered eligible for the CRHR. Specifically, it must retain sufficient character or appearance to be recognizable as a historical resource and convey reasons of significance. Integrity is evaluated with regard to retention of such factors as location, design, setting, materials, workmanship, feeling, and association. Cultural sites that have been affected by ground-disturbing activities, such as agricultural activities and off-road vehicle use, often lack integrity because they have been directly damaged or removed from their original location, among other changes.

California Points of Historical Interest

California Points of Historical Interest are sites, buildings, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific, technical, religious, experimental, or other value. No historical resource may be designated as both a CHL and a Point of Historical Interest. If a Point of Historical Interest is subsequently granted status

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as a CHL, the Point designation will be retired. To be eligible for designation as a Point of Historical Interest, a resource must meet at least one of the following criteria. It must be:

- The first, last, only, or most significant of its type in the state or within the local geographic region (city or county);
- Associated with an individual or group having a profound influence on the history of the local area;
- A prototype of, or an outstanding example of, a period, style, architectural movement, or construction; or
- One of the more notable works or the best surviving work in the local region of a pioneer architect, designer or master builder.

Local

City of Huntington Beach General Plan

Historic and Cultural Resources Element9

The General Plan Historic and Cultural Resources Element includes various adopted policies related to cultural resources, which were designed to protect and preserve historic, archaeological, and paleontological resources. The following Historic and Cultural Resources Element goals and policies are relevant to the proposed Project:

- Goal HC-1: To promote the preservation and restoration of the sites, structures and districts which have architectural, historical, and/or archeological significance to the City of Huntington Beach.
- Policy HCR-1.2.1: Utilize the State of California Historic Building Code, Secretary of Interior Standards for Historic Rehabilitation, and standards and guidelines as prescribed by the State Office of Historic Preservation as the architectural and landscape design standards for rehabilitation, alteration, or additions to sites containing historic resources in order to preserve these structures in a manner consistent with the site's architectural and historic integrity.
- **Policy HCR-1.2.2:** Encourage new development to be compatible with adjacent existing historic structures in terms of scale, massing, building materials and general architectural treatment.
- **Policy HCR-1.3.8:** Preserve and reuse historically significant structures, where feasible.

City of Huntington Beach Municipal Code

Chapter 2.107 - Historic Resources Board

The Historic Resources Board established by City of Huntington Beach Municipal Code (HBMC) §2.107.101 is an advisory body to the City Council on matters pertaining to historic issues and services. The purpose

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⁹ City of Huntington Beach. 2015. City of Huntington Beach General Plan – Historic and Cultural Resource Element. https://www.huntingtonbeachca.gov/government/departments/planning/gp/index.cfm (accessed January 2022).

of the Historic Resources Board is to encourage and promote programs and activities that enhance public awareness of community historic resources, cooperate with other city agencies to ensure that historic preservation and services are considered in the planning for the community's future development, and to act as a liaison to Council for local, state, and federal groups and agencies whose interest involves historic issues.

5.2.3 Existing Environmental Setting

Prehistoric and Historic Settings

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, this is a SEIR to the GPU PEIR. The 6th Cycle HEU Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. The major prehistoric and historic settings in and around the City are described in detail in GPU PEIR Section 4.4.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf).

Candidate Housing Sites

Records Search

As part of the GPU PEIR, a California Historical Resources Information System record search was conducted within a one-mile radius of the City. The record search included a review of various inventories such as the NRHP, CRHR, California Historical Landmarks, California Points of Historical Interest, and the California State Historic Resources Inventory. The record search revealed 68 known resources within the one-mile search radius, and eight previously recorded known cultural resources within the City limits. The known cultural resources within the PEIR study area are summarized below:

- Four historic sites: These consist of two residences, a church, and an oil infrastructure.
- Three prehistoric sites: These primarily consist of small lithic tools and debitage, manos, metates
 and notably a phallic fetish effigy and bowl made of stone. Notably, one of the prehistoric sites
 contained three burials.
- One multi-component site: This site contains lithic debitage and cores, mano fragments, fire affected rock, and worked glass.

In addition, the Native American Heritage Commission (NAHC) was contacted during March 2016 to determine if any sacred sites are listed within the PEIR study area's general vicinity. The NAHC response indicated that known Native American resources are present within the City.

Historic Resources

The City's Historic Context and Survey Report (HCSR), updated by Galvin Preservation Associates Inc. (2014), analyzed a total of 2,403 buildings in the City that were constructed prior to 1959. Of the 2,403 buildings, the HCSR identified 260 properties that were presumed to be historically significant for purposes of CEQA. The City utilizes the CRHR criteria as a basis for local significance. None of the candidate

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housing sites are identified as historically significant properties and none are included in the City's landmark list.

Prehistoric/Archaeological Resources

As discussed above and in the GPU PEIR, the archaeological record search and the archival research shows a sensitivity for cultural resources surrounding the PEIR planning area. Previously recorded archaeological sites near the PEIR planning area exhibit a diverse range of prehistoric land uses employed by Native Americans in coastal Orange County during the prehistoric era. Three prehistoric cultural resource sites and one multi-component site have been recorded to exist within the surveyed PEIR planning area. The archaeological resource sites within the PEIR planning area include burials, fire affected rock, debitage, religious artifacts, and tools. ¹⁰ Due to the confidential nature of the location of the three prehistoric cultural resource sites and one multi-component site, it is unknown if any of the candidate housing sites intersect or are near the cultural resource sites. Thus, there is the potential for prehistoric/archaeological resources to be located on a candidate housing site.

5.2.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning cultural resources. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to the §15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to the §15064.5.
- Disturb any human remains, including those interred outside of formal cemeteries.

5.2.5 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds, as described above, in determining whether Project implementation would create a significant impact concerning cultural resources. The cultural resources information was obtained through review of relevant planning documents including the General Plan, the GPU PEIR, the HBMC, and a CHRIS search, as well as consultation with City staff. This evaluation was based on the locations and forecast development capacities of the candidate housing sites in the context of the presence/absence of resources and/or conditions. This evaluation considers relevant regulations and determines their applicability to the proposed Project. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning cultural resources considers the relevant federal, state, and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

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¹⁰ City of Huntington Beach. 2017. GPU PEIR. Page 4.4-7. https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf. (accessed May 2021).

5.2.6 Project Impacts and Mitigation

Impact CUL-1 Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.4-5)

The GPU PEIR indicated that construction activities associated with General Plan implementation could cause a substantial adverse change in the significance of an historical resource pursuant to State CEQA Guidelines §15064.5. The GPU PEIR concluded that the 17 properties listed as eligible for local landmark status are within or very close to the Transform areas. The majority of the 17 properties are residential, and both the residential and "Transform" areas are proposed to grow towards a broad mix of lower intensity industrial and commercial uses. Two existing properties within the GPU Transform areas are included in the Directory of Historic Properties: a short length of the East Garden Grove-Wintersburg Channel; and the Huntington Youth Shelter. Furthermore, the record search conducted for the GPU also revealed four historic-age sites within the City. In addition, one known multi-component site includes historic era and prehistoric area cultural resources. The historic sites were documented as a Standard Oil Company storage tank, three separate residences or structures, and the multi-component site is historic worked glass. Therefore, the GPU PEIR concluded that future development under the GPU could impact the aforementioned known historical resources. The GPU PEIR also concluded buildout of the GPU would have the potential to disturb unknown historical resources. All future projects would be required to undergo the City's environmental review process and show compliance with applicable GPU Policies HCR 1.2.2 and 1.3.8, and state and City regulations, and incorporate GPU mitigation measure (MM) 4.4-1. Impacts to known and unknown historic resources would be reduced to less than significant levels following compliance with applicable GP policies and GPU MM 4.4-1.

The additions/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons.

Although the Project area encompasses the entire area within the City limits, the areas affected by the rezoning program, housing overlays, and hotel/motel conversions are limited to the 378 candidate housing sites shown in **Exhibit 1-1: Candidate Housing Sites**. Of the 378 candidate housing sites, all are developed/occupied by structures except two sites; thus, the developed candidate housing sites could be occupied by historic period (≥50 years) buildings. Therefore, future housing development facilitated by the Project could cause a substantial adverse change in the significance of a historical resource on the candidate housing sites. Consistent with the GPU PEIR analysis, all future housing development projects facilitated by the Project would be subject to compliance with applicable General Plan policies: Policy HCR 1.2.1 provides architectural and landscape design standards for rehabilitation, alteration, or additions

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to preserve historic structures; Policy HCR 1.2.2 requires projects to be compatible with adjacent existing historic structures; and Policy HCR 1.3.8 requires projects to preserve and reuse historically significant structures, where feasible. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with **GPU PEIR MM 4.4-1**, which would require project-specific applicants to retain a cultural resource professional to determine if future developments on the candidate housing sites would cause a substantial adverse change in the significance of a historical resource. Following compliance with GPU Policies HCR 1.2.1, 1.2.2, and 1.3-8, and **GPU PEIR MM 4.4-1**, the Project's potential to cause a substantial adverse change in the significance of a historical resource would be reduced to a less than significant level.

GENERAL PLAN POLICIES

See **Section 5.3.2: Existing Regulatory Setting** for complete policy text.

- Policy HCR-1.2.1
- Policy HCR-1.2.2
- Policy HCR-1.3.8

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.4-1

Prior to development activities that would demolish or otherwise physically affect buildings or structures 4550 years old or older or affect their historic setting, the project-level applicant shall retain a cultural resource professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History to determine if the GPU would cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. The investigation shall include, as determined appropriate by the cultural resource professional and the City of Huntington Beach, the appropriate archival research, including, if necessary, an updated records search of the South-Central Coastal Information Center of the California Historical Resources Information System and a pedestrian survey of the proposed development area to determine if any significant historic-period resources would be adversely affected by the proposed development. The results of the investigation shall be documented in a technical report or memorandum that identifies and evaluates any historical resources within the development area and includes recommendations and methods for eliminating or reducing impacts on historical resources. The technical report or memorandum shall be submitted to the City of Huntington Beach for approval. As determined necessary by the city, environmental documentation (e.g., CEQA documentation) prepared for future development under the General Plan Amendment shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project-level applicant shall be responsible for implementing methods for eliminating or reducing impacts on historical resources identified in the technical report or memorandum.

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MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact CUL-2 Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.4-7)

The GPU PEIR indicated that future project-specific construction activities associated with General Plan buildout would potentially disturb unknown and known archeological resources. The GPU PEIR concluded it is always possible that ground-disturbing activities may uncover presently buried and previously unknown cultural resources due to the presence of prehistoric sites within the City. In the event that buried cultural resources are discovered, the GPU PEIR determined that such resources could be damaged or destroyed, potentially resulting in significant impacts to cultural resources. Therefore, the GPU PEIR determined that all future development under the General Plan would be subject to **GPU PEIR MM 4.4-2** and **MM 4.4-3**. Following compliance with **GPU PEIR MM 4.4-2** and **MM 4.4-3**, the GPU's potential to cause a substantial adverse change in the significance of an archaeological resource would be reduced to a less than significant level.

The additions/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

As previously stated, areas affected by the rezoning program included in the proposed HEU are limited to the 378 affected by the rezoning program, housing overlays, and hotel/motel conversions. Future housing development on the candidate housing sites would involve ground-disturbing activities such as grading or excavation that could directly or indirectly impact known or undiscovered subsurface archaeological resources. As previously discussed, three prehistoric cultural resource sites and one multi-component site have been recorded to exist within the surveyed PEIR planning area. Due to the confidential nature of the sites, it is unknown if any of the candidate housing sites intersect or are near the cultural resource sites. Thus, there is the potential for cultural resources to be located on or near a candidate housing site. Therefore, all future housing development subject to rezoning and within overlay zones would be subject to compliance with GPU PEIR MM 4.4-2, which requires that the project-specific applicant retain an archeologist prior to any earth-disturbing activities that could encounter undisturbed soils to determine if the project would cause a substantial adverse change in the significance of an archeological resource. Project-specific applicants would also be required to comply with GPU PEIR MM 4.4-3, which requires all earth-disturbing activity within 100 feet of the find to be halted, the City to be notified, and impacts to any significant resources to be mitigated to a less than significant level through data recovery or other methods determined adequate by the archaeologist. Following compliance with GPU EIR MM 4.4-2 and

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MM 4.4-3, the Project's potential impacts associated with causing a substantial adverse change in the significance of an archeological resource would be reduced to a less than significant level.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.4-2

Prior to any earth-disturbing activities (e.g., excavation, trenching, grading) that could encounter undisturbed soils, the project-level applicant for future development shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to determine if site-specific development allowed under the General Plan Update could result in a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines or disturb human remains. The investigation shall include, as determined appropriate by the archaeologist and the City of Huntington Beach, an updated records search of the South Central Coastal Information Center of the California Historical Resources Information System, updated Native American consultation, and a pedestrian survey of the area proposed for development. The results of the investigation shall be documented in a technical report or memorandum that identifies and evaluates any archaeological resources within the development area and includes recommendations and methods for eliminating or avoiding impacts on archaeological resources or human remains. The measures shall include, as appropriate, subsurface testing of archaeological resources and/or construction monitoring by a qualified professional and, if necessary, appropriate Native American monitors identified by the applicable tribe (e.g., the Gabrielino Tongva Nation) and/or the Native American Heritage Commission. The methods shall also include procedures for the unanticipated discovery of human remains, which shall be in accordance with Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. The technical report or memorandum shall be submitted to the City of Huntington Beach for approval. As determined necessary by the city, environmental documentation (e.g., CEQA documentation) prepared for future development allowed under the General Plan Update shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project-level applicant shall be responsible for implementing methods for eliminating or avoiding impacts on archaeological resources identified in the technical report or memorandum. Projects that would not encounter undisturbed soils and would therefore not be required to retain an archaeologist shall demonstrate non-disturbance to the city through the appropriate construction plans or geotechnical studies prior to any earth-disturbing activities. Projects that would include any earth disturbance (disturbed or undisturbed soils) shall comply with MM 4.4-3.

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GPU PEIR MM 4.4-3

If evidence of an archaeological site or other suspected historical resource as defined by CEQA Guidelines Section 15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials) are discovered during any project-related earth-disturbing activities (including projects that would not encounter undisturbed soils), all earthdisturbing activity within 100 feet of the find shall be halted and the City of Huntington Beach shall be notified. The project-level applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less than significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 form and filed with the appropriate Information Center.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact CUL-3

Would the Project disturb any human remains, including those interred outside of formal cemeteries?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.4-9)

The archeological site record conducted for the GPU PEIR identified the presence of human remains outside of the City; therefore, the close proximity to known and recorded human remains raised an increased sensitivity for unknown informal cemeteries that could lie within the City. Ultimately, the GPU PEIR concluded that ground-disturbing activities, such as grading, excavation, and utilities installation associated with future development projects under the General Plan could result in impacts to unknown human remains. The GPU PEIR determined that the potential for disturbance may be reduced by contacting a qualified archaeologist, conducting a record search of given project area, and conducting a thorough site survey prior to any ground-disturbing activities to determine the absence and/or presence of human remains. Despite the implementation of these measures, the GPU PEIR also determined that construction activities could still yield human remains even after ground-disturbing activities are completed. Any disturbance would be considered a significant impact.

As a result, the GPU PEIR concluded that if any human remains are discovered during any phase of construction, all ground-disturbing activities should cease within 100 feet of remains. California HSC §7050.5 dictates that no further disturbance occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC §5097.98. If the remains are determined to be Native

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American by the County Coroner, the NAHC must be notified within 24 hours and the NAHC guidelines must be adhered to in the treatment and disposition of the remains. The GPU PEIR further recommended that a professional archaeologist with Native American burial experience conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by the NAHC. As necessary and appropriate, a professional archaeologist may provide technical assistance to the MLD, including but not limited to, the excavation and removal of the human remains.

Therefore, compliance with the applicable General Plan policies, California HSC, and implementation of mitigation measures **MM 4.4-2** and **MM 4.4-3** would reduce impacts from future development under the General Plan to less than significant levels.

IMPACT ANALYSIS

As previously stated, areas affected by the rezoning program included in the proposed HEU are limited to the 378 affected by the rezoning program, housing overlays, and hotel/motel conversions. The City's archaeological records search and field survey conducted for the GPU PEIR did not reveal any resources known to contain human remains on any of the candidate housing sites. However, the Good Shepard Cemetery and Mausoleum are located within 0.25 mile of candidate housing sites 117, 119, 202, 175, 279, 321, and 143. Due to the City's proximity to known and recorded human remains, there is still a potential to encounter unknown informal cemeteries within the City. Therefore, future housing development facilitated by the Project could potentially disturb unknown human remains during ground-disturbing activities. If human remains are found, those remains would require proper treatment in accordance with applicable laws, including Health and Safety Code (HSC) §§7050.5-7055 and PRC §5097.98 and §5097.99. HSC §§7050.5-7055 describe the general provisions for treatment of human remains. Specifically, HSC §7050.5 prescribes the requirements for the treatment of any human remains that are accidentally discovered during excavation of a site. HSC §7050.5 also requires that all activities cease immediately, and a qualified archaeologist and Native American monitor be contacted immediately. As required by State law, the procedures set forth in PRC §5087.98 would be implemented, including evaluation by the County Coroner and notification of the NAHC. The NAHC would then designate the MLD of the unearthed human remains.

If human remains are found during excavation, excavation would be halted in the vicinity of the find and any area that is reasonably suspected to overlay adjacent remains shall remain undisturbed until the County Coroner has investigated, and appropriate recommendations have been made for the treatment and disposition of the remains. All future housing development subject to rezoning and within overlay zones would be subject to compliance with **GPU PEIR MM 4.4-2** and **MM 4.4-3** prior to any ground-disturbing activity to determine the project's ability disturb human remains. Therefore, compliance with the established regulatory framework (i.e., HSC §§7050.5-7055 and PRC §§5097.98 and 5097.99) and implementation of **GPU PEIR MM 4.4-2** and **MM 4.4-3** would reduce the Project's impacts concerning the potential to disturb human remains to a less than significant level.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

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GPU PEIR MITIGATION MEASURES

See GPU PEIR MM 4.4-2 and MM 4.4-3 above.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

5.2.7 Cumulative Impacts

For purposes of the cultural resource impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0**: **Basis for Cumulative Analysis**.

As concluded above, future housing development facilitated by the Project could cause a substantial adverse change in the significance of a historical resource. Following compliance with General Plan Policies HCR 1.2.1, 1.2.2, and 1.3-8, and **GPU PEIR MM 4.4-1**, the Project's potential impacts associated with causing a substantial adverse change in the significance of a historical resource would be reduced to a less than significant level. Cumulative projects impacting historical resources are required to adhere to similar General Plan Policies and **GPU PEIR MM 4.4-1** to ensure that impacts to any known or unknown historical resources are reduced to a less than significant level. Therefore, the Project's impact to historical resources would not be cumulatively considerable.

As concluded above, future housing development facilitated by the Project could impact as-yet undiscovered archaeological resources. Following compliance with GPU PEIR MMs 4.4-2 and MM 4.4-3, the Project's potential impacts associated with causing a substantial adverse change in the significance of an archeological resource would be reduced to a less than significant level. Cumulative projects could similarly involve actions that damage known or as-yet undiscovered archaeological resources specific to those development sites. Similar to the Project, all cumulative development subject to discretionary approval would undergo environmental review. All cumulative development would also be subject to design review on a project-by-project basis pursuant to CEQA to evaluate potential impacts to cultural resources. Lastly, all cumulative projects are required to implement GPU PEIR MMs 4.4-2 and MM 4.4-3 to ensure that impacts concerning archaeological resources are less than significant. Therefore, the Project's impacts to archaeological resources would not be cumulatively considerable. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures.

As concluded above, previously undiscovered human remains could be encountered during Project construction activities; however, a less than significant impact would occur in this regard following compliance with the established state regulatory framework and **GPU PEIR MM 4.4-2** and **MM 4.4-3**. Cumulative development could impact previously undiscovered human remains during construction. However, all cumulative development subject to discretionary approval would undergo environmental

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review to evaluate the site-specific archaeological sensitivity. Additionally, cumulative development would be subject to compliance with the established State regulatory framework concerning the discovery of human remains on a project-by-project basis. The Project's potential impacts to human remains are not cumulatively considerable given compliance with the established regulatory framework would be required.

5.2.8 Significant Unavoidable Impacts

No significant unavoidable impacts concerning cultural resources have been identified.

5.2.9 References

- City of Huntington Beach. 2017. *City of Huntington Beach General Plan Update*. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf.
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5.3 ENERGY

5.3.1 Introduction

The section identifies existing conditions in the Project area concerning energy use and evaluates the Project's potential to result in impacts due to wasteful, inefficient, or unnecessary consumption of energy resources or conflict with an energy plan. Mitigation to avoid/reduce impacts is identified, as needed.

The candidate housing sites were evaluated in this Subsequent EIR (SEIR) based on information available from the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. Visual impacts were evaluated through the review of photo documentation and aerial photographs including review of public documentation (e.g., City of Huntington Beach General Plan (Huntington Beach GP). Further analysis was not conducted because the City had no further information and would be too speculative to base an analysis of potential impacts resulting from future housing development facilitated by the Housing Element Update (HEU). As such, potential changes beyond that are considered speculative or unlikely to occur and therefore, not reasonably foreseeable.

5.3.2 Existing Regulatory Setting

Federal

National Energy Conservation Policy Act

The National Energy Conservation Policy Act serves as the underlying authority for federal energy management goals and requirements. Signed into law in 1978, it has been regularly updated and amended by subsequent laws and regulations. This act is the foundation of most federal energy requirements.

Energy Policy Act of 2005

The Energy Policy Act of 2005 sets equipment energy efficiency standards. It seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products, including hybrid vehicles; constructing energy-efficient buildings; and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary micro-turbine power plants, and solar power equipment.

Executive Order 13693 (Planning for Federal Sustainability in the Next Decade), signed in 2015, seeks to maintain federal leadership in sustainability and GHG emission reductions. Its goal is to reduce agency GHG emissions by at least 40 percent by 2025, foster innovation, reduce spending, and strengthen communities through increased efficiency and improved environmental performance. Sustainability goals are set for building efficiency and management, energy portfolio, water use efficiency, fleet efficiency, sustainable acquisition and supply chain GHG management, pollution prevention, and electronic stewardship.

Energy and Independence Security Act of 2007

The Energy and Independence Security Act of 2007 sets federal energy management requirements in several areas, including energy reduction goals for federal buildings, facility management and benchmarking, performance standards for new buildings and major renovations, high-performance buildings, energy savings performance contracts, metering, energy-efficient product procurement, and reduction in petroleum use and increase in alternative fuel use. This act also amends portions of the National Energy Policy Conservation Act.

Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission (FERC) regulates the interstate transmission of electricity, natural gas, and oil. FERC is the U.S. federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, and oil pipeline rates. FERC also reviews and authorizes liquefied natural gas terminals, interstate natural gas pipelines, and nonfederal hydropower projects. Electricity is run by the states; however, FERC has jurisdiction over certain matters.

State

Senate Bill 1037 and Assembly Bill 2021

SB 1037 signed into law in September 2005, mandates that all publicly owned utilities report to the California Energy Commission (CEC) on cost-effective and feasible energy efficiency programs. The CEC is the state's primary energy policy and planning agency. AB 2021 was created in 2006 and built upon SB 1037, further requiring publicly owned utilities to develop energy efficiency targets on a triennial basis. The CEC is authorized to set targets for all municipal utilities.

California Public Utilities Commission General Order 131-D

The California Public Utilities Commission (CPUC) has authority to set electric rates, regulate natural gas utility service, protect consumers, promote energy efficiency, and ensure electric system reliability. It also has jurisdiction over the siting of natural gas transmission lines. CPUC General Order 131-D (adopted by Decision 94-06-014 and modified by Decision 95-08-038) contains the rules for the planning and construction of new transmission facilities, distribution facilities, and substations. This decision requires utility companies to obtain permits to construct certain power line facilities or substations if the voltage would exceed 50 kilovolts (kV), or if the substation would require the acquisition of land or an increase in voltage rating above 50 kV. Utilities do not need to comply with this decision for distribution lines and substations with voltage less than 50 kV; however, they must obtain any nondiscretionary local permits required for the construction and operation of these projects. Compliance with CEQA is required for construction of facilities.

Assembly Bill 117

Assembly Bill (AB) 117, passed in 2002, allows local governments to form a Community Choice Energy (CCE), also known as Community Choice Aggregation (CCA) to purchase or generate power for their communities. This is a program that offers an alternative electric power option to constituents (i.e., customers) currently served electric power by investor-owned utilities (IOUs), such as SoCal Gas.

Under the CCE model, local governments purchase and manage their community's electric power supply by sourcing power from a preferred mix of traditional and renewable generation sources, while the incumbent IOU (SoCal Gas) continues to provide distribution service. This gives CCEs the opportunity to design and potentially reduce retail rates for their constituents, provide customer choice, promote local economic development, and offer a cleaner power supply.

Senate Bill 1078 and 107; Executive Order S-14-08, S-21-09, and Senate Bill 2X

Senate Bill (SB) 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, then-Governor Schwarzenegger signed Executive Order S-14-08, which expands the State's Renewable Portfolio Standard to 33 percent renewable power by 2020. In September 2009, then-Governor Schwarzenegger continued the State's commitment to the Renewable Portfolio Standard by signing Executive Order S-21-09, which directs the California Air Resources Board (CARB) under its AB 32 authority to enact regulations to help the state meet its Renewable Portfolio Standard goal of 33 percent renewable energy by 2020. In April 2011, then Governor Brown signed SB 2X, which legislated the prior Executive Order S-14-08 renewable standard. Data from the California Energy Commission shows that 59 percent of the State's electricity came from renewable and zero-carbon sources by 2020.¹

Assembly Bill 32

The State's major initiative for reducing GHG emissions is outlined in AB 32, the "California Global Warming Solutions Act of 2006." AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels; the same requirement as under S-3-05) and requires the CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Reductions in overall energy consumption have been implemented to reduce emissions.

2006 Appliance Efficiency Regulations

The CEC adopted Appliance Efficiency Regulations (Title 20, CCR §§1601 through 1608) on October 11, 2006. The regulations were approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non-federally regulated appliances. While these regulations are now often viewed as "business-as-usual," they exceed the standards imposed by all other states and they reduce GHG emissions by reducing energy demand.

California Energy Efficiency Strategic Plan

On September 18, 2008, the CPUC adopted California's first Long-Term Energy Efficiency Strategic Plan, presenting a roadmap for energy efficiency in California. The Plan articulates a long-term vision and goals

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California Energy Commission. 2022. New Data indicates California Remains Ahead of Clean Electricity Goals. https://www.energy.ca.gov/news/2022-02/new-data-indicates-california-remains-ahead-clean-electricity-goals (accessed June 2022).

for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals.

California Public Utilities Code §366.2

The California Public Utilities Code §366.2, (amended 2008) or CCA Program, requires an ordinance from participating member agencies authorizing the implementation of a CCA Program for the respective jurisdiction.

Title 24, Part 11 – California Green Building Standards Code

Title 24, Part 11 of the California Code of Regulations is the California Green Building Standards Code (CALGreen). Beginning in 2011, CALGreen instituted mandatory minimum environmental performance standards for all ground-up new construction of commercial and low-rise residential buildings, state-owned buildings, schools, and hospitals. It also includes voluntary tiers (I and II) with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory requirements and may adopt CALGreen with amendments for stricter requirements.

Senate Bill (SB) 743

On September 27, 2013, Governor Jerry Brown signed SB 743 into law and codified a process that changed transportation impact analysis as part of CEQA compliance. SB 743 directs the California Office of Planning and Research (OPR) to administer new CEQA guidance for jurisdictions that remove automobile vehicle delay and LOS or other similar measures of vehicular capacity or traffic congestions from CEQA transportation analysis. Rather, it requires the analysis of vehicle miles traveled (VMT) or other measures that "promote the reduction of greenhouse gas emissions, the development of multi-modal transportation networks, and a diversity of land uses," to be used as a basis for determining significant impacts to circulation in California. The goal of SB 743 is to appropriately balance the needs of congestion management with statewide goals related to reducing GHG emissions, encourage infill development, and promote public health through active transportation.

California Code of Regulations, Title 24 – California Building Code

The California Code of Regulations, Title 24, is referred to as the California Building Code. It consists of a compilation of several distinct standards and codes related to building construction, including plumbing, electrical, interior acoustics, energy efficiency, handicap accessibility, etc. To reduce GHG emissions, the State has California Building Code energy efficiency and green building standards as outlined below.

Title 24, Part 6 – Energy Efficiency Standards

Title 24, Part 6 of the California Code of Regulations is the California Energy Efficiency Standards for Residential and Non-residential Buildings (also known as the California Energy Code [Energy Code]). This Code, originally enacted in 1978 in response to legislative mandates, establishes energy-efficiency standards for residential and non-residential buildings to reduce the state's energy consumption. The Energy Code is updated periodically to incorporate and consider new energy efficiency technologies and

methodologies as they become available, and incentives in the form of rebates and tax breaks are provided on a sliding scale for buildings achieving energy efficiency above the minimum standards.

The current version of the Energy Code, known as the 2019 Title 24, or the 2019 Energy Code, became effective January 1, 2020. The 2019 Energy Code provides mandatory energy efficiency measures as well as voluntary tiers for increased energy efficiency. The 2019 Energy Code includes provisions for smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa), residential and nonresidential ventilation requirements, and nonresidential lighting requirements. The 2019 Energy Code aims to reduce energy use in new homes by requiring that all new homes include individual or community solar photovoltaic systems or community shared battery storage systems that achieve equivalent time-dependent value energy use reduction. Accounting for solar photovoltaic requirements, the CEC's preliminary estimates indicate that homes built consistent with the 2019 Energy Code will result in 53 percent less energy use than those built under the 2016 standards.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

Executive Order B-30-15 and Senate Bill 350

In April 2015, the Governor issued Executive Order B-30-15, which established a GHG reduction target of 40 percent below 1990 levels by 2030. SB 350 (Chapter 547, Statutes of 2015) advanced these goals through two measures. First, the law increases the renewable power goal from 33 percent renewables by 2020 to 50 percent by 2030. Second, the law requires the CEC to establish annual targets to double energy efficiency in buildings by 2030. The law also requires the CPUC to direct electric utilities to establish annual efficiency targets and implement demand-reduction measures to achieve this goal.

Senate Bill 32

In 2016, the Legislature passed SB 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation, AB 197, which provides additional direction for developing the Scoping Plan. On December 14, 2017, CARB adopted a second update to the Scoping Plan. The 2017 Scoping Plan details how the State will reduce GHG emissions to meet the 2030 target set by Executive Order B-30-15 and codified by SB 32. Other objectives listed in the 2017 Scoping Plan are to provide direct GHG emissions reductions; support climate investment in disadvantaged communities; and, support the Clean Power Plan and other federal actions. These measures include increasing the Renewable Portfolio Standard to 50 percent by 2030 and extending the cap-and-trade program to 2030 and providing the revenue towards climate programs, disadvantage communities, and projects like the high-speed rail. The 2017 Scoping Plan also includes a 50 percent reduction in petroleum use in vehicles, increasing energy efficiency savings at existing buildings, carbon

sequestration in the land base, and reducing methane, black carbon, and other short-lived climate pollutants.

Senate Bill 100

Adopted in 2018, SB 100 requires renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers by 2045. The CEC, CPC, and CARB are required to prepare a report. The first report needs to be issued by January 1, 2021, with additional reports every four years.

The report shall include:

- 1. A review of the 100 percent zero-carbon policy focused on technologies, forecasts, then-existing transmission, and the maintenance of safety, environmental and public safety protection, affordability, and system and local reliability.
- 2. An evaluation identifying the potential benefits and impacts on system and local reliability associated with achieving the policy.
- 3. An evaluation identifying the nature of any anticipated financial costs and benefits to electric, gas, and water utilities, including customer rate impacts and benefits.
- 4. The barriers to, and benefits of, achieving the policy.
- 5. Alternative scenarios in which the policy can be achieved and the estimated costs and benefits of each scenario.

Local

City of Huntington Beach General Plan

Environmental Resources and Conservation Element²

The General Plan Environmental Resources and Conservation Element includes a number of adopted goals and policies related to energy that were intended to protect and conserve Huntington Beach's environmental resources. Following are the goals and policies relevant to the proposed Project:

Goal ERC-12: New buildings are increasingly energy efficient and ultimately equipped to support zero net energy performance.

Policy A: Create incentives for proposed development and reuse projects to exceed the minimum energy efficiency standards established in the California Building Standards Code when constructing new or significantly renovated residential and nonresidential buildings, including achieving zero net energy performance in advance of state-level targets.

Policy B: Promote the use of passive solar design techniques and technologies in new buildings to reduce energy use for heating and cooling.

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² City of Huntington Beach. 2017. City of Huntington Beach General Plan - Environmental Resources and Conservation Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf (accessed December 2021).

Goal ERC-13: Increase both distributed generation and utility renewable energy sources within

municipal and community-wide practices.

Policy A: Encourage the use of solar energy systems in homes and commercial businesses as a

form of renewable energy, including in support of zero net energy goals.

Policy C: Create incentives that promote renewable energy systems as a component of new

development or reuse projects.

5.3.3 Existing Environmental Setting

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, this an SEIR to the GPU PEIR. The 6th Cycle HEU Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. Although the consumption of energy was not evaluated in the GPU PEIR, energy was discussed as part of the GPU PEIR Section 4.15 Utilities and Service Systems. Existing energy use is described under GPU PEIR Section 4.15.1.4 Energy (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf).

Electricity

Southern California Edison (SCE) is the electricity provider to the City. SCE provides electricity to approximately 15 million people, 180 incorporated cities, 15 counties, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area.³ SCE produces and purchases their energy from a mix of conventional and renewable generating sources. **Table 5.3-1: Energy Resources Used to Generate Electricity for SCE** shows the SCE electric power mix in 2020 compared to the statewide 2020 power mix. According to the CEC, the 2020 total electricity demand for the SCE service area was 83,532 gigawatt hours (GWh),⁴ while electricity use attributed to the County was approximately 19,733 GWh from residential and non-residential sectors.

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³ SCE. (2021). By the Numbers: Who We Serve. Retrieved from SEC Website: https://www.sce.com/about-us/who-we-are. Accessed May 20, 2022.

California Energy Commission (CEC). (2020). Electricity Consumption by Southern California Edison. Retrieved from CEC Website: https://ecdms.energy.ca.gov/elecbyutil.aspx. Accessed May 20, 2022.

Table 5.3-1: Energy Resources Used to Generate Electricity for SCE

Energy Resources	2020 SCE Power Mix	2020 CA Power Mix	
Eligible Renewable:	30.9%:	33.1%:	
Biomass and Biowaste	0.1%	2.5%	
Geothermal	5.5%	4.9%	
Eligible Hydroelectric	0.8%	1.4%	
Solar	15.1%	13.2%	
Wind	9.4%	11.1%	
Coal	0%	2.7%	
Large Hydroelectric	3.3%	12.2%	
Natural Gas	15.2%	37.1%	
Nuclear	8.4%	9.3%	
Other	0.3%	0.2%	
Unspecified Sources of Power ¹	42.0%	5.4%	
Total	100%	100%	

¹Electricity from transactions that are not traceable to specific generation sources.

Source: SCE. (2020). 2020 Power Content Label, Southern California Edison. Retrieved from SCE Website: https://www.sce.com/sites/default/files/inline-files/SCE_2020PowerContentLabel.pdf. Accessed May 19, 2022.

Major SCE facilities located in the planning area include a generating station, six substations, and switching yards. **Table 5.3-2: Residential and Nonresidential Electricity Consumption for Orange County**, provides residential and nonresidential electricity demand between 2011 and 2020.

Table 5.3-2: Residential and Nonresidential Electricity Consumption for Orange County

Year	Residential Electricity Consumption	Nonresidential Electricity Consumption	Total Electricity Consumption (million kilowatt-hours)	
2020	7,765.26	11,967.88	19,733.14	
2019	6,971.09	12,886.28	19,857.37	
2018	6,845.18	13,183.67	20,028.85	
2017	6,815.35	13,388.50	20,203.85	
2016	6,711.07	13,531.41	20,242.48	
2015	6,901.75	13,837.42	20,739.17	
2014	7,036.40	13,712.46	20,748.86	
2013	6,838.01	13,441.54	20,279.55	
2012	7,067.85	13,332.30	20,400.15	
2011	6,693.43	13,231.29	19,924.72	
Source: Ca	Source: California Energy Commission. https://ecdms.energy.ca.gov/. Accessed May 19, 2022.			

In 2011, residential uses comprised 34 percent of Orange County's electricity demand, while non-residential uses comprised 66 percent. By 2020, these percentages changed to 39 percent, and 41 percent respectively for residential and non-residential uses. Although total electricity demand has fluctuated from year to year, overall, between 2011 and 2020, Orange County's total electricity demand decreased by 1.0 percent. However, during that same time period, electricity demand from only residential uses increased by approximately 15 percent.

Natural Gas

Southern California Gas Company (SoCalGas), which is the service provider for the Project area, services approximately 21 million people in a 20,000-square mile service territory. SoCalGas has four storage fields; Aliso Canyon, Honor Rancho, La Goleta, and Playa del Rey, as well as a combined storage capacity of approximately 134 billion cubic feet. According to the CEC, natural gas demand in the SoCalGas service area was 5,231 million therms in 2020.⁵

SoCalGas projects that total demand for natural gas will decline at an annual rate of 1.0 percent each year through 2035. The decline in demand is due to reduced gas demand in the major market segment areas of residential, electric generation (EG), commercial, and industrial; aggressive energy efficiency programs; and statewide efforts to minimize greenhouse gas emissions.

Table 5.3-3: Residential and Nonresidential Natural Gas Consumption in Orange County

Year	Residential Natural Gas Consumption	Nonresidential Natural Gas Consumption	Total Natural Gas Consumption	
2020	387.08	207.55	595.63	
2019	382.14	241.01	623.15	
2018	339.03	236.07	575.10	
2017	343.53	231.98	575.51	
2016	337.83	232.11	569.94	
2015	316.92	227.56	544.48	
2014	319.18	225.57	544.75	
2013	397.97	238.18	636.15	
2012	381.53	231.03	612.56	
2011	407.68	231.77	639.45	
Source: Ca	Source: California Energy Commission. https://ecdms.energy.ca.gov/. Accessed May 19, 2022.			

In 2020, natural gas use in Orange County was approximately 387.08 million therms from residential uses and 207.55 therms for non-residential sectors. Between 2011 and 2020, Orange County's residential natural gas demand decreased by 5.05 percent.

Transportation Energy

Transportation energy demand in California is largely related to vehicular traffic (e.g., passenger vehicles, light duty trucks, semi-trucks, etc.), with most transportation-related energy demand currently met by gasoline and diesel fuel. In 2020, California consumed 12.94 billion gallons of gasoline and 3.05 billion gallons of diesel fuel based on data from California EMission FACtor (EMFAC). In Orange, approximately 1.06 billion gallons of gasoline and 126 million gallons of diesel fuel were consumed in 2020 based on EMFAC.

⁵ California Energy Commission (CEC). (2020). Gas Consumption by Southern California Gas. Retrieved from CEC Website: http://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed May 20, 2022.

⁶ California Gas and Electric Utilities (2020). 2020 California Gas Report https://www.socalgas.com/sites/default/files/2020-10/2020 California Gas Report Joint Utility Biennial Comprehensive Filing.pdf. Accessed May 20, 2022.

California Energy Commission (CEC). (2020). Gas Consumption by County. Retrieved from CEC Website: https://ecdms.energy.ca.gov/gasbyutil.aspx. Accessed May 20, 2022.

Gasoline and diesel fuel is supplied to City residents by a widely distributed series of service stations both inside and around the City. The Federal Highway Administration (FHWA) reports that approximately 17.98 million automobiles, 12.98 million trucks, and 760,051 motorcycles were registered in California in 2020. Annual automotive fuel consumption in Orange County from 2011 to 2020 is shown in **Table 5.3-4**: **Annual Automotive Fuel Consumption in Orange County**. As shown in **Table 5.3-4**, the County's gasoline consumption has declined 5 percent since 2011 and diesel consumption increased 14 percent.

Table 5.3-4 Annual Automotive Fuel Consumption in Orange County

Year	Gasoline Consumption (million gallons)	Diesel Fuel Consumption (million gallons)
2020	1,059.8	126.4
2019	1,220.3	126.2
2018	1,197.6	125.7
2017	1,204.5	128.6
2016	1,201.2	125.0
2015	1,167.4	117.2
2014	1,139.9	114.9
2013	1,118.4	113.1
2012	1,114.7	107.3
2011	1,119.5	108.4
_	,	Chttps://arb.ca.gov/omfas/accessed

Source: California Air Resources Board. 2022. EMFAC https://arb.ca.gov/emfac/accessed May 20, 2022

Candidate Housing Sites

As previously stated, the proposed Project includes an update to the City's Housing Element map of candidate housing sites to reflect properties that could accommodate future housing development. In total, the HEU identifies 378 candidate housing sites (approximately 419 acres), which are detailed in **Appendix B: Candidate Housing Sites Inventory** and illustrated on **Exhibit 1-1: Candidate Housing Sites**. In addition to the identified candidate housing sites, future development of accessory dwelling units (ADUs) could occur on residential sites throughout the City and would not be limited to the candidate housing sites.

Of the 378 candidate housing sites identified in the HEU, only two sites (Sites 83 and 129) are vacant, comprising less than one-half percent (approximately 0.18 acre) of the approximately 419 acres. Only two sites totaling approximately 14 acres and 312 dwelling units are developed with residential uses (Site 6, 14 acres with 311 dwelling units, and Site 86, 0.06 acre with 1 dwelling unit); see also **Table 5.10-5: Existing Housing - Candidate Housing Sites**. The remaining 374 developed sites include various non-residential land uses (i.e., commercial, office, research/technology, industrial, and public and semipublic). All of these existing land uses currently consume electricity, natural gas, and transportation energy related to vehicular traffic to varying degrees.

5.3.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning energy. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Result in a potentially significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

5.3.5 Methodology

This analysis considers the City's Environmental Checklist Form thresholds, as described above, in determining whether Project implementation would create a significant impact concerning energy. The evaluation was based on a review of regulations and determining their applicability to the Project.

The baseline conditions and impact analyses are based on the review of various data available in public records, including local planning documents. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning energy resources considers the relevant federal, state, and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

5.3.6 Project Impacts and Mitigation

Impact ENE-1

Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, pages 4.15-16 to 4.15-19)

Electricity and natural gas use was evaluated in the GPU PEIR under Utilities and Service Systems. The GPU PEIR determined that implementation of the GPU would increase electricity demand from current conditions to 2040. At buildout, development of land uses allowable under the GPU would increase electricity demand by approximately 113,634,008 kWh per year. The GPU PEIR noted that this increase in electricity demand equates to a 9.5 percent increase in the City's electricity demand. The GPU PEIR further noted SCE is a reactive agency and would expand its energy infrastructure to serve the growth associated with buildout of the GPU. No proposals for energy production facilities or transmission facilities were included as part of the GPU. If SCE determines that such facilities are needed at a later date, the GPU PEIR concluded that such projects would be required to undergo separate CEQA review, and their impacts assessed at that time.

Similarly, new development with implementation of the GPU would increase the City's natural gas demand, thus increasing the need for services. The GPU PEIR determined that implementation of the GPU would increase the natural gas demand from current conditions through to 2040. At buildout, development of land uses allowable under the GPU would increase natural gas demand by approximately

65,944,856 therms per month. This increase in natural gas demand would equate to a 38 percent increase in the City's natural gas demand. The GPU PEIR noted that SoCal Gas is a reactive agency and would expand its energy infrastructure to serve the growth associated with buildout of the GPU. No proposals for energy production facilities or transmission facilities were included as part of the GPU. If SoCal Gas determines that such facilities are needed at a later date, the GPU PEIR concluded that such projects would be required to undergo separate CEQA review, and their impacts assessed at that time.

Impacts were anticipated to be less than significant. The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons.

Construction-Related Energy Consumption

Project construction would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass.

Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, and construction. Fuel energy consumed during construction would be temporary and would not represent a significant demand on energy resources. In addition, some incidental energy conservation would occur during construction through compliance with State requirements which specify that equipment not in use for more than five minutes must be turned off. Project construction equipment would also be required to comply with the latest EPA and CARB engine emissions standards, which require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. There is also growing recognition among developers and retailers that sustainable construction is not prohibitively expensive, and that there is a significant cost-savings potential in green building practices and materials.

Substantial reductions in energy inputs for construction materials can be achieved by selecting building materials composed of recycled materials that require substantially less energy to produce than non-recycled materials. The Project-related incremental increase in the use of energy bound in construction materials such as asphalt, steel, concrete, pipes and manufactured or processed materials (e.g., lumber and gas) would not substantially increase demand for energy compared to overall local and regional demand for construction materials. It is reasonable to assume that production of building materials such as concrete, steel, etc., would employ all reasonable energy conservation practices in the interest in minimizing the cost of doing business.

Future development throughout the City accommodated through Project implementation would meet the residents' varied housing needs. Except two vacant sites, future housing development facilitated by the Project would occur on sites that are fully improved. Such development would result in constructionrelated energy consumption. Unlike an individual project for which project-specific construction information is available, it is impractical to quantify construction-related energy consumption from all of the future housing development that would contribute incrementally to construction energy demand throughout the City. Although construction equipment would primarily use energy in the form of fuel consumption, the amount of construction-related fuel cannot be determined at this time due to the lack of project-specific construction information associated with future development on each of the candidate housing sites. Rather, construction energy consumption would be evaluated for specific development projects as future development applications are processed by the City. It is noted that construction fuel use is temporary and would cease upon completion of construction activities. Furthermore, there are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. Therefore, construction fuel consumption associated with future housing development facilitated by the Project would not be any more inefficient, wasteful, or unnecessary than other similar residential developments. A less than significant impact would occur in this regard.

Operations-Related Energy Consumption

Operational Energy Use

Future housing development facilitated by the Project would incrementally increase the demand for energy. However, because all except two of the candidate housing sites are currently developed, the Project's energy demand at each candidate housing site would be offset to varying degrees by the current energy demand from existing land uses, which are generally considered less energy efficient than future redevelopment projects that would be developed under Title 24 standards.

Future housing development facilitated by Project implementation would consume energy for interior and exterior lighting, heating/ventilation and air conditioning (HVAC), refrigeration, electronics systems, appliances, and security systems, among other things. Future housing development would be required to comply with Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards would significantly reduce energy usage. Furthermore, the electricity provider, SCE, is subject to California's Renewables Portfolio Standard (RPS). The RPS requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020 and to 60 percent of total procurement by 2030. Renewable energy is generally defined as energy that comes from resources, which are naturally replenished within a human timescale such as sunlight, wind, tides, waves, and geothermal heat. Data from the California Energy Commission shows that California is currently ahead of schedule with 59 percent of the State's electricity coming from renewable and zero-carbon sources in 2020.

Because estimating the operational energy demand from future housing development facilitated by the HEU would account for credits from displaced land uses, it is not feasible to calculate energy demand for

each of the 368 candidate housing sites, as this would require assessing each site's existing uses and proposed demand. However, to provide representative developments, this analysis includes calculated energy demand for the candidate housing sites, with the mean, maximum, and 95th percentile development capacities. The maximum site (Site 217 with 601 dwelling units) provides the site with the maximum development (i.e., the most dwelling units), and therefore the greatest energy demand. The 95th percentile site (Site 71 with 183 dwelling units) was provided to illustrate that 95 percent of the sites would have development capacities and thus energy demands less than Site 71. Additionally, the mean (or average) site (Site 53 with 51 dwelling units) provides a site with average development (i.e., the average dwelling unit), and therefore the average energy demand that is reasonably expected for typical candidate housing site development. **Table 5.3-5: Projected Energy Demand – Representative Development Capacities**, shows the projected energy demand and the offset/credited values for a representative sample of the candidate housing sites, with the mean, maximum, and 95th percentile development capacities based on the various development capacities at the 368 candidate housing sites; see **Appendix B: Candidate Housing Sites Inventory** for details concerning each site.

Table 5.3-5: Projected Energy Demand – Representative Development Capacities

Scenario	Size (Acres)	Zoning	FAR	Development Capacity	Projected Electricity Use (GWh)	Projected Natural Gas Use (Therms)
		Mean/Ave	erage (Sit	te No. 53)		
Existing	0.67	Research and Technology	1.0	29,185 SF	0.241	6,060
Proposed	0.67	Overlay	NA	51 DU	0.195	5,687
		Cho	inge Exis	ting Plus Project	-0.046	-373
	% Credit to Project from Existing 100% 100%			100%		
		Maximu	m (Site N	lo. 217)		
Fyisting		Beach and Edinger				
Existing	7.55	Corridors Specific Plan	1.5	493,317 SF	5.491	9,819
Proposed		Overlay	NA	601 DU	2.304	67,025
		Cho	ange Exis	ting Plus Project	-3.187	+57,206
	% Credit to Project from Existing 100% 15			15%		
	95th Percentile (Site No. 71)					
Evicting		Beach and Edinger				
Existing	2.32	Corridors Specific Plan	1.5	151,589 SF	1.687	3,017
Proposed		Overlay	NA	183 DU	0.702	20,408
	Change Existing Plus Project -0.985 +17,			+17,391		
		% Credi	t to Proje	ect from Existing	100%	15%
Note: Usage ba	sed on Projec	t specific estimates and CalEEMod de	faults.			

Table 5.3-5 shows the projected electricity demands associated with the representative mean/average, maximum, and 95th percentile candidate housing sites are, 0.195 GWh per year, 2.304 GWh per year, and 0.702 GWh per year, respectively. Projected natural gas use for representative mean/average, maximum, and 95th percentile candidate housing sites are 5,687 therms, 67,025 therms, and 20,408 therms,

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The 95th percentile was selected to represent a more conservative analysis for air quality emissions evaluation. The 95th percentile captures more dwelling units and emissions associated with the 90th percentile would be incrementally less.

respectively. In general, electricity use at the representative housing development sites would decrease while natural gas use would increase.

It is noted that the offset/credited values shown in **Table 5.3-5** are based on existing zoning and forecast development capacities. The actual offset/credited values would vary by development site based on the existing on the ground land uses that would be displaced at the time of each respective development application.

Operational Vehicle Fuel Consumption

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration (NTSA) is responsible for establishing additional vehicle standards and for revising existing standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. Project implementation would accommodate future housing development throughout the City to meet the residents' varied housing needs. However, the Project does not include specific development proposals. The Project would not result in any unusual characteristics that would result in excessive operational fuel consumption. Fuel consumption associated with individual project-related vehicle trips would not be considered inefficient, wasteful, or unnecessary in comparison to other similar residential developments in the region. Further, as concluded in Table 5.13-4: VMT Screening Summary Results, the majority (325 sites, or 86 percent) of the 378 candidate housing sites were presumed to have a less than significant transportation impact concerning VMT, and thus would not be anticipated to result in inefficient fuel consumption associated with individual project-related vehicle trips.

Overall, all future housing development facilitated by the Project would be subject to General Plan Policies ERC.12.A and ERC.13.A and ERC.13.A and ERC.13.C, which are intended to encourage energy efficiency. In addition to complying with federal, State, and local standards regulating energy consumption, the Project is also required to comply with *State CEQA Guidelines Appendix F*. Specifically, State CEQA Guidelines Appendix F requires that EIRs include a discussion of potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. **Table 5.3-6: HEU Comparison to State CEQA Guidelines Appendix F**, analyzes the HEU for consistency with applicable State CEQA Guidelines Appendix F considerations.

Table 5.3-6: HEU Comparison to State CEQA Guidelines Appendix F

Appendix F Items for Consideration **Proposed Project** Consistent. Energy use during construction of future housing facilitated by 1. The project's energy the Project would primarily involve gasoline and diesel fuel and would requirements and its energy use efficiencies by amount and fuel represent a short-term use of readily available resources. Potential type for each stage of the construction impacts would be less than significant, and no mitigation is project including construction, required. operation, maintenance, and/ Operational energy demand of future housing facilitated by the Project or removal. If appropriate, the includes natural gas and electricity. As discussed above, the City's General intensiveness energy Plan includes goals and policies that are focused on improving the City's materials may be discussed. sustainability. Further, future housing development facilitated by the

Appendix F Items for Consideration	Proposed Project
	Project would be required to meet or exceed the provisions included in the California Energy Code Building Energy Efficiency Standards (CCR Title 24, Part 6) and the CALGreen Code (CCR Title 24, Part 11). Additionally, because future housing development facilitated by the Project has not been designed or proposed at this time, site-specific details related to electricity and natural gas facilities would be identified and evaluated at the time future housing developments are considered. Therefore, following adherence to Title 24 regulations and the City's General Plan policies, the Project would be consistent with this requirement for consideration of future energy use and efficiencies.
2. The effects of the project on local and regional energy supplies and on requirements for additional capacity. Output Description:	Consistent. The Project does not propose physical improvements or development. Future housing development facilitated by the Project would be required to obtain development permit approval. Future permits would require new development to meet or exceed the provisions included in the California Energy Code Building Energy Efficiency Standards (CCR Title 24, Part 6) and the CALGreen Code (CCR Title 24, Part 11) and would be required to comply with General Plan goals and policies that are aimed at reducing energy consumption. The energy demand from future housing development facilitated by the Project would be greater than existing conditions, but would not result in the construction of new electric or natural gas infrastructure beyond what has already been assumed and would be included in SCE and SoCalGas regional forecasts. In the event that new energy facilities are needed at a later date, these would be evaluated under CEQA as part of their discretionary review and their impacts would be assessed at that time. Therefore, the Project would be consistent with this requirement to consider the effect on existing energy supplies and capacity.
3. The effects of the project on peak and base period demands for electricity and other forms of energy.	Consistent. Future housing development facilitated by the Project would be required to implement various energy conservation measures that would be consistent with General Plan policies and comply with regulations that are aimed at reducing energy consumption. Future housing development would also be required to meet the California Energy Code Building Energy Efficiency Standards contained in CCR Title 24, Part 6. Additionally, because the Project is programmatic and does not propose future housing development, any required improvements to the current energy and natural gas facilities would be identified at the time such discretionary projects are proposed and under review. Although currently unknown, in the event that new energy facilities are needed, such facilities would be required to undergo a separate CEQA review process and their impacts would be assessed at that time. Therefore, the Project would be consistent with this requirement to consider demands for electricity and other forms of energy.

Appendix F Items for Consideration The degree to which the project complies with existing energy standards.

Proposed Project

Consistent. Future development facilitated by the Project would be required to be consistent with City's General Plan policies that are aimed at reducing energy consumption. Permits for future housing development would also be required to meet or exceed the provisions included in the California Energy Code Building Energy Efficiency Standards (CCR Title 24, Part 6) and the CALGreen Code (CCR Title 24, Part 11). For example, future housing developments facilitated by the Project would be required to comply with the Building Energy Efficiency Standards for Residential and Non-Residential Buildings that are in place at the time new development is proposed. These standards are updated by the State every three years, with the latest update (2019) having gone into effect on January 1, 2020. Therefore, the Project is considered consistent with this requirement to comply with existing energy standards.

5. The effects of the project on energy resources.

Consistent. Energy use during construction of future housing development facilitated by the Project would primarily involve gasoline and diesel fuel and would represent a short-term use of readily available resources. Potential construction impacts would be less than significant, and no mitigation is required.

Operational energy demand for future housing development operations includes natural gas and electricity. As discussed above, the City's General Plan and the proposed updates to the HEU include numerous policies focused on improving the City's sustainability. Future housing development facilitated by the Project would be required to obtain permits and meet or exceed the provisions included in the California Energy Code Building Energy Efficiency Standards (CCR Title 24, Part 6) and the CALGreen Code (CCR Title 24, Part 11). Additionally, because the details of future housing development facilitated by the Project are not known at this time, specific effects on energy resources cannot be analyzed in this PEIR. The need for potential improvements to existing energy and natural gas facilities would be identified and evaluated at the time site-specific development is proposed and project permits are considered. Therefore, following adherence to CCR Title 24 and the policies included in the City's General Plan, the Project would be consistent with this requirement to consider the Project's effects on energy resources.

 The project's anticipated transportation energy use requirements and its overall use of efficient transportation alternatives. Consistent. Project implementation would facilitate residential development in existing commercial and industrial sites located throughout the City, in order to increase housing capacity such that it will take advantage of opportunities for greater pedestrian connectivity and access to public transportation between residential and commercial uses. The Project's facilitation of opportunities for access to alternative transportation modes would help reduce vehicle trips and automobile reliance, thereby reducing the transportation energy demand associated with the Project. Therefore, the Project would be consistent with this

Appendix F Items for Consideration	Proposed Project
	requirement to consider transportation energy and efficient transportation
	alternatives.

All future housing development facilitated by the Project would be required to adhere to all federal, State, and local requirements for energy efficiency, including the latest Title 24 standards. Considering these requirements, the Project would not result in the inefficient, wasteful, or unnecessary consumption of building energy. Therefore, impacts would be less than significant, and no mitigation is required.

GENERAL PLAN POLICIES

See **Section 5.3.2: Existing Regulatory Setting** for complete policy text.

Policy ERC-12.A

Policy ERC-13.A

Policy ERC-12.B

Policy ERC-13.C

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less than significant impact

Impact ENE-2 Would the Project conflict with or obstruct a State or Local plan for renewable energy or energy efficiency?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, pages 4.15-16 to 4.15-19)

As previously discussed under Impact ENE-1, electricity and natural gas use was evaluated in the GPU PEIR under Utilities and Service Systems.

IMPACT ANALYSIS

Future housing development facilitated by the Project would be required to obtain permits and comply with federal, State, and local regulations aimed at reducing energy consumption. Federal and state energy regulations, such as the California Energy Code Building Energy Efficiency Standards (CCR Title 24, Part 6), the CALGreen Code (CCR Title 24, Part 11), and SB 743 transportation-related impact analysis requirements would also be imposed through future development permit review to minimize future energy consumption. As concluded in **Section 5.13**, the majority (86 percent) of the 378 candidate housing sites were presumed to have a less than significant transportation impact concerning VMT, and thus would not be anticipated to result in inefficient fuel consumption associated with individual project-related vehicle trips. The remaining site would be subject to SB 743 compliance. Therefore, future development facilitated by the Project would be required to be consistent with applicable federal, State, and local laws, policies, and regulations related to renewable energy and energy efficiency, and no

mitigation would be required. As a result, the proposed Project would support State, regional, and City efforts to improve transportation energy efficiency and would not conflict with or obstruct plans for renewable energy or energy efficiency. Impacts would be less than significant.

GENERAL PLAN POLICIES

See **Section 5.3.2: Existing Regulatory Setting** for complete policy text.

Policy ERC-12.A

Policy ERC-13.A

Policy ERC-12.B

Policy ERC-13.C

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less than Significant

5.3.7 Cumulative Impacts

For purposes of the energy impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0**: **Basis for Cumulative Analysis**.

The Project, combined with cumulative development in the City, would increase housing in an already developed area and result in increased energy consumption. Potential impacts to energy resources from future housing development facilitated by the Project would be site-specific and would require applications for development permits that would be evaluated on a case-by-case basis. Each project would require separate approval and evaluation under CEQA, which would address potential energy consumption impacts and identify necessary mitigation measures, where appropriate. Additionally, any future housing development facilitated by the Project would be subject to compliance with all federal, State, and local requirements for energy efficiency, including the California Energy Code Building Energy Efficiency Standards (CCR Title 24, Part 6), the CALGreen Code (CCR Title 24, Part 11), and SB 743.

Consequently, future housing development facilitated by the Project would not result in significant environmental impacts from the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation; and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the Project would not cause a cumulatively considerable impact on energy resources and no mitigation is required.

Electricity and Natural Gas

Potential future development within the City, Orange County, and the State would incrementally contribute to the need for regional energy production and distribution facilities. These facilities are operated and maintained by utility companies that plan for and accommodate anticipated growth. Electric and natural gas services are provided upon demand from consumers and expanded as needed to meet demand, consistent with applicable local, State, and federal regulations.

California natural gas demand is expected to decrease at a rate of 1.0 percent per year from 2018 to 2035 as a result of stricter codes/standards, energy efficiency improvements, and the State's transition away from fossil fuel-generated electricity to increased renewable energy. The 2020 SoCalGas California Gas Report predicts a decline in every sector (i.e., residential, industrial, commercial, electricity generation, and transportation). While cumulative projects would result in the use of nonrenewable natural gas resources, which could limit future availability, the use of such resources would be on a relatively small scale and would be consistent with regional and local growth expectations for SoCalGas's service area.

Transportation Energy

Residential development facilitated by the proposed Project along with future growth within the City would cumulatively increase the demand for transportation-related fuel in the State and region. However, over the last decade the State has implemented several policies, rules, and regulations to improve vehicle fuel economy, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector, and reduce VMT which would reduce reliance on petroleum fuels. According to the CEC, gasoline consumption has declined by 6 percent since 2008, and the CEC predicts that the demand for gasoline will continue to decline over the next 10 years and that there will be an increase in the use of alternative fuels, such as natural gas, biofuels, and electricity. In 2020, Governor Gavin Newsome also signed Executive Order (N-79-20) which calls for Zero-Emission Vehicles by 2035. Locally, the City expects to see the number of EVs increase and a decrease in the consumption of non-renewable fossil fuels for transportation.

Additionally, as discussed previously, the proposed Project would support regional and City-wide goals and policies to increase housing opportunities in jobs-rich and transit-served areas. The proposed Project is also consistent with the State's overall goals to reduce VMT pursuant to SB 375, and as outlined in Connect SoCal (SCAG 2020). These local and regional plans encourage the development of new uses near transit to reduce overall VMT. Therefore, the proposed Project would not result in a substantial contribution to cumulatively considerable impacts.

5.3.8 Significant Unavoidable Impacts

No significant unavoidable impacts concerning energy have been identified.

5.3.9 References

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5.4 GEOLOGY AND SOILS

5.4.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to cause a substantial adverse change to geology, soils, and paleontological resources, including risks associated with geologic events, soil erosion and topsoil loss, unstable geologic units or soils, expansive soils, incapable soils, or unique paleontological or geological features. Mitigation to avoid/reduce impacts is identified, as needed.

No site-specific surveys or technical studies were conducted for this analysis. The candidate housing sites were evaluated in this Subsequent Environmental Impact Report (SEIR) based on information available from the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. Further analysis was not conducted because the City had no further information and would be too speculative to base an analysis of potential impacts resulting from future housing development per the Housing Element Update (HEU) and corresponding updates to the Land Use Element (LUE). As such, potential changes beyond what is known at this time are considered speculative or unlikely to occur and therefore not reasonably foreseeable.

5.4.2 Existing Regulatory Setting

Federal

Earthquake Hazards Reduction Act

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

The mission of NEHRPA includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improved building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improved mitigation capacity; and accelerated application of research results. The NEHRPA designates the Federal Emergency Management Agency (FEMA) as the lead agency of the program and assigns several planning, coordinating, and reporting responsibilities. Other NEHRPA agencies include the National Institute of Standards and Technology, National Science Foundation, and U.S. Geological Survey (USGS).

National Flood Insurance Act

The National Flood Insurance Act (1968) established the National Flood Insurance Program, which is based on the minimal requirements for floodplain management and is designed to minimize flood damage within Special Flood Hazard Areas. FEMA is the agency that administrates the National Flood Insurance Program of which the City is a participant. FEMA also issues the Flood Insurance Rate Map (FIRM) to

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identify which land areas are subject to flooding and establishes design standards for flood protection in the areas with highest risk of flooding. The FIRM identifies flood hazard zones that apply to real property. Special Flood Hazard Areas are defined as areas that have a one percent chance of flooding within a given year, which is also referred to as the 100-year flood.

Soil and Water Resources Conservation Act

The purpose of the Soil and Water Resources Conservation Act of 1977 is to protect or restore soil functions on a permanent sustainable basis. Protection and restoration activities include prevention of harmful soil changes; rehabilitation of the soil, contaminated sites, and of water contaminated by such sites; and precautions against negative soil impacts. Disruptions of natural soil functions and function as an archive of natural and cultural history should be avoided, as far as practicable. In addition, the federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) requirements, through the National Pollution Discharge Elimination System (NPDES) permitting process, provide guidance for protection of geologic and soil resources.

National Pollutant Discharge Elimination System

Section 402 of the CWA establishes the permit program to regulate pollutant discharge from point sources and discharge pollutants into U.S. waters. In the State of California, the U.S. Environmental Protection Agency (U.S. EPA) has authorized the State Water Resources Control Board permitting authority to implement the NPDES program. In general, the State Water Resources Control Board issues two baseline general permits: one for industrial discharges and one for construction activities. Rather than setting numeric effluent limitations for stormwater and urban runoff, CWA regulation calls for the implementation of best management practices (BMPs) to reduce or prevent pollutant discharge from these activities to the Maximum Extent Practicable for urban runoff and meeting the Best Available Technology Economically Achievable and Best Conventional Pollutant Control Technology standards for construction stormwater. Regulations and permits have been implemented at the federal, state, and local level to form a comprehensive regulatory framework to serve and protect the quality of the country's surface water resources.

State

Alguist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PRC] §§2621-2624, Division 2 Chapter 7.5) was passed in 1972 to mitigate the hazard of surface faulting to structures intended for human occupancy. The Alquist-Priolo Act's main purpose is to prohibit siting buildings used for human occupancy across traces of active faults that constitute a potential hazard to structures from surface faulting or fault creep. The Alquist-Priolo Act requires the State Geologist to establish regulatory zones, known as "Earthquake Fault Zones," delineating appropriately wide earthquake fault zones to encompass potentially active and recently active traces of faults. Local agencies must regulate most development projects within these zones. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that proposed human occupancy structures would not be constructed across active faults. A licensed geologist must prepare an evaluation and written report of a specific site.

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If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (typically at least 50-foot setbacks are required).

The City contains one active fault, the Newport-Inglewood Fault, which is recognized as an active fault under the Alquist-Priolo Act.¹ The City's Earthquake Faults map² depicts the faults that are part of the Newport-Inglewood fault zone.

Seismic Hazards Mapping Act

The 1990 Seismic Hazards Mapping Act (PRC §§2690–2699.6) addresses hazards such as strong ground shaking, earthquake-induced landslides, and, in some areas, zones of amplified shaking. The act established a mapping program for areas that have the potential for liquefaction, landslide, strong ground shaking, or other earthquake and geologic hazards. CGS is the primary state agency charged with implementing the Seismic Hazards Mapping Act and provides local jurisdictions with the seismic hazard zone maps that identify areas susceptible to liquefaction, earthquake-induced landslides, and amplified shaking. Site-specific hazard investigations are required by the Seismic Hazards Mapping Act when a development project is located within one of the Seismic Hazard Mapping Zones defined as a "zone of required investigation." The law also specifies that the lead agency for a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

Natural Hazards Disclosure Act

The Natural Hazards Disclosure Act (effective June 1, 1998), requires "that sellers of real property and their agents provide prospective buyers with a Natural Hazards Disclosure Statement when the property being sold lies within one or more state-mapped hazard areas, including a Seismic Hazard Zone." The law specifies two ways in which this disclosure can be made:

- 1. The Local Option Real Estate Transfer Disclosure Statement as provided in §1102.6a of the California Civil Code.
- 2. The Natural Hazard Disclosure Statement as provided in §1103.2 of the California Civil Code.

The Local Option Real Estate Disclosure Statement can be substituted for the Natural Hazards Disclosure Statement if it contains substantially the same information and substantially the same warning as the Natural Hazards Disclosure Statement.

Public Resources Code

California PRC §§5097–5097.6 identifies that the unauthorized disturbance or removal of archaeological, historical, or paleontological resources located on public lands is a misdemeanor. It prohibits the knowing

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California Department of Conservation. (1986). California Geological Survey- Earthquake Zones of Required Investigation. Retrieved from https://maps.conservation.ca.gov/cgs/EQZApp/app/. Accessed April 19, 2022.

² City of Huntington Beach General Plan. Earthquake Faults and Essential Service Facilities. (2015). Retrieved from: https://www.huntingtonbeachca.gov/about/maps/faults and facilities.pdf. Accessed April 19, 2022.

destruction of objects of antiquity without a permit (expressed permission) on public lands, and it provides for criminal sanctions.

This section was amended in 1987 to require consultation with the Native American Heritage Commission (NAHC) whenever Native American graves are found. Violations for taking or possessing remains or artifacts are felonies. California PRC §5097.5 states that "no person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historic feature situated on public lands, except with the express permission of the public agency having jurisdiction over the lands."

California Coastal Act

California Coastal Act (CCA) §30253 requires that new development (1) minimize risks to life and property in areas of high geologic, flood, and fire hazard; and (2) assures stability and structural integrity, and neither creates nor contributes significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way requires the construction of protective devices that would substantially alter landforms along bluffs and cliffs. The California Coastal Commission (Coastal Commission) indicates that an appropriate setback from a coastal bluff is at the point where a Factor of Safety (FOS) of 1.5 can be demonstrated; however, the Coastal Commission notes that it is more difficult to determine for overhanging or notched coastal bluffs or bluffs undermined by sea caves. The Coastal Act is implemented in the City through the certified local coastal program, which applies to all proposed development in the City located within the Coastal Zone boundary.

The California Coastal Act, in part, authorizes the Coastal Commission to review permit applications for development within the coastal zone and, where necessary, to require reasonable mitigation measures to offset effects of that development. Permits for new development are issued with "special conditions" to ensure implementation of these mitigation measures. The Act also states that "Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required" (CCA §30244).

California Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (California Code of Regulations [CCR] §§2690–2699.6) addresses earthquake hazards from non-surface fault rupture, including liquefaction, landslides, strong ground shaking, and other earthquake and geologic hazards. The Seismic Hazards Mapping Act also specifies that the lead agency for a project may withhold project permits until geologic or soils investigations are conducted for specific areas and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

California Building Code/California Residential Code

The 2019 California Building Code (CBC) is based on the International Building Code, which is a model building code developed by the International Code Council that sets rules specifying the minimum acceptable level of safety for building construction in the United States. The CBC is part of the CCR, Title 24 Part 2. The California Residential Code (CRC) is part of the CCR, Title 24 Part 2.5. The CBC is updated

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periodically. The current version of the CBC was published on July 1, 2019 and became effective on January 1, 2020. The CBC and CRC contain seismic safety standards outlining design and construction requirements. Development projects must show compliance with the CBC and/or CRC through the development review process. Building permits are submitted and reviewed for compliance prior to obtaining construction and building permits. The CBC includes estimates for maximum earthquake magnitudes and peak ground acceleration, soil classifications and expansion potential, seismic design categories and lateral pressure, and grading and surface drainage.

Local

City of Huntington Beach General Plan

Natural and Environmental Hazards Element³

Following are the goals and policies relevant to the Project:

Goal HAZ-1: Structures are designed and retrofitted to be more resilient to earthquakes and

other geologic and seismic hazards, protecting against injury while also preserving

the structural integrity of the structure.

Policy A: Ensure that new and significantly retrofitted structures are sited and designed to

reduce the risk of damage from geologic and seismic hazards.

Policy B: Support retrofits to existing structures to improve resiliency to geologic and seismic

hazards.

Huntington Beach Municipal Code

The City adopts the current CBC as the basis for its own Building Code (Huntington Beach Municipal Code (HBMC) Chapter 17.04, Building Code). The City's Building Code, as adopted, includes acceptable variations to the CBC related to minimum slab thickness, fire-extinguishing systems, building security, and methane district regulations. The Grading and Excavation Code (HBMC Chapter 17.05, Grading and Excavation Code) sets forth rules and regulations to control excavation, grading, earthwork, and site improvement construction, and establishes administrative requirements for issuance of permits, approvals of plans, and inspection of grading construction. Specifically, the Grading and Excavation Code identifies, defines, and regulates grading design and operations, including hazardous conditions, plans and specifications, soils and geology reports, fills, setbacks, drainage and terracing, asphalt concrete pavement, and erosion control systems. HBMC Chapters 17.04 and 17.05 stipulate the requirements for proposed new development in the city to address geotechnical issues, including all aspects of geologic and engineering site investigation, seismic-resistant foundation and building design, and slope and soil stability including erosion and sediment control. Development is required to comply with the Huntington Beach Building Code, and Grading and Excavation Code, and all state requirements pertaining to geologic, soil, and seismic hazards. With this regulatory framework in place, the City has the authority to enforce General Plan Update (GPU) policies protecting the public from geotechnical hazards associated with proposed development.

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³ City of Huntington Beach. 2017. City of Huntington Beach General Plan - Natural and Environmental Hazards Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf (accessed April 19, 2022).

Given the long history of oil extraction in the planning area, methane hazards have resulted in City regulations and procedures to ensure proper mitigation and abatement. HBMC §17.04.170 specifies the City Methane District Regulations, including appropriate testing and mitigation measures for new buildings within established methane overlay districts. In addition, the City also created Specification No. 429, which identifies the specific testing requirements and protocols for adequate analysis and mitigation of methane-related hazards within the methane overlay district.

5.4.3 Existing Environmental Setting

Paleontological and Geological Setting⁴

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, this a SEIR to the GPU Program EIR (PEIR). The 6th Cycle HEU Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. The major paleontological and geological settings in and around the City are described in detail in GPU PEIR Sections 4.4.1 and 4.5.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf).

Geologic Hazards

Earthquake Faults and Fault Rupture

The closest fault zone to the City is the Newport-Inglewood Fault Zone. The Newport-Inglewood Fault Zone is an active right-lateral fault system consisting of a series of fault segments located mostly parallel to the coastline. This fault is considered the second most active fault in California. It extends from the Santa Monica Mountains southeastward through the western part of Orange County to the offshore area near Newport Beach. This fault was the source of the destructive 1933 Long Beach earthquake (magnitude 6.4), which caused 120 deaths and considerable property damage. During the past 60 years, numerous other shocks ranging from magnitude 3.0 to 5 have been recorded. The Southern California Earthquake Center (SCEC) reports probable earthquake magnitudes for the Newport-Inglewood fault to be in the range of 6.0 to 7.4.5 Candidate housing sites 31, 32, 68, 69, 101, 203, 208 and 294 are located within the Newport-Inglewood Fault zone; see **Exhibit 5.4-1: Fault Zones**.

Seismic Ground Shaking

Landslide

Landslide susceptibility is identified by the State of California Seismic Hazard Zone Map for the Newport Beach and Seal Beach Quadrangles. General Plan Figure HAZ-3, Seismic Hazard Zones (Liquefaction and Landslide), depicts the portions of the City subject to landslides. The California Department of Conservation combines rock strength and slope data to establish susceptibility to deep-seated landslides

⁴ City of Huntington Beach. 2017. City of Huntington Beach General Plan Update; Volume II – PEIR. Page 4.5-1. Retrieved from: https://huntingtonbeachca.gov/government/departments/planning/major/general-plan-update.cfm. Accessed July 2021.

⁵ Southern California Earthquake Center (SCEC). 2021. Significant Earthquakes and Faults. Available at https://scedc.caltech.edu/earthquake/significant.html. Accessed July 2021.

Department of Conservation. Seismic Hazards Mapping Act. (2019). Retrieved from: https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/. Accessed April 2022.

classes (0 to 10, low to high). These classes express the generalization that on very low slopes, landslide susceptibility is low even in weak materials, and that landslide susceptibility increases with slope and in weak rocks. Based on this mapping and City's topography, there are small areas along coastal bluffs that have the potential for earthquake-induced landslides. However, none of the candidate housing sites are located in a landslide zone.

Liquefaction and Related Ground Failure

Most of the corridor north of Warner Avenue, in the vicinity of Beach Boulevard and Slater Avenue, west of Gothard Street and Edwards Street and east of Spring Street, is known to be within a Liquefaction Hazard Zone as identified by the State of California Seismic Hazard Zone Map for the Newport Beach and Seal Beach Quadrangles. General Plan Figure HAZ-3 depicts those portions of the City within medium to very high liquefaction potential areas. Of the 378 candidate housing sites, 116 sites are in a Liquefaction Hazard Zone; see Exhibit 5.4-2: Candidate Housing Sites Within a Liquefaction Hazard Zone.

Soil Hazards

Soil Erosion

Erosion occurs when earthen materials are loosened, worn away, decomposed, or dissolved and are removed from one place and transported to another location. Coastal erosion also can occur from rapid, short-term daily, seasonal, or annual natural events such as waves, storm surge, wind, coastal storms, and flooding or from human activities including boat wakes and dredging. Within the City, opportunities for accelerated erosion include beach and bluff erosion. Continual erosion could degrade highway and beach access and possibly cause bluff failure. The principal natural causes of erosion are wave action, wind action, sea level rise, and overland runoff. Erosion can be exacerbated by human-caused influences, shoreline hardening, seawalls, groins, jetties, navigation inlets, boat wakes, dredging, and other interruptions of physical coastal processes that reduce or interrupt longshore sediment transport. As a coastal community, the City is constantly susceptible to coastal erosion. The coast of Southern California is markedly different from the rest of the state. Coastal bluffs and marine terraces are widespread and typically fronted by narrow beaches.

Soil erosion hazards in the City range from minimal to high. Proper ground cover and drainage can minimize erosion. Potential erosion hazards are evaluated by standard soils and foundation engineering and testing required by the City grading and building codes. In addition, the City's Grading and Excavation Code (HBMC Chapter 17.05, Grading and Excavation Code) implements the requirements of California Building Code Appendix J Section J110, Erosion Control, for construction periods. Adequate protection in the form of BMPs and erosion and sediment control plans would be incorporated to address current legal requirements for control of erosion caused by stormwater discharges.

Expansive Soils

Expansive soils contain considerable amounts of clay that expands with moisture and shrinks when dried. The swelling or shrinking of this soil can shift, crack, or break structures built upon this type of surface.

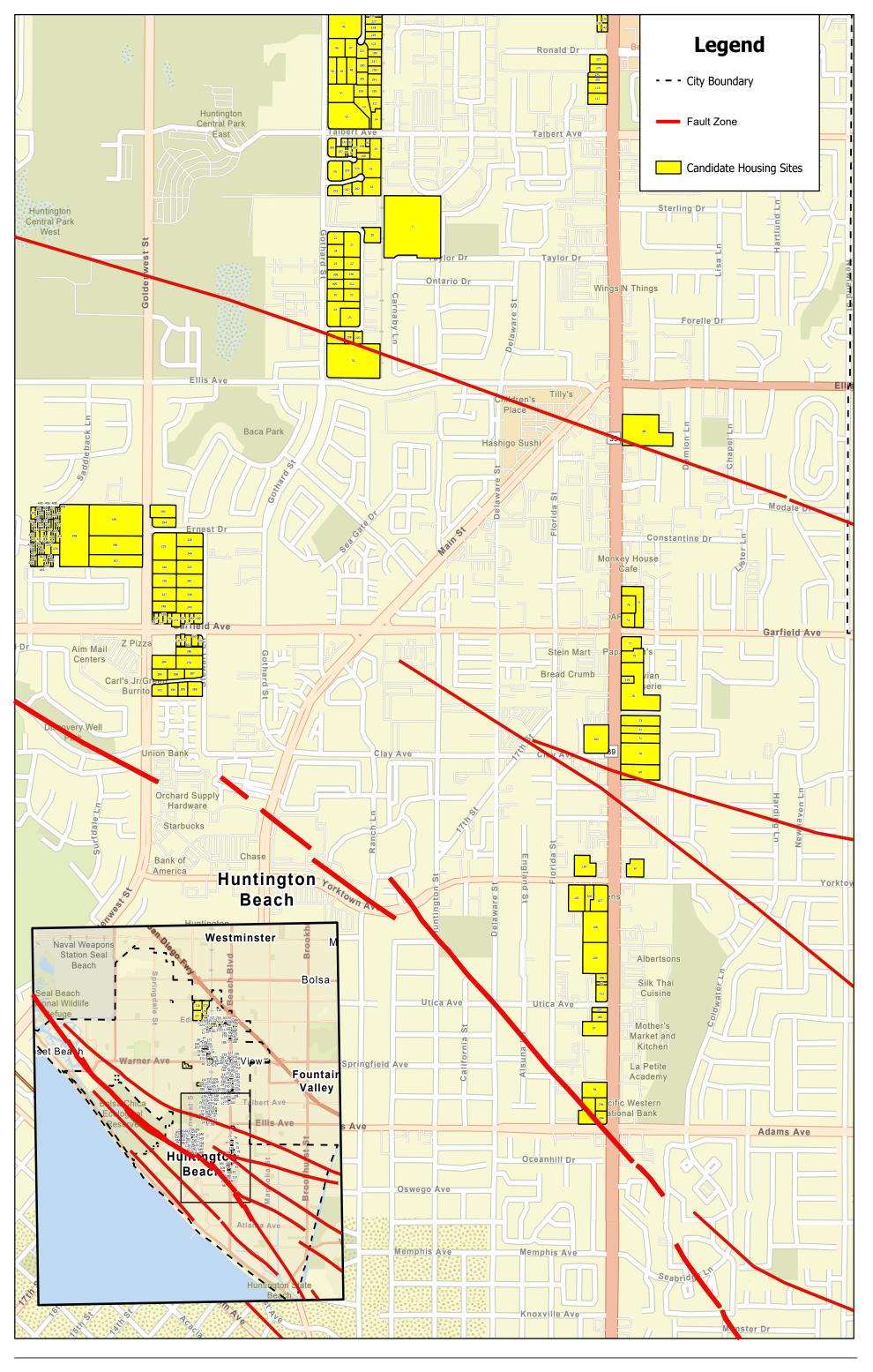
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Movements may vary under different parts of a building with the result that the foundations crack, with vertical displacement causing various structural portions of the building to be damaged and/or destroyed. Based on the descriptions of the geologic units (and soil classifications) identified within the Project area, locations underlain by younger alluvium are considered prone to moderate to high expansion potential, depending on the presence and amount of organic content in the soils. In addition, younger alluvial soils with high organic content are considered collapsible. This condition typically occurs when the soils come into contact with moisture while placed under load. Risks associated with expansive soil are addressed through compliance with the City Building Code and the Grading and Excavation Code, as well as engineering and construction practices to reduce potential impacts.

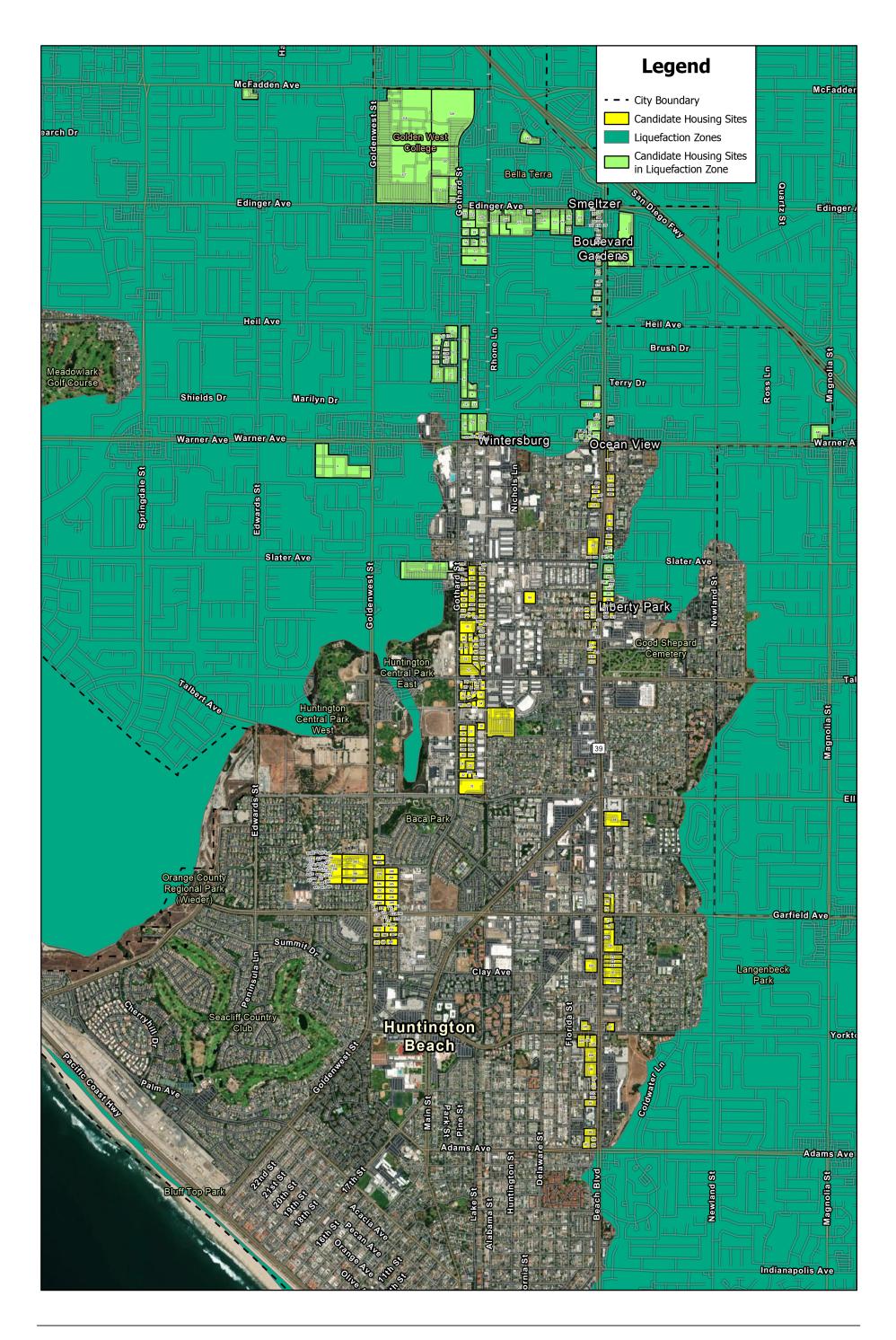
Subsidence and Settlement

According to the USGS, land subsidence is the gradual settling or sudden shrinking of the Earth's surface owing to subsurface movement of earthen materials. Subsidence occurs when a large portion of land sinks, usually due to the withdrawal of groundwater, oil, or natural gas. Soils that are particularly subject to subsidence include those with high silt or clay content. Minor ground subsidence is expected to occur in the soils below the zone of removal, due to settlement and machinery working. The actual amount of subsidence is expected to be variable and would be dependent on the type of machinery used, repetitions of use, and dynamic effects. While subsidence can occur naturally, most of the subsidence that has occurred within the Project area is a result of oil and water extraction during the City's history. All candidate housing sites are located in areas of varied degrees of subsidence, as follows:

- 152 sites are in an area with 0 to -0.1 inches of subsidence,
- 101 sites are in an area of -0.1 to -0.2 inches of subsidence,
- 45 sites are in an area with -0.2 to -0.3 inches of subsidence, and
- 80 sites are located in an area with -0.3 to -0.4 inches of subsidence.



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5.4.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning geology and soils. The issues presented in the Environmental Checklist have been used as significance criteria in this section.

Accordingly, the Project would have a significant effect on the environment if it would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - 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;
 - Strong seismic ground shaking;
 - Seismic-related ground failure, including liquefaction; and
 - Landslides.
- Result in substantial soil erosion or loss of topsoil.
- 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.
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994),
 creating substantial direct or indirect risks to life or property.
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.
- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

5.4.5 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds, as described above, in determining whether Project implementation would create a significant impact concerning geology, soils, and paleontological resources. The evaluation was based on the previous GPU PEIR geology and soil analysis and a review of regulations and determining their applicability for the Project. Geology, soils, and paleontological resource information was acquired through consultation with City staff and review of relevant documents.

The baseline conditions and impact analyses are based on analysis of aerial and ground-level photographs and review of various data available in public records, including local planning documents. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning geology and soils considers the relevant federal, state, and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

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5.4.6 Project Impacts and Mitigation

Impact GEO-1

Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

- a) Rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
- b) Strong seismic ground shaking;
- c) Seismic-related ground failure, including liquefaction; and/or
- d) Landslides?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.5-11)

The City contains one active fault, the Newport-Inglewood Fault, which is recognized as an active fault under the Alquist-Priolo Act. The GPU PEIR concluded that the City is in a seismically active region and is subject to strong seismic ground shaking and seismic-related activity. The GPU PEIR concluded that because the City is located in a seismically active region, the City is also prone to earthquake-induced landslides and liquefaction events. The GPU PEIR also concluded that implementation of GPU land use policies would gradually shift City land uses and development densities and, therefore, expose people/new structures to hazards associated with fault rupture of the Newport-Inglewood Fault, ground shaking, landslides, and liquefaction. Thus, new development would be required to adhere to GPU Natural and Environmental Hazards Element policies to ensure that new and redeveloped buildings are not only located in areas which are less susceptible to the effects from seismic activity, but that they are designed to reduce the risk of damage from geologic and seismic hazards; and ensure that records of existing vulnerable structures are recorded.

Furthermore, the GPU PEIR determined that implementation of mitigation measure (MM) 4.5-1 and MM 4.5-2 would reduce impacts to less than significant levels by requiring all new development to adhere to prepare a detailed soils and geotechnical analysis and to comply with the recommendations established in such an analysis to ensure compliance with state and local laws and regulations concerning fault rupture, ground shaking, and liquefaction. Further discussion pertaining to seismic-related ground failure including liquefaction and/or landslides are discussed in Impact GEO-3 below.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

As previously noted, the Alquist-Priolo Act requires the State Geologist to establish regulatory zones, known as AP Earthquake Fault Zones, around the surface traces of active faults and to issue appropriate maps. If an active fault is found, a structure for human occupancy (e.g., housing) cannot be placed over

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the trace of the fault and must be set back from the fault (typically 50 feet). 7 Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons. Candidate housing sites 31, 32, 68, 69, 101, 203, 208 and 294 are located within the Newport-Inglewood Fault zone; see Exhibit 5.4-1. Therefore, future housing development facilitated by the Project could cause potential substantial adverse effects involving rupture of a known earthquake fault. Additionally, as is most of Southern California, the City and all candidate housing sites are within a seismically active area that could be subject to strong seismic ground shaking. As shown in General Plan Figure HAZ-3, Seismic Hazard Zones (Liquefaction and Landslide), none of the candidate housing sites are within landslide zones; however, much of the City is within medium to very high liquefaction potential areas. Of the 378 candidate housing sites, 116 sites are entirely or predominantly located in liquefaction hazard areas; see Exhibit 5.4-2. Therefore, future housing development facilitated by the Project could cause potential substantial adverse effects involving strong seismic ground shaking and other seismic-related ground failures (e.g., liquefaction and lateral spreading). The type and magnitude of seismic hazards affecting the City would depend upon the distance to causative faults, the intensity, and the magnitude of the seismic event.

All future housing development subject to rezoning and within overlay zones would be subject to compliance with General Plan Policy HAZ-1A, which would ensure that new structures are sited and designed to reduce the risk of damage from geologic and seismic hazards, and HAZ-1B, which supports retrofits to existing structures (e.g., hotel/motel conversions) to improve resiliency to geologic and seismic hazards. Pursuant to State law, future housing development on candidate housing sites located within the Newport-Inglewood Fault zone (i.e., Sites 31, 32, 68, 69, 101, 203, 208 and 294) would be prohibited from placing housing (i.e., is a structure for human occupancy) over the trace of the fault and must be set back from the fault (typically 50 feet).8 Additionally, the City's Building Code, which incorporates the California Building Code (CBC), provides standards for seismic design of structures that have been used to provide the acceptable level of protection to most structures and occupants. In general, all future housing development facilitated by the Project must demonstrate conformance with HBMC Chapter 17.04 (i.e., the City's Building Code) requirements, which would be confirmed through the building plan review process. The CBC contains design and construction regulations pertaining to seis mic safety for buildings, which covers issues such as ground motion, soil classifications, redundancy, drift, and deformation compatibility. Additionally, all future housing development subject to rezoning and within overlay zones would be subject to compliance with GPU PEIR MM 4.5-1, which requires a detailed soils and geotechnical analysis that provides detailed recommendations for grading, chemical and fill properties, liquefaction, expansive soils, soil erosion, earthquake faulting and landscaping, and GPU PEIR MM 4.5-2, which requires future projects to comply with the recommendations of a final soils and geotechnical report (a preliminary report would be required per MM 4.5-1).

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Department of Conservation. California Geological Survey. Special Publication 42 Revised 2018. Earthquake Fault Zones: A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California. Available at <a href="https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Publications/S

Department of Conservation. California Geological Survey. Special Publication 42 Revised 2018. Earthquake Fault Zones: A Guide for Government Agencies, Property Owners/Developers, and Geoscience Practitioners for Assessing Fault Rupture Hazards in California. Available at https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Publications/Sp 042.pdf. Accessed June 2022.

Future housing developments facilitated by the Project would also be subject to compliance with all federal, State, and local requirements for avoiding and minimizing seismic-related impacts (i.e., strong seismic shaking or ground failure including liquefaction and lateral spreading). Following compliance with the established regulatory framework (i.e., Alquist-Priolo Act, General Plan Policies HAZ-1A and HAZ-1B, and HBMC Chapters 17.04 and 17.05) as well as compliance with **GPU PEIR MM 4.5-1** and **GPU PEIR MM 4.5-2**, the Project would result in a less than significant impact concerning potential substantial adverse effects involving rupture of a known earthquake fault.

GENERAL PLAN POLICIES

See **Section 5.4.2: Existing Regulatory Setting** for complete policy text.

- Policy HAZ-1.A
- Policy HAZ-1.B

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.5-1

Prior to issuance of a grading permit, a California-licensed Certified Engineering Geologist and/or Geotechnical Engineer shall prepare and submit to the City of Huntington Beach Department of Public Works a detailed soils and geotechnical analysis. The report shall include soil sampling and laboratory testing of materials to provide detailed recommendations for grading, chemical and fill properties, liquefaction, expansive soils, soil erosion, earthquake faulting and landscaping.

GPU PEIR MM 4.5-2

Any future project within the planning area shall comply with the recommendations of a final soils and geotechnical report (a preliminary report would be required per MM 4.5-1). These recommendations shall be implemented in the design of a project, including but not limited to measures associated with site preparation, fill placement, temporary shoring and permanent dewatering, groundwater seismic design features, excavation stability, foundations, soil stabilization, establishment of deep foundations, concrete slabs and pavements, surface drainage, cement type and corrosion measures, erosion control, shoring and internal bracing, and plan review.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact GEO-2 Would the Project result in substantial soil erosion or the loss of topsoil?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.5-13)

The GPU PEIR concluded that the natural erosion processes would occur predominately through coastal erosions due to ground disturbance. This would increase both on- and off-site transport of sediment and

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leave areas susceptible to increased rates of erosion via the wind and rain. Therefore, the GPU PEIR indicated that construction activities would be required to comply with Building Code requirements and National Pollutant Discharge Elimination System (NPDES) permit conditions to minimize the polluting effects of erosion from construction sites. Construction also would be required to comply with the Regional Water Quality Control Board (RWQCB) Water Quality Control Plan and its regulations. Standard BMPs regarding post-erosion and sediment control also would be implemented for all future development. In addition, future project applicants would be required to prepare site-specific geotechnical reports and undergo separate environmental review, as applicable. Future development would be required to adhere to State and City regulations, including GPU Natural and Environmental Hazard Element and Environmental Resources Element policies to minimize impacts from erosion. Therefore, the GPU PEIR concluded that a less than significant impact would occur in this regard.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Future housing development facilitated by the Project would result in grading activities that would disrupt soil profiles, and thereby result in potential increased exposure of soils to wind and rain. Erosion on graded slopes could cause downstream sedimentation impacts. Other related impacts resulting from substantial short-term erosion or loss of topsoil include topography changes and the creation of impervious surfaces.

Future housing development facilitated by the Project subject to rezoning and within overlay zones would be subject to permits and would be required to comply with all federal, State, and local requirements for avoiding and minimizing impacts concerning soil erosion or loss of topsoil, including the City's Building Code (Chapter 17.04) and the City's plan review process. Short-term construction-related erosion would be addressed through compliance with the NPDES program, which requires implementation of a Storm Water Pollution Prevention Plan (SWPPP) and BMPs intended to reduce soil erosion. Considering these requirements, future housing development facilitated by the Project would not result in substantial soil erosion or loss of topsoil. Therefore, impacts would be less than significant, and no mitigation is required.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

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Impact GEO-3

Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.5-14)

As discussed in Impact GEO-1, the City is susceptible to earthquake-induced landslides, lateral spreading, subsidence, liquefaction, and/or collapse. Therefore, the GPU PEIR concluded that all future projects would be required to adhere to State and local regulations and policies, including the GPU policies, and MM 4.5-1 and MM 4.5-3 to reduce impacts to less than significant levels.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

As discussed under Impact GEO-1, candidate housing sites are not located within landslide susceptibility areas. Therefore, there would be no impact concerning potential risk involving landslides.

Several candidate housing sites (i.e., 116 sites) are entirely or predominantly located in liquefaction hazard areas. These candidate housing sites could also be exposed to potential lateral spreading. Additionally, all candidate housing sites are located in areas of varied degrees of subsidence.

Future housing developments facilitated by the Project would be subject to permits and required to adhere to all federal, State, and local requirements for avoiding and minimizing impacts caused by unstable geological units or soils. All future housing development subject to rezoning and within overlay zones would be subject to compliance with General Plan Policy HAZ-1A, which would ensure that new structures are sited and designed to reduce the risk of damage from geologic hazards, and HAZ-1B, which supports retrofits to existing structures (e.g., hotel/motel conversions) to improve resiliency to geologic hazards. In general, all future housing development facilitated by the Project must demonstrate conformance with HBMC Chapter 17.04 (i.e., the City's Building Code) requirements, which would be confirmed through the building plan review process. All future housing development subject to rezoning and within overlay zones would be subject to compliance with GPU PEIR MM 4.5-1, which requires a detailed soils and geotechnical analysis that provides detailed recommendations for addressing grading procedures, soil stabilization during and post-construction, foundation design, and slope stability, and **GPU PEIR MM 4.5-2**, which requires future projects to comply with the recommendations of a final soils and geotechnical report (a preliminary report would be required per MM 4.5-1). Additionally, pursuant to GPU PEIR MM 4.5-3, all future housing development subject to rezoning and within overlay zones would require a site-specific evaluation of soil conditions. Compliance with required geotechnical investigations and engineering techniques would reduce impacts associated with ground subsidence to a less than significant level. Following compliance with the established regulatory framework (i.e., General Plan Policies HAZ-1A and HAZ-1B, and HBMC Chapters 17.04 and 17.05), as well as compliance with GPU PEIR MM 4.5-1 through GPU PEIR MM 4.5-3, the Project would result in a less than significant impact concerning potential substantial adverse effects involving exposure to unstable geological units or soils.

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GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

See GPU PEIR MM 4.5-1 and MM 4.5-2 above.

GPU PEIR MM 4.5-3

Pre-Construction Soil Condition Evaluation. A site-specific evaluation of soil conditions would be required with the submittal of grading plans for all future projects and must contain recommendations for ground preparation and earthworkspecific to the site.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact GEO-4

Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.5-16)

According to the Natural and Environmental Hazards Technical Report prepared for the GPU PEIR, approximately 21 percent of the City's soils are described as clay bearing. Thus, future development was anticipated to expose additional people and structures to hazards associated with expansive soils. Therefore, the GPU PEIR required all future development under the Huntington Beach GPU to comply with building code requirements and required a site-specific evaluation of soil conditions for all construction projects. In addition, the HBMC requires that expansive soil is either removed prior to construction of foundations or treatment programs are undertaken that include grouting (combining of soil particles) and recompaction. Future development proposed within the City would be designed, constructed, and operated in conformance with State and local regulations. Therefore, the GPU PEIR concluded that a less than significant impact would occur due to a project being located on an expansive soil.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

As described above, approximately 21 percent of the City's soils are clay bearing. Future housing development facilitated by the Project could occur on properties containing expansive soils, potentially creating risk to life and property. However, all future housing development facilitated by the Project must demonstrate conformance with HBMC Chapter 17.04 (i.e., the City's Building Code) requirements, which

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would be confirmed through the building plan review process. All future housing development subject to rezoning and within overlay zones would be subject to compliance with **GPU PEIR MM 4.5-1**, which requires a detailed soils and geotechnical analysis that would confirm site-specific soil composition and assign an expansion index (EI) rating, and would include conclusions and recommendations addressing grading procedures, soil stabilization, and foundation design. Additionally, **GPU PEIR MM 4.5-2** requires future projects to comply with the recommendations of a final soils and geotechnical report (a preliminary report would be required per **MM 4.5-1**), and **GPU PEIR MM 4.5-3** requires a site-specific evaluation of soil conditions. Following compliance with the established regulatory framework (i.e., HBMC Chapters 17.04 and 17.05), as well as compliance with **GPU PEIR MM 4.5-1** through **GPU PEIR MM 4.5-3**, future housing development facilitated by the Project would not create substantial risks to life or property associated with expansive soils. Therefore, impacts would be less than significant.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

See GPU PEIR MM 4.5-1, MM 4.5-2, and 4.5-3 above.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant With Mitigation Incorporated

Impact GEO-5

Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Level of Significance Before Mitigation: No Impact

GPU PEIR (Volume II, page 4.5-10)

The GPU PEIR concluded that buildout of the Huntington Beach GPU would not result in a significant impact concerning soils incapable to adequately supporting the use of tanks or alternative wastewater disposal systems. The sewer collection pipelines within the City are owned and maintained by two agencies, the City and the Orange County Sanitation District. The City would provide these services for future development as part of the Huntington Beach GPU buildout, with the exception of the sewer collection pipelines in the Sunset Beach area; owned by the Sunset Beach Sanitary District. The GPU PEIR concluded that no alternative wastewater systems or new septic tanks were proposed with the implementation of the Huntington Beach GPU.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

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IMPACT ANALYSIS

All future housing development facilitated by the Project would be in areas served by the City and the Orange County Sanitation District's sanitary sewer systems and would not use septic tanks or other alternative wastewater disposal systems. Therefore, no impact would occur, and no mitigation is required.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: No Impact

Impact GEO-6 Would the project directly or indirectly destroy a unique paleontological resource or

site or unique geological feature?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.4-9)

Although much of the City is an urban development, many of the structures throughout the City were built prior to the implementation of California Environmental Quality Act (CEQA) environmental review and guidelines. Thus, the GPU PEIR indicated that any future projects that would be developed under the Huntington Beach GP would be subject to CEQA review and guidelines. Specifically, if any future projects under the Huntington Beach GP would surpass the current depth of disturbed sediments, future projects would need to be analyzed for possible paleontological resources. Older and shallower marine sediments are prominent along Bolsa Chica and Huntington Beach mesas. Older deposits have the possibility to produce vertebrate fossils that have been found within the City such as marine freshwater, and terrestrial specimens including leopard shark, three-spined stickleback, garter snake, desert shrew, pocket gopher, mammoth, bison, and horse fossils.

The GPU PEIR concluded that future development would result in potentially significant direct and indirect impacts on known and unknown paleontological resources. Subsequent construction activities resulting from development under the GPU could damage or destroy fossils in the underlying rock units. Ground-disturbing activities in high or moderate sensitivity fossil-bearing geologic formations have the potential to damage or destroy paleontological resources that may be present below the ground surface. In the event that paleontological resources are discovered due to development, projects would be required to implement MM 4.4-2, MM 4.4-3, and MM 4.4-4 to reduce impacts to a less than significant level. Future development would also be required to comply with all applicable GPU policies as well as State and City regulations. Therefore, the GPU PEIR concluded that potential impacts on paleontological resources would be reduced to less than significant levels.

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The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

The specific underlying geology is not known for any of the candidate housing sites at this level of programmatic analysis; however, older shallow marine sediments, which have the potential to produce paleontological resources, have been identified within the City. Therefore, there is a likelihood that earthwork activities associated with future housing development facilitated by the Project would encounter a paleontological resource. Direct impacts to paleontological resources could occur when earthwork activities (e.g., grading) cut into sensitive paleontological areas, thereby directly damaging the resource, or exposing paleontological resources to potential indirect impacts (e.g., surficial erosion, uncontrolled specimen collection). Any fossils found during construction of future housing developments facilitated by the Project would require construction to cease until a qualified paleontologist could identify and establish a plan to recover any fossil remains if discovered. Ground-disturbing activities associated with future housing development facilitated by the Project could destroy a unique paleontological resource. Therefore, implementation of GPU PEIR MM 4.4-4, which requires that a qualified paleontologist evaluate any potential finds during construction, would be required. Additionally, future housing development facilitated by the Project would be subject to permits and required to adhere to all federal, State, and local requirements for avoiding and minimizing impacts to paleontological resources. With implementation of GPU PEIR MM 4.4-4, the HEU's potential impacts from future housing development concerning the destruction of a unique paleontological resource or unique geologic feature would be less than significant.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.4-4 Should paleontological resources (i.e., fossil remains) be identified at a particular site during project construction, the construction foreman shall cease construction within 100 feet of the find until a qualified professional can provide an evaluation. Mitigation of resource impacts shall be implemented and funded by the project-level applicant and shall be conducted as follows:

- 1) Identify and evaluate paleontological resources by intense field survey where impacts are considered high
- 2) Assess effects on identified sites
- 3) Consult with the institutional/academic paleontologists conducting research investigations within the geological formations that are slated to be impacted
- 4) Obtain comments from the researchers
- 5) Comply with researchers' recommendations to address any significant adverse effects where determined by the City to be feasible

June 2022 5.4-22 5.4 | Geology and Soils In considering any suggested mitigation proposed by the consulting paleontologist, the City of Huntington Beach staff shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, applicable policies and land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for paleontological resources is carried out.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

5.4.7 Cumulative Impacts

For purposes of the geology and soils impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0**: **Basis for Cumulative Analysis.**

The anticipated Project-related impacts, in conjunction with cumulative development in the City, could result in impacts related to geology, soils, and paleontological resources. Potential impacts would be site-specific and would require evaluation on a case-by-case basis at the project level when future development is proposed in accordance with the HEU and corresponding LUE. For future residential development subject to discretionary review, compliance with the applicable GPU PEIR mitigation measures would be confirmed through the discretionary review process. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures.

Consequently, the HEU would not result in significant environmental impacts concerning geology, soils, and paleontological resources resulting from future construction or operations; and future housing development facilitated by the Project would not conflict with or obstruct a State or local plan, ordinance, or standards aimed at avoiding or minimizing impacts concerning geology, soils, and paleontological resources. Therefore, the HEU's contribution to potentially cumulatively considerable impacts would be less than significant with the implementation of mitigation measures identified in this section and compliance with applicable federal, State, and local regulations.

5.4.8 Significant Unavoidable Impacts

No significant unavoidable impacts concerning geology and soils have been identified.

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5.4.9 References

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5.5 GREENHOUSE GAS EMISSIONS

5.5.1 Introduction

This section identifies existing conditions in the Project area and evaluates the Project's potential to generate greenhouse gas (GHG) emissions that may impact the environment or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Mitigation to avoid/reduce impacts is identified, as needed.

The Subsequent Environmental Impact Report (SEIR) evaluates the candidate housing sites based on information available to the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect impacts to air quality could be considered. More specifically, the information in this section is based on the City of Huntington Beach General Plan (General Plan) and the Huntington Beach General Plan Update Program Environmental Impact Report (GPU PEIR), the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), the California Air Resources Board (CARB), and U.S. Environmental Protection Agency (EPA).

Greenhouse Gases and Climate Change

Certain gases in the earth's atmosphere classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the Earth's climate, known as global climate change or global warming.

GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants (TACs), which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of a GHG molecule is dependent on multiple variables and

cannot be pinpointed, more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms of carbon sequestration. Of the total annual human-caused CO_2 emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remains stored in the atmosphere¹. **Table 5.5-1: Description of Greenhouse Gases** describes the primary GHGs attributed to global climate change, including their physical properties.

Table 5.5-1: Description of Greenhouse Gases

Greenhouse Gases	Description
Carbon Dioxide (CO ₂)	CO ₂ is a colorless, odorless gas that is emitted naturally and through human activities. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The largest source of CO ₂ emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. The atmospheric lifetime of CO ₂ is variable because it is readily exchanged in the atmosphere. CO ₂ is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.
Nitrous Oxide (N2O)	N_2O is largely attributable to agricultural practices and soil management. Primary human-related sources of N_2O include agricultural soil management, sewage treatment, combustion of fossil fuels, and adipic and nitric acid production. N_2O is produced from biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years. The Global Warming Potential of N_2O is 298.
Methane (CH ₄)	CH ₄ , a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Methane is the major component of natural gas, about 87 percent by volume. Human-related sources include fossil fuel production, animal husbandry, rice cultivation, biomass burning, and waste management. Natural sources of CH ₄ include wetlands, gas hydrates, termites, oceans, freshwater bodies, non-wetland soils, and wildfires. The atmospheric lifetime of CH ₄ is about 12 years and the Global Warming Potential is 25.
Hydrofluorocarbons (HFCs)	HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is increasing, as the continued phase out of CFCs and HCFCs gains momentum. The 100-year Global Warming Potential of HFCs range from 124 for HFC-152 to 14,800 for HFC-23.
Perfluorocarbons (PFCs)	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Two main sources of PFCs are primary aluminum production and semiconductor manufacturing. Global Warming Potentials range from 6,500 to 9,200.
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane with chlorine and/or fluorine atoms. They are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface). CFCs were synthesized in 1928 for use as refrigerants, aerosol propellants, and cleaning solvents. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited their production in 1987. Global Warming Potentials for CFCs range from 3,800 to 14,400.
Sulfur Hexafluoride (SF ₆)	SF ₆ is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. This gas is manmade and used for insulation in electric power transmission equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas. The Global Warming Potential of SF ₆ is 23,900.

¹ Intergovernmental Panel on Climate Change, Carbon and Other Biogeochemical Cycles. In: Climate Change 2013: The Physical Science Basis, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2013. http://www.climatechange2013.org/ images/report/WG1AR5_ALL_FINAL.pdf

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Greenhouse Gases	Description
Hydrochlorofluorocar bons (HCFCs)	HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, HCFCs are subject to a consumption cap and gradual phase out. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The 100-year Global Warming Potentials of HCFCs range from 90 for HCFC-123 to 1,800 for HCFC-142b.
Nitrogen Trifluoride (NF ₃)	NF_3 was added to Health and Safety Code section 38505(g)(7) as a GHG of concern. This gas is used in electronics manufacture for semiconductors and liquid crystal displays. It has a high global warming potential of 17,200.

Source: Compiled from U.S. EPA, Overview of Greenhouse Gases, (https://www.epa.gov/ghgemissions/overview-greenhouse-gases), 2018; U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016, 2018; Intergovernmental Panel on Climate Change, Climate Change, 2007: The Physical Science Basis, 2007; National Research Council, Advancing the Science of Climate Change, 2010; U.S. EPA, Methane and Nitrous Oxide Emission from Natural Sources, April 2010.

5.5.2 Existing Regulatory Setting

Federal

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (December 2007), among other key measures, requires the following, which are intended to aid in the reduction of national GHG emissions:

- Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- Set a target of 35 miles per gallon for the combined fleet of cars and light trucks by model year 2020 and direct the National Highway Traffic Safety Administration (NHTSA) to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.
- Prescribe or revise standards affecting regional efficiency for heating and cooling products and procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

U.S. Environmental Protection Agency Endangerment Finding

The U.S. Environmental Protection Agency's (U.S. EPA) authority to regulate GHG emissions stems from the U.S. Supreme Court decision in Massachusetts v. EPA (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing federal Clean Air Act (FCAA) and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, the U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs (CO_2 , CH_4 , N_2O , HFCs, PFCs, and SF_6) constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing FCAA and the U.S. EPA's assessment of the scientific evidence that form the basis for the U.S. EPA's regulatory actions.

The U.S. EPA is responsible for implementing federal policy to address global climate change. The federal government's early efforts have focused on public-private partnerships to reduce GHG intensity through

energy efficiency, renewable energy, methane and other non-CO₂ gases, agricultural practices, and implementation of technologies to achieve GHG reductions.

The U.S. EPA is required to regulate carbon dioxide (CO₂) and other GHGs as pollutants under Section 202(a)(1) of the federal Clean Air Act. The first step in implementing its authority was the Mandatory Reporting Rule that required inventory data collection commencing on January 1, 2010 with first reports due March 2011. Effective January 2, 2011, the U.S. EPA requires new and existing sources of GHG emissions of 75,000 tons per year to obtain a permit under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit Program.

Corporate Average Fuel Economy Program

The main federal regulatory program for automobiles is the Corporate Average Fuel Economy (CAFE) program, which has been in place since 1975. Under previous administrations, CAFE was the primary means of limiting mobile source carbon emissions. Rules finalized in 2012 put in place binding standards through Model Year 2021 and offered estimated standards through 2024. The federal light-duty vehicle standards were developed in two phases that harmonized with State standards through 2016 (Phase 1) and 2025 (Phase 2) and developed the first ever federal GHG standards for medium-duty and heavy-duty vehicles. At the time, the U.S. EPA estimated the new standards in this rule would reduce CO₂ emissions by approximately 270 MMT and save 530 million barrels of oil over the life of vehicles sold during the 2014 through 2018 model years.

State

The State has adopted a variety of regulations aimed at reducing the State's GHG emissions. While State actions alone cannot stop climate change, the adoption and implementation of this legislation demonstrates the State's leadership in addressing climate change. Key legislation and Executive Orders pertaining to the State's reduction targets are described below.

Executive Order S-3-05

Executive Order S-3-05 was issued on June 1, 2005, which established the following GHG emissions reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was codified in AB 32. Because the 2050 target is only contained in an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order B-30-15

On April 29, 2015, then California Governor Jerry Brown announced through EOB-30-15 the following GHG emissions target:

By 2030, California shall reduce GHG emissions to 40 percent below 1990 levels.

The emissions reduction target of 40 percent below 1990 levels by 2030 is an interim-year goal to make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. The order directs CARB to provide a plan with specific regulations to reduce statewide sources of GHG emissions. EO B-30-15 does not include a specific guideline for local governments.

Assembly Bill 32 (AB 32) and Senate Bill 32 (SB 32), California Global Warming Solutions Act

AB 32 requires CARB to reduce Statewide GHG emissions to 1990 levels by 2020. As part of this legislation, CARB was required to prepare a "Scoping Plan" that demonstrates how the state will achieve this goal. The Scoping Plan was adopted in 2011, and in it, local governments were described as "essential partners" in meeting the Statewide goal, recommending a GHG reduction level of 15 percent below 2005 to 2008 levels (depending on when a full emissions inventory is available) by 2020.

CARB released the 2017 Scoping Plan in November 2017. The 2017 Scoping Plan provides strategies for achieving the 2030 target established by Executive Order B-30-15 and codified in SB 32 (40 percent below 1990 levels by 2030). The 2017 Scoping Plan recommends local plan-level GHG emissions reduction goals.

Senate Bill 375

Senate Bill (SB) 375, signed in September 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPOs) to prepare a "Sustainable Communities Strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plans (RTP). On September 23, 2010, CARB adopted final regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035.

AB 1493 (Pavley)

The Pavley Bill enacted in 2002 requires the maximum feasible and cost-effective reduction of GHGs from automobiles and light-duty trucks. In 2004, CARB approved the "Pavley I" regulations that applied to new passenger vehicles beginning with model year 2009 through 2016. Pavley I is expected to reduce GHG emissions from regulated vehicles by 30 percent from 2002 levels by 2016. Pavley II was incorporated into Amendments to the Low Emission Vehicle Program referred to as LEV III. The amendments, effective August 7, 2012, apply to vehicles for model years 2017 through 2025. The regulation will reduce GHGs from new cars by 34 percent from 2016 levels by 2025.

California Energy Code (California Building Energy Efficiency Standards)

Energy consumption by new buildings in California is regulated by the California Energy Code (CEC) which is California Code of Regulations (CCR Title 24) Title 24 Part 6. The CCR Title 24's 12 parts are known as

the California Building Standards Code (CBSC). The California Energy Commission adopted its first energy code, titled the Energy Conservation Standards for New Residential and New Nonresidential Buildings, in 1978 in response to a legislative mandate to reduce energy consumption in the state. The CBSC is updated every three years, and the current 2019 CEC went into effect on January 1, 2020.

The CEC applies to both new construction and rehabilitation of residential and non-residential buildings, and regulates energy consumed for heating, cooling, ventilation, water heating, and lighting. The CEC is enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided these standards meet or exceed those provided in CCR Title 24. The 2019 CCR Title 24 standards include the requirement by the California Public Utilities Commission Energy Efficiency Strategic Plan for net zero energy consumption for new residential development starting in 2020 and will ultimately incorporate requirements for net zero in new non-residential development by 2030.

On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.

California Green Building Standards Code (CALGreen Code)

In 2008, the California Building Standards Commission adopted Part 11 of CCR Title 24, titled the California Green Building Standards Code (CALGreen Code) which became effective on August 1, 2009 as a voluntary code. The 2010 CALGreen Code was the first mandatory edition, took effect on January 1, 2011, and is now a part of the CBSC 3-year update cycle. The 2019 CALGreen Code standards became effective on January 1, 2020 and the 2022 code update will become effective on January 1, 2023. The CALGreen Code establishes mandatory measures for residential and non-residential building construction and encourages sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the State's efforts to reduce GHG emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and non-residential buildings subject to the standard.

Senate Bill 97

SB 97, enacted in 2007, amends the California Environmental Quality Act (CEQA) statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. The legislation directed the California Office of Planning and Research to develop draft CEQA Guidelines "for the mitigation of GHG emissions or the effects of GHG emissions" and directed the California Natural Resources Agency to certify and adopt the State CEQA Guidelines. CEQA Guidelines Section 15183.5, Tiering and Streamlining the Analysis of GHG Emissions, was added as part of the CEQA Guideline amendments that became effective in 2010 and describes the criteria needed in a GHG reduction plan that would allow for the tiering and streamlining of CEQA analysis for development projects.

Senate Bill 100

In 2018, the State Assembly passed and Governor Jerry Brown signed SB 100, which requires energy providers to derive 60 percent of their electricity from qualified renewable sources by 2030 and 100 percent by 2045. The Renewable Portfolio Standard (RPS) requires energy providers to derive 33 percent of their electricity from qualified renewable sources by 2020. The RPS is anticipated to lower emission factors (i.e., fewer GHG emissions per kilowatt-hour used) from utilities across the State.

Sustainable Communities and Climate Protection Act of 2008 (SB 375)

SB 375, signed in September of 2008, links regional transportation planning efforts, GHG reduction targets, and land use and housing allocations. It requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or an Alternative Planning Strategy as part of the land use and housing allocation in their Regional Transportation Plan (RTP). The ARB will work with the MPOs to set reduction targets for passenger cars and light trucks in the area of the MPO's jurisdiction, to be updated every four to eight years.

The MPO for the Huntington Beach area, SCAG, released its RTP/SCS in April 2012. The SCS is intended to reduce GHG emissions from passenger vehicles by 8 percent per capita by 2020, and by 13 percent per capita by 2035 compared to 2005, consistent with regional targets set by the ARB. One aspect of SB 375 that is unique to the SCAG region is that subregions within SCAG have the option of creating their own subregional SCS. Of SCAG's 15 subregions, two accepted this option, including the Orange County Council of Governments (OCCOG), of which Huntington Beach is a member agency. The underlying land use, socioeconomic, and transportation data provided in the OCCOG subregional SCS was incorporated into the regional SCS.

Executive Order B-30-15

In 2015, Governor Brown issued EO B-30-15, building on EO S-3-05 and the actions of AB 32. This executive order establishes an additional GHG reduction goal for the state of 40 percent below 1990 levels by 2020, comparable to a 49-percent reduction below baseline levels for local communities. It also directs state agencies to take a number of actions to reduce GHG emissions and to improve California's resiliency to the impacts of climate change.

Senate Bill 734

SB 734, adopted in 2016, requires the Governor's Office of Planning and Research to amend the CEQA Guidelines to provide an alternative to level of service (LOS) for evaluating transportation impacts. The law requires the alternative criteria promote GHG reduction, development of multimodal transportation networks, and diverse land uses.

Other Regulations

The CARB has adopted numerous regulations on sources of GHGs since the approval of the Climate Change Scoping Plan. Some of the more notable regulations include the Low Carbon Fuel Standard (LCFS) and regulations affecting vehicle efficiency such as the Tire Pressure Program, Low Friction Oil, and Heavy-

Duty Vehicle Aerodynamic Efficiency Standards. Also important are CARB regulations that apply to high global warming potential consumer products and refrigerants.

Regional

The City lies within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Air districts have direct and indirect regulatory authority over sources of air pollution and GHGs within their territory, and can inform and guide how laws on air pollution and GHGs are applied. The districts play a critical role in providing support and guidance to jurisdictions, but they do not officially certify Qualified GHG Reduction Strategies. The SCAQMD has not yet officially adopted plan-level guidelines for GHG reduction, although the agency has proposed project-level thresholds, below which a project's GHG emissions would not be considered significant for CEQA purposes.

Local

City of Huntington Beach General Plan

Environmental Resources Conservation Element²

The Huntington Beach General Plan Environmental Resources and Conservation Element establishes goals and policies to protect and conserve the City's environmental resources and addresses air quality and GHG emissions. Following are the goals and policies relevant to the proposed Project:

Goal ERC-5: Greenhouse gas emissions from activities occurring in Huntington Beach are

reduced to levels consistent with state goals.

Policy ERC-5.A: By 2020, reduce community-wide greenhouse gas emissions to 15 percent below

2005 levels. By 2040, reduce greenhouse gas emissions by 53.33 percent below the 2020 target, placing the community on a path to meet the State's 2050 greenhouse

gas emissions reduction goals.

5.5.3 Existing Environmental Setting

As discussed in detail in Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162, this a SEIR to the GPU PEIR. The 6th Cycle HEU Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. The environmental setting for GHG emissions is described in detail GP Update PEIR Section 4.6.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf).

Candidate Housing Sites

As previously stated, the proposed Project includes an update to the City's Housing Element map of candidate housing sites to reflect properties that could accommodate future housing development. In total, the HEU identifies 378 candidate housing sites (approximately 419 acres), which are detailed in

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² City of Huntington Beach. 2017. City of Huntington Beach General Plan - Environmental Resources and Conservation Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU Adopted-October-2017.pdf (accessed December 2021).

Appendix B: Candidate Housing Sites Inventory and illustrated on Exhibit 3-3: Candidate Housing Sites. In addition to the identified candidate housing sites, future development of accessory dwelling units (ADUs) could occur on residential sites throughout the City and would not be limited to the candidate housing sites.

Of the 378 candidate housing sites identified in the HEU, only two sites (Sites 83 and 129) are vacant, comprising less than one-half percent (approximately 0.18 acre) of the approximately 419 acres. Only two sites totaling approximately 14 acres and 312 dwelling units are developed with residential uses (Site 6, 14 acres with 311 dwelling units, and Site 86, 0.06 acre with 1 dwelling unit); see also **Table 5.10-5: Existing Housing - Candidate Housing Sites**. The remaining 374 developed sites include various non-residential land uses (i.e., commercial, office, research/technology, industrial, and public and semipublic). All of these existing land uses currently generate GHG emissions to varying degrees.

5.5.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning GHG emissions. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

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

Generally, the evaluation of an impact under CEQA involves comparing the project's effects against a threshold of significance. The CEQA Guidelines clarify that "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." For GHG emissions and global warming, there is not, at this time, one established, universally agreed-upon quantified threshold of significance for GHG impacts. The CEQA Guidelines do not establish a quantified threshold of significance for GHG impacts. Instead, lead agencies have the discretion to establish significance thresholds for their respective jurisdictions. A lead agency may look to thresholds developed by other public agencies or other expert entities, so long as the threshold chosen is supported by substantial evidence.

Determining a threshold of significance for GHG emissions can pose unique difficulties for lead agencies. Much of the science in this area is relatively new and constantly evolving, while, at the same time, state and local agencies are not specialized in this area. There is no federal standard for GHG emissions thresholds. California adopted AB 32 as a requirement for statewide GHG reductions, but the bill has no legal mandate to set emissions thresholds for local governments. The SCAQMD, which has the authority to set plan-level thresholds for GHG emissions, has not adopted such a threshold or announced when it might do so.

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents. This working group is

composed of a wide variety of stakeholders including the State Office of Planning and Research, CARB, the Attorney General's Office, a variety of city and county planning departments in the South Coast Air Basin (SCAB), various utilities such as sanitation and power companies throughout the SCAB, industry groups, and environmental and professional organizations. The Working Group has proposed a tiered approach to evaluating GHG emissions for development projects where SCAQMD is not the lead agency, wherein projects are evaluated sequentially through a series of "tiers" to determine whether the project is likely to result in a potentially significant impact due to GHG emissions.

With the tiered approach, the project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. The SCAQMD has adopted a threshold of 10,000 metric tons of carbon dioxide equivalent (MTCO2e) per year for industrial projects and a 3,000 MTCO2e threshold was proposed for non-industrial projects but has not been adopted. These bright line thresholds were derived using a 90 percent capture rate of a large sampling of projects. The SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three options. Under the Tier 4 first option, SCAQMD initially outlined that a project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. However, the Working Group did not provide a recommendation for this approach. The Working Group folded the Tier 4 second option into the third option. Under the Tier 4 third option, a project would be excluded if it was below an efficiency-based threshold of 4.8 MTCO2e per service population per year. Tier 5 would exclude projects that implement offsite mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

Even in the absence of clearly defined thresholds for GHG emissions, the law requires that an agency makes a good faith effort to disclose the GHG emissions from a project and mitigate to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact. Regardless of which threshold(s) are used, the agency must support its analysis and significance determination with substantial evidence (CEQA Guidelines Section 15064.7).

5.5.5 Methodology

This analysis considers the City's *Environmental Checklist Form*, as described above, in determining whether Project implementation would create a significant impact concerning the generation of GHG emissions from the previous GPU PEIR. The evaluation was based on reviewing the regulations and determining their applicability for the Project. The baseline conditions and impact analyses are based on review of various data available in public records, including local planning documents. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning GHG emissions considers the relevant federal, state, regional, and local (i.e., General Plan and HBMC)

laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

5.5.6 Project Impacts and Mitigation

Impact GHG-1 Would the Project generate greenhouse gas emissions, either directly or indirectly,

that may have a significant impact on the environment?

Impact GHG-2 Would the Project conflict with an applicable plan, policy or regulation adopted for

the purpose of reducing the emissions of greenhouse gases?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.6-6)

The GPU PEIR concluded that implementation of the Huntington Beach GPU would result in a significant unavoidable impact concerning the generation of GHG emissions and conflict with an applicable plan, policy, or regulation responsible for the reduction of GHG emissions.

The GPU PEIR identified that without any reduction intervention, cumulative GHG emissions in the City were forecasted to increase from approximately 1,432,540 MTCO $_2$ e from 2012 to 1,498,910 MTCO $_2$ e in 2020, and 1,660,640 MTCO $_2$ e in 2040. The Huntington Beach GPU does not mandate that the City achieve the growth potential identified in the plan, and not all identified land may be developed as expected considering site readiness, environmental constraints, market changes, and other factors. Nevertheless, the GPU PEIR concluded that multiple state and local strategies already in place are expected to reduce future emissions to 1,308,690 MTCO $_2$ e in 2020 (a reduction of 190,220 MTCO $_2$ e, or 13 percent), and to 1,102,850 MTCO $_2$ e in 2040 (a reduction of 557,790 MTCO $_2$ e, or 34 percent).

The GPU PEIR concluded that GHG emissions would be further reduced following the implementation of GHG Reduction Program (GGRP) strategies that include, but are not limited to, alternative transportation methods, supporting the use of alternative fuels and fuel-efficient vehicles, promoting renewable energy, supporting energy and water efficiency and conservation, and reducing waste generation in compliance with General Plan Policy ERC-5.A. The GPU PEIR concluded that cumulative emission reductions from implementation of the GGRP's 42 GHG reduction strategies would be 90,600 MTCO $_2$ e in 2020 and 532,480 MTCO $_2$ e in 2040, which is below significance thresholds.

The GGRP provides near-term specific and measurable actions, programs, and projects to achieve GHG reduction goals as required by state legislation, and provides performance indicators and a monitoring tool. The GGRP's proposed 42 GHG reduction strategies are voluntary, applicable strategies; see Table 5.5-2: GHG Emission Sectors and Associated GHG Reduction Strategies.

Table 5.5-2, GHG Emission Sectors and Associated GHG Reduction Strategies.

Sector	Associated GHG Reduction Strategies. Associated GHG Reduction Strategies		
Residential Energy	RE-1 – Residential solar RE-3 – Community shared solar RE-4 – New zero net energy buildings RE-5 – Solar swimming pool heating RE-6 – Community Choice Aggregation EE-1 – Residential homeowner retrofits EE-2 – Rental unit retrofits EE-5 – Public lighting retrofits EE-6 – Swimming pool efficiencies EE-7 – Low-income weatherization EE-8 - Electrification		
Nonresidential Energy	RE-2 – Nonresidential solar RE-3 – Community shared solar RE-4 – New zero net energy buildings RE-6 – Community Choice Aggregation EE-3 – Nonresidential retrofits EE-4 – Industrial retrofits EE-5 – Public lighting retrofits EE-8 - Electrification		
Transportation	LU-1 – Improved pedestrian network LU-2 – Inclusionary housing units T-1 – Bike ridership T-2 – Shared parking T-3 – Increased transit ridership T-4 – Carsharing T-5 – Telecommuting and alternative work schedules T-6 – Transportation Demand Management T-7 – Shuttle service T-8 – Traffic calming F-1 – Traffic signal synchronization F-2 – Electric vehicles F-3 – Biofuel vehicles F-4 – Autonomous vehicles		
Off-Road Equipment	OR-1 – Alternative fuel landscaping equipment OR-2 – Alternative fuel construction equipment		
Resource Management	RM-1 – Construction and demolition waste RM-2 – Construction and organic waste RM-3 – Increased recycling		
Water and Wastewater	WW-1 – Indoor water efficiency WW-2 – Water-efficient landscaping		
Source: City of Huntington Beach. 2017. City of Huntington Beach General Plan Update			

While the GPU PEIR identified that GHG emissions would be reduced below the reduction targets, based on the data at that time, most of the GPU PEIR GGRP's reduction strategies would require additional action by City staff and officials, and the feasibility of implementing these strategies and specific implementation details rely on numerous factors that could not be adequately forecasted by the draft GGRP or the GPU PEIR including economic feasibility, technological improvements, and community and political goals. The

City is not required by any State or federal law, or by any mechanism to implement the GGRP reduction strategies nor does the draft GGRP analyze GHG emissions associated with future development projects. Thus, the GPU PEIR concluded that a potentially significant cumulative impact to GHG emissions would occur with no feasible mitigation measures identified to reduce levels of significance.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons.

As previously noted, of the 378 candidate housing sites identified in the HEU, all except two sites (Sites 83 and 129) are developed with residential and various non-residential land uses (i.e., commercial, office, research/technology, industrial, and public and semipublic). All of these existing land uses currently generate GHG emissions to varying degrees. Future housing development facilitated by the Project would replace these existing uses with new residential uses (11,743 housing units) by 2029.

Future development is expected to result in increased GHG emissions, largely due to increased vehicle miles traveled (VMT), as well as from construction activities, stationary area sources (i.e., natural gas consumption for space and water heating devices, landscape maintenance equipment operations, and use of consumer products), energy consumption, water supply, and solid waste generation. Direct project-related GHG emissions typically include emissions from construction and operational activities.

Construction Emissions

The California Emissions Estimator Model (CalEEMod) was used to calculate GHG emissions from construction equipment operations, as well as materials transport, and construction workers commutes to and from the construction site. Construction activities would generally consist of grading, demolition, excavation, cut-and-fill, paving, building construction, and application of architectural coatings. Construction activities associated with future housing development would occur in incremental phases over time based upon numerous factors, including market demand, and economic and planning considerations.

Construction-related GHG emissions are typically site-specific and depend upon multiple variables. Construction activities associated with future development facilitated by the Project would occur in incremental phases over time based upon numerous factors, including market demand, and economic and planning considerations. Quantifying individual future development's GHG emissions from short-term, temporary construction-related activities is not possible due to project-level variability and uncertainties concerning locations, detailed site plans, construction schedules/duration, equipment requirements, etc., among other factors, which are presently unknown. Since these parameters can vary so widely (and individual project-related construction activities would occur over time dependent upon numerous factors), quantifying precise construction-related GHG emissions and impacts would be

speculative and impractical. Depending on how development proceeds, construction-related GHG emissions associated with future development could exceed SCAQMD thresholds of significance. To provide a reference of the types of GHG emissions associated with representative individual construction activities, three hypothetical scenarios were modeled for different residential development capacities anticipated from implementation of the proposed Project. Modeling was conducted for construction of the following three residential development scenarios:

- Mean Development Scenario (Site 53): 51 dwelling units on 0.67 acres;
- 95th Percentile³ Development Scenario (Site 70): 183 dwelling units on 2.32 acres; and
- Maximum Development Scenario (Site 217): 601 dwelling units on 7.55 acres.

This approach allows for an estimate of the range of construction emissions that could occur from buildout of the Project. Table 5.5-3: Typical Project Construction Greenhouse Gas Emissions, presents the estimated short-term construction emissions for the three hypothetical scenarios. As shown in **Table 5.5-3**, short-term construction GHG emissions would range between 82 and 948 MTCO₂e for the various development scenarios. As also shown in Table 5.5-3, Site 217, which provides the greatest/maximum development capacity with 601 dwelling units (i.e., the most dwelling units) of all 378 candidate housing sites, is anticipated to generate construction GHG emissions amortized over 30 years totaling 32 MTCO₂eq/yr year. The 95th percentile site (Site 70 with 183 dwelling units), is anticipated to generate construction GHG emissions amortized over 30 years totaling 15 MTCO₂eq/yr year. The 95th percentile site was provided to communicate that 95 percent of the sites would have development capacities with corresponding construction GHG emissions that are anticipated to be less than Site 70. In contrast, Site 53 with 51 dwelling units, which is representative of an average-sized residential development, or what is reasonably expected for typical candidate housing site development, is anticipated to generate construction GHG emissions amortized over 30 years totaling 3 MTCO₂eq/yr year. Construction of all 11,743 housing units amortized over 30 years would generate approximately 400 MTCO₂e per year. These values are an approximation for informational purposes and can vary widely depending upon the type and intensity of construction occurring at any given time.

Table 5.5-3: Typical Project Construction Greenhouse Gas Emissions

	Potential MTCO₂e		
Emissions	Mean Development (Site 53, 51 DU)	95 th Percentile Development (Site 70, 183 DU)	Maximum Development (Site 217, 601 DU)
Total GHG Construction Emissions	82	439	948
GHG Construction Emissions (amortized over 30 years)	3	15	32
Source: CalEEMod version 2020.4.0. Refer to Appendix C: Air Quality Data/Greenhouse Gas Emissions Data, for model outputs			

Future project-level analyses of GHG emissions from construction emissions would be conducted on a case-by-case basis as individual development project applications are submitted. The SCAQMD has prepared protocols related to the preparations of such analyses. These protocols do not yet recommend a specific significance threshold, but they do recommend that such emissions be amortized over a 30-year

The 95th percentile was selected to represent a more conservative analysis for air quality emissions evaluation. The 95th percentile captures more dwelling units and emissions associated with the 90th percentile would be incrementally less.

period and added to the total operational emissions of a project to ensure that GHG reduction strategies address construction emissions as part of overall operation. In addition, all future housing development projects would be recommended to implement applicable GGRP GHG reductions strategies to further minimize short-term construction-related GHG emissions.

Operational GHG Emissions

Future housing development facilitated by Project would generate long-term operational emissions. The total daily operational emissions that could potentially be generated over the life of Project were estimated using the CalEEMod Version 2020.4.0. Specific data for the types and amounts of future development were entered into CalEEMod to determine the pollutant emissions anticipated at full buildout of the City's unmet RHNA of 11,743 housing units. This data includes dwelling units, average daily trips, vehicle miles traveled, and average trip lengths. Where Project-specific data was not available, CalEEMod defaults were used. The results of the CalEEMod calculations for the Project's annual long-term operational emissions are presented in **Table 5.5-4: Operational Greenhouse Gas Emissions**.

Emissions SourceMTCO2e per YearArea Source203Energy15,054Mobile66,189Solid Waste2,716Water and Wastewater3,151Total87,313

Table 5.5-4: Operational Greenhouse Gas Emissions

The following activities are typically associated with the operation of residential development that would contribute to the generation of GHG emissions:

Source: CalEEMod version 2020.4.0. Refer to Appendix C: Air Quality Data/Greenhouse Gas Emissions Data, for model outputs

Area Sources. Area source emissions occur from hearths, architectural coatings, landscaping equipment, and consumer products. Additionally, the primary emissions from architectural coatings are volatile organic compounds, which are relatively insignificant as direct GHG emissions.

Energy Consumption. Energy consumption consists of emissions from project electricity and natural gas consumption. Primary uses of project electricity and natural gas consumption would be for space heating and cooling, water heating, ventilation, lighting, appliances, and electronics. Energy emissions are calculated based on CalEEMod consumption rates and emissions factors.

Mobile Sources. Mobile sources are emissions from motor vehicles. Vehicle trips generated by the new residential development facilitated by the Project would result in GHG emissions through combustion of fossil fuels. In calculating mobile-source GHG emissions, emissions are estimated based on the Project's forecast trip generation was estimated based on the proposed zoning/overlay, density, development capacity, and ITE Trip Generation Manual (11th Edition) trip rates for the following land use categories:

- ITE Category 220 Multifamily Housing (Low-Rise)
- ITE Category 221 Multifamily Housing (Mid-Rise)

Solid Waste. Solid waste releases GHG emissions in the form of methane when these materials decompose. Solid waste emissions are calculated based on generation rates and emissions factors in CalEEMod.

Water and Wastewater. Project GHG emissions would be generated from energy consumption associated with water and wastewater conveyance and treatment. Water and wastewater emissions are calculated based on the estimated consumption and emissions factors in CalEEMod.

As shown in **Table 5.5-3**, the annual emissions from full buildout of the Project would total approximately $87,313 \, \text{MTCO}_2\text{e}$. With the addition of $400 \, \text{MTCO}_2\text{e}$ from construction emissions (see **Table 5.5-2**), annual Project GHG emissions would total $87,713 \, \text{MTCO}_2\text{e}$.

All future housing development projects would be recommended to implement applicable GGRP GHG reductions strategies to further minimize both short-term and long-term GHG emissions in compliance with General Plan Policy ERC-5.A, which requires the reduction of greenhouse gas emissions by 53.33 percent below the 2020 target, placing the City on a path to meet the state's 2050 greenhouse gas emissions reduction goals.

Consistent with GPU PEIR findings, the Project would potentially generate GHG emissions that could have a significant impact on the environment and could conflict with applicable plans for reducing GHG emissions. As noted in the GPU PEIR analysis, the GHG reduction strategies require additional action by City staff and officials, and the feasibility of implementing these strategies and specific implementation details rely on numerous factors that cannot be adequately forecasted at this time. Furthermore, GHG emissions may differ from actual Project future emissions due to various factors (i.e., faster-than-expected growth, and reduction measures having a smaller effect on GHG emissions than anticipated). Consistent with the GPU PEIR, Project impacts concerning GHG emissions would remain significant and unavoidable.

GENERAL PLAN POLICIES

See **Section 5.5.2: Existing Regulatory Setting** for complete policy text.

Policy ERC-5.A

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No feasible mitigation was identified to reduce impacts to a less than significant level.

Level of Significance After Mitigation: Significant and Unavoidable

5.5.7 Cumulative Impacts

For purposes of the GHG impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0: Basis for Cumulative Analysis**.

While the analysis presented is focused on the anticipated results of the Project, which is considered to be the project for CEQA purposes, the analysis is also considered cumulative in nature because it is only as a contribution to a cumulative effect that the project-specific emissions have environmental consequences. Therefore, the GHG analysis presented above includes the analysis of both the project and cumulative impact.

As concluded above, the Project's potential to generate GHG emissions, either directly or indirectly, and potential to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the GHG emissions would be significant and unavoidable. Both future housing development facilitated by the Project and cumulative projects are required to quantify project-specific GHG emissions associated with construction and operational activities and implement feasible mitigation measures and/or GHG reduction strategies to reduce GHG emissions. Nevertheless, the contribution of daily construction and operational GHG emissions from future housing development facilitated by the Project has the potential to create a significant impact and thus, the Project's impacts would be cumulatively significant and unavoidable.

5.5.8 Significant Unavoidable Impacts

Despite the recommendation of GGRP GHG reduction strategies, the Project would generate GHG emissions that may have a significant impact on the environment and could conflict with applicable plans for reducing GHG emissions. Therefore, impacts on GHG are considered significant and unavoidable, both for the Project and cumulative conditions.

5.5.9 References

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5.6 HAZARDS AND HAZARDOUS MATERIALS

5.6.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to cause a significant hazard to the public due to the use, handling, or release of hazardous materials; result in a safety hazard or excessive noise for projects within two miles of an airport; interfere with an emergency plan; or expose people/structures to risk of loss, injury, or death involving wildland fires. Mitigation to avoid/reduce impacts is identified, as needed.

Site-specific surveys to determine the presence or absence of hazardous materials on the candidate housing sites has not been conducted. The candidate housing sites were evaluated in this Subsequent EIR (SEIR) based on information available from the City of Huntington Beach (City) where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. Further analysis was not conducted because the City had no further information and would be too speculative to base an analysis of potential impacts resulting from future housing development per the Project. As such, potential changes beyond that are considered speculative or unlikely to occur and therefore, not reasonably foreseeable.

5.6.2 Existing Regulatory Setting

Federal

Hazardous Materials Transportation Act

The Hazardous Materials Transportation Act of 1975 regulates safe transportation of hazardous materials. The U.S. Department of Transportation regulates transportation of hazardous materials on all interstate roads. Within California, the state agencies with primary responsibility for enforcing federal and state regulations and for responding to transportation emergencies are the California Highway Patrol (CHP) and Caltrans. Together, federal and state agencies determine driver training requirements, load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.

Resource Conservation and Recovery Act

At the federal level, the principal agency regulating the generation, transport, treatment, storage, and disposal of hazardous substances is the United States Environmental Protection Agency (U.S. EPA), under the authority of the Resource Conservation and Recovery Act (RCRA). RCRA established an allencompassing federal regulatory program for hazardous substances that is administered by the U.S. EPA. RCRA was amended in 1984 by the Hazardous and Solid Waste Amendments of 1984, which specifically prohibited the use of certain techniques for the disposal of various hazardous substances. The Federal Emergency Planning and Community Right to Know Act of 1986 imposes requirements for hazardous materials planning to help protect local communities in the event of accidental release of hazardous substances. The U.S. EPA has delegated many of the RCRA requirements to Department of Toxic Substances Control (DTSC).

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as the Superfund, was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites; provided for liability of persons responsible for releases of hazardous waste at these sites; and established a trust fund to provide for cleanup when no responsible party could be identified. Cleanup actions can be conducted only at sites listed on the U.S. EPA's National Priorities List (NPL). The NPL is the list of national priorities among the known or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the U.S. EPA in determining which sites warrant further investigation.

Regulation of Polychlorinated Biphenyls and Lead-Based Paint

The Toxic Substances Control Act of 1976 (United States Code [USC], §2605 Title 15) banned the manufacture, processing, distribution, and use of polychlorinated biphenyls (PCBs) in enclosed systems. PCBs are considered hazardous materials because of their toxicity. They have been shown to cause cancer in animals, along with effects on the immune, reproductive, nervous, and endocrine systems, and studies have shown evidence of similar effects in humans.

The U.S. EPA Region 9 PCB Program regulates remediation of PCBs in several states, including California. Code of Federal Regulations, Title 40, §761.30(a)(1)(vi)(A) states that all owners of electrical transformers containing PCBs must register their transformers with the U.S. EPA. Specified electrical equipment manufactured between July 1, 1978, and July 1, 1998, that does not contain PCBs must be marked by the manufacturer with the statement "No PCBs" (§761.40[g]). Transformers and other items manufactured before July 1, 1978, containing PCBs, must be marked as such.

The Residential Lead-Based Paint Hazard Reduction Act of 1992 amended the Toxic Substances Control Act to include Title IV, Lead Exposure Reduction. The U.S. EPA regulates renovation activities that could create lead-based paint hazards in target housing and child-occupied facilities and has established standards for lead-based paint hazards and lead dust cleanup levels in most pre-1978 housing and child-occupied facilities.

Toxic Substances Control Act/Resource Conservation and Recovery Act/Hazardous and Solid Waste Act

The Federal Toxic Substances Control Act of 1976 and Resource Conservation and Recovery Act (RCRA) established a program administered by the U.S. EPA to regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle to grave" system of regulating hazardous wastes.

Comprehensive Environmental Response, Compensation, and Liability Act/Superfund Amendments and Reauthorization Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, was enacted by Congress on December 11, 1980. This law, US Code Title 42 Chapter 103, provides broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. CERCLA establishes requirements concerning closed and abandoned hazardous waste sites; provides for liability of persons responsible for releases of hazardous waste at these sites; and establishes a trust fund to provide for cleanup when no responsible party can be identified. CERCLA also enables the revision of the National Contingency Plan (NCP). The NCP (Title 40, Code of Federal Regulation [CFR], Part 300) provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, and/or contaminants. The NCP also established the National Priorities List. CERCLA was amended by the Superfund Amendments and Reauthorization Act on October 17, 1986.

Disaster Mitigation Act of 2000

The Disaster Mitigation Act (42 USC §5121) was signed into law to amend the Robert T. Stafford Disaster Relief Act of 1988 (42 USC §5121-5207). Among other things, this legislation reinforces the importance of pre-disaster infrastructure mitigation planning to reduce disaster losses nationwide and is aimed primarily at controlling and streamlining the administration of federal disaster relief and programs to promote mitigation activities. Some of the Act's major provisions include:

- Funding pre-disaster mitigation activities;
- ii. Developing experimental multi-hazard maps to better understand risk;
- iii. Establishing state and local government infrastructure mitigation planning requirements;
- iv. Defining how states can assume more responsibility in managing the hazard mitigation grant program; and
- v. Adjusting ways in which management costs for projects are funded.

State

California Department of Toxic Substances Control

The California DTSC regulates hazardous waste primarily under the authority of the RCRA and California Public Health and Safety Code Title 22. The DTSC regulates hazardous waste, maintains a public database of potentially contaminated properties (through its List and Hazardous Materials Division [HMD] database), cleans up existing contamination, and research ways to reduce the hazardous waste produced in the state.

The California Health and Safety Code and Occupational Safety and Health Administration

The California Health and Safety Code (H&SC) is the collection of state laws governing the handling of hazardous waste, corrective action (remediation), and permitted facilities. H&SC Chapter 6.7 outlines the requirements for underground storage tanks, identifies requirements for corrective actions, cleanup

funds, liability, and the responsibilities of owners and operators of underground storage tanks. The Leaking Underground Storage Tank (LUST) Information System maintained by the State Water Resources Control Board is available to determine if LUSTs have been reported within or near a specified property.

The California Occupational Safety and Health Administration (Cal-OSHA) defines and enforces worker safety standards and requires proper handling and disposal of hazardous materials including asbestoscontaining materials (ACMs) and lead compounds (LCs) according to OSHA and U.S. EPA regulations. The OSHA/EPA Occupational Chemical Database compiles information from several government agencies and organizations. This database provides reports on physical properties, exposure guidelines, and emergency response information, including the U.S. Department of Transportation (DOT) emergency response guide.

California Building Code/California Residential Code

The 2019 California Building Code (CBC) is based on the 2018 International Building Code, which is a model building code developed by the International Code Council that sets rules specifying the minimum acceptable level of safety for building construction in the United States. The CBC is part of California Code of Regulations (CCR), Title 24 Part 2. The California Residential Code (CRC) is part of CCR Title 24 Part 2.5. The CBC is updated periodically. The current version of the CBC was published on July 1, 2019 and became effective on January 1, 2020. Development projects must show compliance with the CBC and/or CRC through the development review process. Building permits are submitted and reviewed for compliance prior to obtaining construction and building permits.

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) implements and enforces a statewide hazardous materials program that was established by Senate Bill 1802 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for the following environmental and emergency management programs for hazardous materials:

- Hazardous Materials Release Response Plans and Inventories (Business Plans)
- California Accidental Release Prevention Program
- Underground Storage Tank Program
- Aboveground Petroleum Storage Act Requirements for Spill Prevention, Control, and Countermeasure Plans
- Hazardous Waste Generator and On-Site Hazardous Waste Treatment Programs
- California Uniform Fire Code, Hazardous Materials Management Plans, and Hazardous Material Inventory Statements

Emergency Mutual Aid Agreements

The Emergency Mutual Aid Agreements (EMAA) system is a collaborative effort between city and county Office of Emergency Services (OES) emergency managers in the State's coastal, southern, and inland regions. EMAA provides service in the emergency response and recovery efforts at the Southern Regional Emergency Operations Center, local Emergency Operations Centers, the Disaster Field Office, and community service centers. The purpose of EMAA is to support disaster operations in affected

jurisdictions by providing professional emergency management personnel. In accordance with the EMAA, local and state emergency managers have responded in support of each other under a variety of plans and procedures.

California Governor's Office of Emergency Services (Cal OES)

In 2009, the State of California passed legislation creating the California Emergency Management Agency (Cal EMA) and authorizing it to prepare a Standardized Emergency Management System (SEMS) program (Title 19 CCR §2400 et seq.), which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the state withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

As part of former Governor Brown's Reorganization Plan #2, Cal EMA was eliminated and restored to the Governor's Office in 2013. Cal EMA was renamed California Governor's Office of Emergency Services (Cal OES) and merged with the office of Public Safety Communications.

Cal OES serves as the lead state agency for emergency management. Cal OES coordinates the State response to major emergencies in support of local government. The primary responsibility for emergency management resides with local government. Local jurisdictions first use their own resources and, as these are exhausted, obtain more from neighboring cities and special districts, the county in which they are located, and other counties throughout the state through the statewide mutual aid system. The SEMS provides the mechanism by which local government requests assistance. Cal OES serves as the Lead Agency for mobilizing the State's resources and obtaining federal resources; it also maintains oversight of the State's mutual aid system.

Hazardous Materials Release Response Plans and Inventories

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 requires hazardous materials business plans to be prepared and inventories of hazardous materials to be disclosed. A business plan includes an inventory of the hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee safety and emergency response training (California Health and Safety Code, Division 20, Chapter 6.95, Article 1). Statewide, the DTSC has primary regulatory responsibility for managing hazardous materials, with delegation of authority to local jurisdictions that enter into agreements with the State of California. Local agencies, including the Orange County Environmental Health Department, administer these laws and regulations.

California Health and Safety Code §§12101 through 12103 require that permits be obtained by those manufacturing, transporting, possessing, or using explosives and endorsed by the jurisdiction(s) in which the transportation or use would occur.

Hazardous Waste Control Act

The Hazardous Waste Control Act is codified in California Code of Regulations Title 26, which describes requirements for the proper management of hazardous wastes. The act created the state's hazardous waste management program, which is similar to but more stringent than the federal RCRA program. The

program includes hazardous waste criteria for identification and classification; generation and transportation; design and permitting of recycling, treatment, storage, and disposal facilities; treatment standards; operation of facilities and staff training; and closure of facilities and liability requirements.

The Hazardous Waste Control Act and Title 26 regulations list more than 800 potentially hazardous materials and establish criteria for identifying, packaging, and disposing of such wastes. To comply with these regulations, the generator of hazardous waste material must complete a manifest that accompanies the material from the point of generation to transportation to the ultimate disposal location and is required to file copies of the manifest with the DTSC.

Emergency Services Act

Under the Emergency Services Act (California Government Code §8850 et seq.), the state developed an emergency response plan to coordinate emergency services provided by federal, state, and local agencies. Quick response to incidents involving hazardous materials or hazardous waste is a key part of the plan. Cal OES administers the plan and coordinates the responses of other agencies, including the Cal EPA, CHP, California Department of Fish and Wildlife, Santa Ana Regional Water Quality Control Board, air quality management districts, and county disaster response offices.

Government Code §65962.5 (Cortese List)

The provisions of Government Code §65962.5 are commonly referred to as the Cortese List. The Cortese List is a planning document used by state and local agencies to provide information about hazardous materials release sites. Government Code §65962.5 requires Cal EPA to develop an updated Cortese List annually. The DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous materials release information for the list.

Underground Storage Tank Program

The California Department of Public Health and the State Water Resources Control Board (SWRCB) maintain lists of hazardous UST sites for remediation. Sites are listed based on unauthorized release of toxic substances. Leak prevention, cleanup, enforcement, and tank testing certification are UST program elements.

Unified Program

Cal EPA grants oversight and permitting responsibility to qualifying local agencies for certain state programs pertaining to hazardous waste and hazardous materials. This is achieved through the Unified Program, created by state legislation in 1993 to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for the following emergency and management programs:

- Hazardous materials release response plans and inventories (business plans);
- California Accidental Release Prevention Program;
- UST Program;

- Aboveground Petroleum Storage Act requirements for Spill Prevention, Control, and Countermeasure plans;
- Hazardous Waste Generator and On-Site Hazardous Waste Treatment (tiered permitting)
 Programs; and
- California Uniform Fire Code: Hazardous material management plans and hazardous material inventory statements.

Cleanup of Contaminated Sites

The State of California has a number of different regulatory structures governing cleanup of contaminated sites. The DTSC regulates many of these programs, including RCRA corrective actions, state Superfund sites, brownfields programs, and voluntary cleanups. The SWRCB (through RWQCBs and some local agencies) regulates releases with the potential to affect water resources under programs such as the LUST program and the Spills, Leaks, Incidents, Cleanup (SLIC) program. Regulatory authority for these programs may be delegated by the federal government (as with RCRA corrective actions directed by the DTSC) or found in the California Health and Safety Code. These regulations vary in their specifics but require the reporting, investigation, and remediation of sites where releases of hazardous materials have occurred, followed by appropriate disposal of any hazardous materials. These programs govern a range of pollutants (e.g., solvents, petroleum fuels, heavy metals, and pesticides) in surface water, groundwater, soil, sediment, and air.

Local

City of Huntington Beach General Plan

Natural and Environmental Hazards Element¹

Following are the goals and policies relevant to the Project:

Goal HAZ-4: The risk of urban fires is reduced through effective building design and effective fire

services.

Policy HAZ-4A: Ensure that all new construction is designed for easy access by fire and other

emergency response personnel.

Goal HAZ-5: Environmental cleanup and management of brownfield sites improves

environmental quality of life, desirability of surrounding neighborhoods, economic

development, and housing options in the community.

Policy HAZ-5A: Continue to identify, map and remediate existing hazardous waste sites and require

remediation when a property is redeveloped.

Goal HAZ-6: The risk of exposure to hazardous materials in Huntington Beach is substantially

decreased.

Policy HAZ-6C: Ensure that all community members have access to information about proper

handling, storage, and disposal of hazardous materials, including electronic waste.

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City of Huntington Beach. 2017. City of Huntington Beach General Plan - Natural and Environmental Hazards Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf (accessed December 2021).

Policy HAZ-6D: Continue to develop and enforce Methane District Regulations to reduce the hazards from methane-containing soils.

City of Huntington Beach Municipal Code

City of Huntington Beach Municipal Code (HBMC) Chapter 8.60: Emergency Management and Homeland Security, created the Emergency Management and Homeland Security (EMHS) office, which is responsible for coordinating the City's emergency preparedness activities. The office serves the City Council and public's interests in all emergency management and homeland security matters. A major activity of the EMHS office is to direct development and approval of the City's Emergency Operations Plan (EOP).

The Oil Production Overlay District (O District) and a subdistrict (O1 Subdistrict) are established by HBMC Chapter 220: Oil Production Overlay District. The O District provides areas to accommodate only oil operations with no drilling. The O1 Subdistrict provides areas where oil drilling is allowed, subject to a conditional use permit. HBMC Chapter 220 specifies that no development shall occur on land subject to the Oil Production Overlay District unless it is in accord with a reuse plan for the disposition or treatment of any existing or proposed oil wells or oil operations with the district that has been approved in writing by the oil operator or lessee and approved by the City in accord with HBMC Chapter 220.10. The City may approve the plan only if open space has been reserved around the oil operation site to allow for all existing and future equipment which could reasonably be expected to be used on the site including any setbacks from new development required by the Fire Chief, access from the public street to all oil operation sites, screening of oil facilities and soundproofing/fire protection as required by the Fire Chief.

City of Huntington Beach Local Hazard Mitigation Plan

The 2017 Local Hazard Mitigation Plan is a Federal Emergency Management Agency (FEMA)-approved document that identifies the natural and human-caused hazards of concern within the planning area and the potential actions identified by the City to mitigate these hazards. This document complies with the Disaster Mitigation Act of 2000, which requires an update every five years to ensure jurisdictions remain eligible for FEMA mitigation grant opportunities.

City of Huntington Beach Emergency Operations Plan

The City maintains an All Hazards EOP that guides the City through the mitigation, preparedness, response, and recovery phases of emergency management. The EOP's purpose is to establish policies and procedures that would assure the most effective utilization of all City resources to minimize potential loss of life and protect the environment and property. The City adopted its current EOP in 2004 and began its update in 2013. Cal OES has approved the current EOP revision.

City of Huntington Beach Emergency Response Organization

The City's Emergency Response Organization (ERO), which is made up of assigned representatives from City departments, carry out the activities identified in the EOP. The City's ERO is formed per HBMC Chapter 8.60 and maintains a readiness condition 24 hours per day, seven days per week.

In substantial emergency situations, the City also may choose to activate its Emergency Operations Center (EOC), which is responsible for directing, coordinating, and supporting the various city departments and other agencies in their emergency response activities. The EOC is a stand-alone facility, located in the Civic Center, with resources necessary to facilitate an effective emergency response. When the ERO is activated, representatives from city departments report to the EOC and fill their assigned roles. The EOC allows for face-to-face coordination among personnel who must create policy, set priorities, inform the public, and support first responders.

5.6.3 Existing Environmental Setting

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, this is a SEIR to the GPU PEIR. The 6th Cycle HEU Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. Hazardous materials sites, school, airports, transport of hazardous materials, and wild and urban fires are described in detail in the GPU PEIR Section 4.7.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08_04_17.pdf).

Candidate Housing Sites

Database Review

Kimley-Horn performed regulatory database searches of the SWRCB GeoTracker website² and the DTSC Envirostor website³ to identify hazardous materials regulated facilities within the City. **Appendix E: Hazardous Materials Listed Sites,** lists all the SWRCB GeoTracker and DTSC Envirostor databases listed sites that occur within the City.

The SWRCB GeoTracker database reports there are 304 hazardous materials-related cases in the City, of which 267 cases are closed, 1 case is informational only, 1 case is pending review, and 35 cases are open site assessments. Thus, the GeoTracker database reports 35 open site assessment cases. Of the 35 open site assessment cases, 19 cases are leaking underground storage tank (LUST) sites, 11 cases are "Cleanup Program Sites," 4 cases are Land Disposal Sites, and 1 case is a National Pollution Discharge Elimination System (NPDES) site. A Cleanup Program Site includes all non-federally owned sites that are regulated under the SWRCB Site Cleanup Program and/or similar programs conducted by each of the nine Regional Water Quality Control Boards. Cleanup Program Sites are varied and include but are not limited to pesticide and fertilizer facilities, rail yards, port, equipment supply facilities, metals facilities, industrial manufacturing and maintenance sites, dry cleaners, bulk transfer facilities, refineries, mine sites, landfills, RCRA/CERCLA cleanups, pesticides, perchlorate, nitrate, heavy metals, and petroleum constituents. Land Disposal Sites are sites with solid and/or liquid wastes discharged to land such as landfills, mines, surface impoundments, waste piles and land treatment facilities. Candidate housing Sites 133, 204, 214, 217 and 222 are located on five of the open cases.

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² State Water Resources Control Board's (SWRCB) GeoTracker website http://geotracker.waterboards.ca.gov/. (accessed January 26, 2022).

Department of Toxic Substances Control Envirostor website http://www.envirostor.dtsc.ca.gov/public/. (accessed January 26, 2022).

State Water Resources Control Board's (SWRCB) GeoTracker website http://geotracker.waterboards.ca.gov/. (accessed January 26, 2022).

In addition to the SWRCB GeoTracker, the DTSC Envirostor database reports there are a total of 46 hazardous materials-related cases in the City and their status is as follows:

- 17 cases are open site assessments (active and inactive),
- 17 cases have been referred to the EPA, RCRA, local agency or other agency for oversight,
- 3 cases are Certified.
- 1 case has a status of Certified Operation and Maintenance, and
- 8 cases have received "No Further Action" or "No Action Required"

Thus, the DTSC Envirostor database reports 34 open cases (i.e., not Certified or having received No Further Action or No Action Required). Candidate housing Sites 32, 38, 289, 300, and 325 are located on three of the open cases. A site qualifies to receive a No Further Action once DTSC determines that the property does not pose a problem to public health or the environment. A Certified site means that the DTSC has certified that the site has been remediated satisfactorily. A Certified Operation and Maintenance site means that all planned activities necessary to address the contamination problems have been implemented but require ongoing Operation and Maintenance activities.

There is one hazardous waste site (Ascon Landfill, located at 21641 Magnolia Street) in the City that is on the Hazardous Waste and Substances Site List (Cortese List) compiled pursuant to California Government Code §65962.5.⁵ This property is not included in the inventory of candidate housing sites.

Oil Production Overlay District

Candidate housing Sites 199, 200, 237, 281, 291, 300, 322 and 325 are located within the O1 Subdistrict, which provides areas where oil drilling is allowed, subject to a conditional use permit (CUP); see also the *City of Huntington Beach Municipal Code* Section above.

5.6.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning hazards and hazardous materials. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.
- 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.
- Emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school.
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or environment.

⁵ California, State of, Department of Toxic Substances Control, DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List). Available at: https://dtsc.ca.gov/dtscs-cortese-list/. Accessed: January 30, 2022.

- 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 result in a safety hazard or excessive noise for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- 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.

5.6.5 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds, as described above, in determining whether Project implementation would create a significant impact concerning hazards or hazardous materials. The evaluation was based on a review of regulations and determining their applicability to the Project. The baseline conditions and impact analyses are based on the previous GPU PEIR impact determinations concerning hazards and hazardous materials, and review of various data available in public records, including local planning documents. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning hazards and hazardous materials considers the relevant federal, state, and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

5.6.6 Project Impacts and Mitigation

Impact HAZ-1 Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.7-4)

The GPU PEIR concluded General Plan implementation would shift land uses and associated intensities towards residential, office, commercial, and mixed land uses. Buildout of these land uses would result in the use of hazards and hazardous materials and thus, would expose the public or environment to hazardous materials through improper handling or use of hazardous materials or hazardous wastes particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; or fire, explosion, or other emergencies. The severity of potential effects varies with the activity conducted, the concentration of and type of hazardous material or wastes present, and the proximity to sensitive receptors. However, due to the General Plan's programmatic nature, the GPU PEIR indicated that it is impossible to reliably quantify the future amount of hazardous material transport, use, or storage because the GPU did not include specific development.

Thus, all future development would be required to comply with the regulations, standards, and guidelines related to storage, use, and disposal of hazardous materials established by the U.S. EPA, the state, and local agencies including the General Plan Natural and Environmental Hazards Element policies. CHP and Caltrans would regulate transportation of hazardous materials on roadways and DTSC would regulate use

of these materials. Therefore, the GPU PEIR concluded impacts to the public and the environment concerning the routine transport, use, storage, or disposal of hazardous materials would be less than significant. To further reduce the impacts from hazards and hazardous materials, the GPU PEIR required all future development to comply with **MM 4.7-1**.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the Project would not, in and of itself, construct new housing in the City but would facilitate housing development by providing programs and policies that would promote housing for all persons.

Except two vacant sites, all the 378 housing sites are developed/occupied by structures. Demolition and construction activities associated with these candidate housing sites could require transport of hazardous materials (e.g., ACMs, lead-based paint, and/or contaminated soils) typical of construction activities. This transport would be limited in duration. Compliance with handling measures as required by the City, Orange County Environmental Health Department, and South Coast Air Pollution Control District during construction would be required. These measures include standards and regulations regarding the storage, handling, and use of hazardous materials.

Future housing development facilitated by the Project would not involve ongoing or routine use of substantial quantities of hazardous materials during operations. Only small quantities of hazardous materials typical of residential uses would be anticipated, including cleaning solvents, fertilizers, pesticides, and other materials used in regular maintenance. All future housing development subject to rezoning and within overlay zones would be subject to compliance with General Plan Policy HAZ-6.C, which ensures that all community members have access to information about proper handling, storage, and disposal of hazardous materials, including electronic waste; and Policy HAZ-6.D, which requires that developments adhere to the Methane District Regulations to reduce hazards from methane-containing soils. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with GPU PEIR MM 4.7-1, which would require future housing developments to comply with Huntington Beach Fire Department City Specification No. 429, Methane Mitigation Requirements. A plan for the testing of soils for the presence of methane gas would be prepared and submitted to the Huntington Beach Fire Department for review and approval. Following compliance with General Plan Policies and adherence to mandatory regulations for preventing and minimizing the transport, use, disposal, or release of hazardous materials, Project implementation would not create a significant hazard to the public or the environment in this regard. Therefore, impacts would be less than significant, and no additional mitigation is required.

GENERAL PLAN POLICIES

See **Section 5.6.2: Existing Regulatory Setting** for complete policy text.

Policy HAZ-6.C

Policy HAZ-6.D

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.7-1

Prior to the issuance of grading permits, future development in the planning area shall comply with Huntington Beach Fire Department City Specification No. 429, Methane Mitigation Requirements. A plan for the testing of soils for the presence of methane gas shall be prepared and submitted by the project-level applicant to the Huntington Beach Fire Department for review and approval, prior to the commencement of sampling. If significant levels of methane gas are discovered in the soil on a future development site, the project-level applicant's grading, building, and methane plans shall reference that a sub-slab methane barrier and vent system will be installed at the site per City Specification No. 429, prior to plan approval. If required by the Huntington Beach Fire Department, additional methane mitigation measures to reduce the level of methane gas to acceptable levels shall be implemented.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact HAZ-2

Would the Project 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?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.7-6)

The GPU PEIR concluded that future development under the General Plan would result in infill development and redevelopment of existing uses within the City through demolition. Demolition could expose construction workers and the public to hazardous materials, such as contaminated soils, lead, or asbestos. In addition, future development could also uncover previously undiscovered soil contamination. The GPU PEIR also concluded that other construction activities including the excavation and grading of individual sites in the future also could expose workers and the public to unknown hazardous materials in the soil or groundwater. This includes contamination, which may cause both short- and long-term adverse health effects. Thus, before construction activities could begin, all future development on/near documented hazardous materials sites would be preceded by remediation and cleanup under DTSC supervision. If an underground tank is uncovered or disturbed during construction activities, it would be closed in place or removed in accordance with the existing standards as enforced and monitored by the California Department of Environmental Health. If groundwater contamination is identified, remediation activities would be required by the Santa Ana RWQCB prior to commencement of new construction activities.

The GPU PEIR concluded that any hazardous materials used and/or stored during operations would be done accordingly with the Department of Transportation Office of Hazardous Materials Safety regulations,

the California Building Code, and California Fire code requirements. Impacts would be less than significant. The GPU PEIR also concluded that development would be required to adhere to **GPU PEIR MM 4.7-2** and **MM 4.7-3** to further reduce the identified less than significant impact.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Review of regulatory databases (i.e., SWRCB GeoTracker and DTSC Envirostor) indicates candidate housing Sites 32, 38, 289, 300, and 325 are located on three DTSC Envirostor open cases and candidate housing Sites 133, 204, 214, 217 and 222 are located on five of the Geotracker open cases. Additionally, these databases report multiple listings are present within the City that have or previously had cases associated with hazardous material spills, violations, or incidents. As previously noted, the SWRCB GeoTracker database reports 35 open cases and the DTSC Envirostor database reports 34 open cases throughout the City. Additionally, because all except two candidate housing sites are developed with varying land uses (e.g., commercial, industrial, office, research/technology, public, semipublic, and residential), future housing development facilitated by the Project would require demolition of existing uses, which could disturb ACMs and LBP, or other various materials. In addition, candidates housing Sites 199, 200, 237, 281, 291, 300, 322 and 325 are located within the O1 Subdistrict within the City's Oil Overlay District. Therefore, future housing development facilitated by the Project could 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. However, future housing development within the O1 Subdistrict would be required to adhere to HBMC Chapter 220 and obtain oil operator and City approval. Additionally, all future housing development subject to rezoning and within overlay zones would be required to adhere to GPU PEIR MM 4.7-2 and MM 4.7-3, which require preparation of a preliminary environmental site assessment to determine if contamination has impacted the site, to ensure that impacts from hazardous material are investigated and remediated prior to future site development. Following compliance with HBMC Chapter 220 and GPU PEIR MM 4.7-2 and MM 4.7-3, the Project would not 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. Impacts would be less than significant with mitigation incorporated.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

Revisions to existing Final EIR mitigation measures are shown in underline and deletions are show in strikethrough.

GPU PEIR MM 4.7-2 Prior to the issuance of grading permits on any project site, the project applicant shall:

1) Investigate the project site to determine whether it or immediately adjacent areas have a record of hazardous material contamination via the preparation

of a preliminary environmental site assessment, which shall be submitted to the City for review. If contamination is found the report shall characterize the site according to the nature and extent of contamination that is present before development activities precede at that site.

- 2) If contamination is determined to be on site, the City, in accordance with appropriate regulatory agencies, shall determine the need for further investigation and/or remediation of the soils conditions on the contaminated site. If further investigation or remediation is required, it shall be the responsibility of the site developer(s) to complete such investigation and/or remediation prior to construction of the project.
- 3) If remediation is required as identified by the local oversight agency, it shall be accomplished in a manner that reduces risk to below applicable standards and shall be completed prior to issuance of any occupancy permits.
- 4) Closure reports or other reports acceptable to the Huntington Beach Fire Department that document the successful completion of required remediation activities, if any, for contaminated soils, in accordance with City Specification <u>429 and</u> 431-92, shall be submitted and approved by the Huntington Beach Fire Department prior to the issuance of grading permits for any site development. No construction shall occur in the affected area until reports have been accepted by the city.
- 5) Any on-site oil wells will need to comply with the requirements found in City Specification No. 429. If abandonment is required, then the well will need to be abandoned to the current California Geologic Energy Management Division (CalGEM) standard for abandonment.

GPU PEIR MM 4.7-3

In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction, construction activities in the immediate vicinity of the contamination shall cease immediately. If contamination is encountered, a Risk Management Plan shall be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures could include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, appropriate agencies shall be notified (e.g., City of Huntington Beach Fire Department). If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements shall be prepared and in place prior to commencement of work in any contaminated area.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact HAZ-3

Would the Project emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.7-9)

The GPU PEIR identified the following schools and school districts in the City: Huntington Beach Union High School, Huntington Beach City School, and Ocean View School Districts, as well as portions of the Westminster School and Fountain Valley School Districts. The GPU PEIR concluded that the General Plan would not directly emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school and future development under the General Plan would comply with all applicable federal, State, and local hazardous materials regulations.

All future development that may generate hazardous materials and waste would be required to comply with federal, state, and local regulations for hazardous wastes, including General Plan Natural and Environmental Hazards Element policies. California Health and Safety Code Chapter 6.95 requires businesses that handle more than a specified amount of hazardous materials on-site to submit a Hazardous Materials Business Plan which would contain an emergency response plan, and provisions for employee safety and emergency response training. Furthermore, future projects would comply with California Education Code §17210 requirements. The GPU PEIR concluded that compliance with federal, state, and local regulations would minimize the risks associated with the exposure of school children to hazardous materials. Impacts were identified to be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

As described in **Section 5.11: Public Services**, there are more than 50 public and private schools in the City. Therefore, any one of the 378 candidate housing sites could be within 0.25-mile of an existing school. However, the Project would facilitate housing development, which does not typically involve uses or routine activities that would emit hazardous emissions. Notwithstanding, upset/accident conditions could emit hazardous emissions within 0.25-mile of an existing or proposed school. All future housing development facilitated by the Project subject to rezoning and within overlay zones would need to adhere to mandatory requirements and regulations related to the emissions or handling of hazardous materials, substances, or wastes near schools to reduce the potential for impacts to schools within 0.25-mile of a future housing development site. Adherence to California Hazardous Waste Control Law, California Health

and Safety Code, and RCRA regulations would reduce potential impacts associated with the accidental release of hazardous materials and emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school. Therefore, impacts would be less than significant, and no mitigation is required.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures concerning hazards were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

Impact HAZ-4

Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Level of Significance Before Mitigation: No Impact

GPU PEIR (Volume II, page 4.7-10)

The GPU PEIR concluded although sites identified under the Government Code §65962.5 (the Cortese List) could create a significant hazard to the public or environmental, future development or redevelopment would undergo remediation and clean-up prior to any site disturbance. Furthermore, future development would be required to comply with all applicable federal, State, and local regulations, supported by implementation of Natural and Environmental Hazards Element policies. The GPU PEIR concluded that impacts would be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

The Ascon Landfill, located at 21641 Magnolia Street in the City, is on the Hazardous Waste and Substances Site List (Cortese List) compiled pursuant to California Government Code §65962.5.⁶ This property is not included in the inventory of candidate housing sites. Therefore, future housing development facilitated by the Project would not be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5. As a result, the Project would not create a significant hazard to the public or the environment in this regard. No impact would occur, and no mitigation is required. Further, all future housing development subject to rezoning and within

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⁶ California, State of, Department of Toxic Substances Control, DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List). Available at: https://dtsc.ca.gov/dtscs-cortese-list/. Accessed: January 30, 2022.

overlay zones would be subject to compliance with General Plan Policy HAZ-5.A, which requires that existing hazardous waste sites be remediated when a property is redeveloped.

GENERAL PLAN POLICIES

See **Section 5.6.2: Existing Regulatory Setting** for complete policy text.

Policy HAZ-5.A

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures concerning hazards were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: No Impact

Impact HAZ-5

Would the Project be 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 or excessive noise for people residing or working in the project area?

Level of Significance: No Impact

GPU PEIR (Volume II, page 4.7-3)

The GPU PEIR concluded that the General Plan would not create a safety hazard regarding impacts from a nearby airport or private airstrip. The airport nearest the City is the John Wayne Airport in the City of Santa Ana, located approximately 9.0 miles to the southeast. The GPU PEIR identified eight privately owned and operated heliports within the City. All existing private heliports are operated in compliance with the Orange County Airport Land Use Commission (ALUC) and Federal Aviation Administration (FAA) requirements. Since the City is not near John Wayne Airport and there are no existing or proposed airstrips within the City, the GPU PEIR concluded that General Plan implementation would not result in a significant impact.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

As previously noted, the public airport nearest the City is John Wayne Airport. The candidate housing site nearest John Wayne Airport is 6.5 miles to the northwest. Thus, no future housing development facilitated by the Project would be within the John Wayne Airport Land Use Plan's Airport Influence Area. Additionally, there are no private airstrips near the City. Therefore, the Project would not result in an airport- or airstrip-related safety hazard or excessive noise for people residing or working on the candidate housing sites. No impact would occur in this regard, and no mitigation is required.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures concerning airport or airstrip hazards were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: No Impact

Impact HAZ-6 Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.7-11)

The GPU PEIR concluded that all future development under the General Plan would be subject to the Huntington Beach EMHS Office, which is the responsible entity that organizes the City's emergency preparedness activities. All future development would comply with the Huntington Beach EOP and Hazard Mitigation Plan, which directs the City's emergency preparation, response, and recovery activities. In addition, future development would be subject to traffic-related General Plan policies identified in GPU PEIR Section 4.14 that were proposed to reduce impacts to traffic to the maximum extent possible, which potentially would reduce impacts and interference with emergency response and evacuation plans. Therefore, the GPU PEIR concluded that compliance with existing federal, State, and local laws and plans previously discussed would ensure that less than significant impact would occur. The GPU PEIR also concluded that adherence to **MM 4.7-4** would further reduce impacts to less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Future development facilitated by the Project would increase housing density in certain areas of the City, resulting in greater population concentrations within certain areas. This increased density could interfere with emergency evacuation in the event of a City-wide emergency. However, the Project would not result in changes to the City's existing circulation network. No land uses are proposed that would impair the implementation of, or physically conflict with, the Huntington Beach EOP/Hazard Mitigation Plan. As a result, the Project would not conflict with any State or local plan aimed at preserving and maintaining adopted emergency response or emergency evacuation plans. Notwithstanding, to minimize all potential impacts, all future housing development subject to rezoning and within overlay zones would be required to adhere to **GPU PEIR MM 4.7-4**, which requires future housing developments to consult with the City of Huntington Beach Police or Fire Departments to disclose temporary lane or roadway closures and

alternative travel routes during construction, to ensure that there are no conflicts with emergency response and evacuation plans. Therefore, impacts would be less than significant.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.7-4

To ensure adequate access for emergency vehicles when construction activities would result in temporary lane or roadway closures, a future project applicant shall consult with the City of Huntington Beach Police or Fire Departments to disclose temporary lane or roadway closures and alternative travel routes. The project-level applicant shall be required to keep a minimum of one lane in each direction free from encumbrances at all times on perimeter streets accessing a project site. At any time only a single lane is available, the project-level applicant shall provide a temporary traffic signal, signal carriers (i.e., flagpersons), or other appropriate traffic controls to allow travel in both directions. If construction activities require the complete closure of a roadway segment, the applicant shall coordinate with the City of Huntington Beach Police and Fire Departments to designate proper detour routes and signage indicating alternative routes.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant With Mitigation Incorporated

Impact HAZ-7

Would the Project expose people or structures, either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.7-12)

CAL Fire identifies the City within a Non-Fire hazard Severity Zone. The City is fully urbanized and surrounded by other urbanized communities, and thus, General Plan buildout would not expose people or structures to substantial risks due to wildfire. The GPU PEIR nevertheless concluded that urban fires occur in the City due to electrical faults, unattended cooking, or flammable or combustible materials exposed to a heat source. Therefore, all future development would adhere to the existing federal, State, and local regulations in order to reduce risk of urban fires within the City. The GPU PEIR concluded that compliance with applicable regulatory framework would ensure that impacts would be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

As previously noted, CAL Fire identifies the City within a Non-Fire Hazard Severity Zone. Also, the City is fully urbanized and surrounded by other urbanized communities. Thus, future housing development facilitated by the Project would not expose people or structures to risk involving wildland fires. No impact would occur in this regard, and no mitigation is required. Notwithstanding, all future housing development subject to rezoning and within overlay zones would be subject to compliance with General Plan Policy HAZ-4.A, which requires that all new construction be compliant with City Specification No. 401 for fire access and other emergency response personnel, to minimize potential risks associated with urban fires. Adherence to existing federal, State, and local laws and regulations and compliance with General Plan Policy HAZ-4.A would minimize risks involving urban fires.

GENERAL PLAN POLICIES

See Section 5.6.2: Existing Regulatory Setting for complete policy text.

Policy HAZ-4.A

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures concerning wildland fires were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

5.6.7 Cumulative Impacts

For purposes of the hazardous materials and waste impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0: Basis for Cumulative Analysis**.

The anticipated Project -related impacts, when combined with cumulative development in the City, could result in impacts concerning hazards and hazardous materials. Potential impacts would be site-specific and would require evaluation on a case-by-case basis at the project level when future development is proposed in accordance with the GPU and HEU. For future residential development subject to discretionary review, compliance with the applicable GPU PEIR mitigation measures would be confirmed through the discretionary review process. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures.

Consequently, the Project would not result in significant environmental impacts concerning hazards and hazardous materials resulting from future construction or operations; and future housing development facilitated by the Project would not conflict with or obstruct a State or local plan, ordinance, or standards aimed at avoiding or minimizing impacts concerning hazards and hazardous materials. Therefore, the

Project's contribution to potentially cumulatively considerable impacts would be less than significant with the implementation of mitigation measures identified in this section and compliance with applicable federal, State, and local regulations.

5.6.8 Significant Unavoidable Impacts

No significant unavoidable impacts concerning hazardous materials have been identified.

5.6.9 References

- California, State of, Department of Toxic Substances Control, DTSC's Hazardous Waste and Substances Site List Site Cleanup (Cortese List). Available at: https://dtsc.ca.gov/dtscs-cortese-list/. Accessed: January 30, 2022.
- City of Huntington Beach. 2017. *City of Huntington Beach General Plan Update*. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU Adopted-October-2017.pdf.
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 https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf. Atkins: San Diego, CA.
- City of Huntington Beach. 2021. *City of Huntington Beach Municipal Code*. http://www.qcode.us/codes/huntingtonbeach/view.php?topic=municipal code&frames=on.
- Department of Toxic Substances Control, Envirostor Database. Available at: http://www.envirostor.dtsc.ca.gov/public/. Accessed January 26, 2022
- State Water Resources Control Board (SWRCB), GeoTracker Database. Available at: http://geotracker.waterboards.ca.gov/. Accessed January 26, 2022.

5.7 HYDROLOGY AND WATER QUALITY

5.7.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to degrade surface or groundwater quality; decrease groundwater supplies; alter drainage patterns; release pollutants in flood, tsunami, or seiche zones, or conflict with a water quality or groundwater management plan. Mitigation to avoid/reduce impacts is identified, as needed.

The candidate housing sites were evaluated in this Subsequent Environmental Impact Report (SEIR) based on information available from the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. Information provided in this section is based on the *Huntington Beach General Plan* (General Plan), the *Huntington Beach General Plan Update Project Environmental Impact Report* (GPU EIR), and the 2005 Citywide Urban Runoff Management Plan prepared by the City. Further analysis was not conducted because the City had no further information and it would be too speculative to base an analysis of potential impacts resulting from future housing development per the Housing Element Update (HEU) and corresponding updates to the Land Use Element (LUE). As such, potential changes beyond that are considered speculative or unlikely to occur and therefore, not reasonably foreseeable.

5.7.2 Existing Regulatory Setting

Federal

Federal Clean Water Act

Future housing development facilitated by the Project would be subject to federal permit requirements under the Federal Clean Water Act (CWA). The CWA's primary goals are to maintain the chemical, physical, and biological integrity of the nation's waters and to make all surface waters fishable and swimmable. The CWA forms the basic national framework for the management of water quality and the control of pollution discharges; it provides the legal framework for several water quality regulations, including the National Pollutant Discharge Elimination System (NPDES), effluent limitations, water quality standards, pretreatment standards, antidegradation policy, nonpoint source discharge programs, and wetlands protection. The United States Environmental Protection Agency (U.S. EPA) has delegated the administrative responsibility for portions of the CWA to State and regional agencies. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality.

Under the NPDES permit program, the U.S. EPA establishes regulations for discharging stormwater by municipal and industrial facilities and construction activities. CWA §402 prohibits the discharge of pollutants into Waters of the United States from any point source unless the discharge is in compliance with an NPDES Permit.

The Anti-degradation Policy under the U.S. EPA's Water Quality Standards Regulations (48 F.R. 51400, 40 Code of Federal Regulations [CFR] 131.12, November 8, 1983), requires states and tribes to establish a three-tiered anti-degradation program to prevent a decrease in water quality standards.

- Tier 1— Maintains and protects existing uses and water quality conditions that support such uses.
 Tier 1 is applicable to all surface waters.
- Tier 2—Maintains and protects "high quality" waters where existing conditions are better than necessary to support "fishable/swimmable" waters. Water quality can be lowered in such waters but not to the point at which it would interfere with existing or designated uses.
- Tier 3—Maintains and protects water quality in outstanding national resource waters. Water quality cannot be lowered in such waters except for certain temporary changes.

Anti-degradation was explicitly incorporated into the federal CWA through 1987 amendments, codified in §303(d)(4)(B), requiring satisfaction of anti-degradation requirements before making certain changes in NPDES permits.

CWA §303(d) requires the SWRCB to list impaired water bodies that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized tribes. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop Total Maximum Daily Loads (TMDL) for these waters. In the City, the following water bodies are on the SWRCB 303(d) List of Water Quality Limited Segments:

- Bolsa Chica Channel for ammonia
- Huntington Harbour for chlordane, copper, indicator bacteria, lead, Polychlorinated biphenyls (PCBs), and toxicity
- Huntington Beach State Park for PCBs

CWA Section 404 is administered and enforced by the U.S. Army Corps of Engineers (USACE). Section 404 establishes a program to regulate the discharge of dredged and fill material into Waters of the United States, including wetlands and coastal areas below the mean high tide. USACE administers the day-to-day program, and reviews and considers individual permit decisions and jurisdictional determinations. USACE also develops policy and guidance and enforces §404 provisions.

Federal Emergency Management Agency and Flood Plain Management

The Federal Emergency Management Agency (FEMA) is responsible for determining flood elevations and floodplain boundaries based on USACE studies and approved agency studies. FEMA also is responsible for distributing the Flood Insurance Rate Maps (FIRM), which are used in the National Flood Insurance Program (NFIP). These maps identify the location of special flood hazard areas (SFHAs), including the 100-year flood zone. FEMA allows nonresidential development in SFHAs; however, construction activities are restricted depending upon the potential for flooding within each area. Federal regulations governing development in an SFHA are set forth in 44 CFR 60. They enable FEMA to require municipalities that participate in the NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year flood plains. NFIP §60.3(c)(2) regulations requires that the lowest occupied floor

of a residential structure be elevated to, or above, the 100-year flood elevation (the base flood elevation). Section 60.3(c)(3) adds that nonresidential or commercial structures can either be elevated or dry flood-proofed to, or above, the 100-year flood elevation. In addition, the Flood Disaster Protection Act of 1973 and the National Flood Insurance Reform Act of 1994 mandate the purchase of flood insurance as a condition of federal or federally related financial assistance for acquisition and/or construction of buildings in SFHAs.

State

California Porter-Cologne Water Quality Control Act (Porter-Cologne Act)

The Porter-Cologne Act (California Water Code §13000 et seq) is the principal law governing water quality regulation in California. It established a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and groundwater and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act, the State's policy is as follows:

- That the quality of all the waters of the state shall be protected,
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason, and
- That the state must be prepared to exercise its full power and jurisdiction to protect the quality
 of water in the state from degradation.

The Porter-Cologne Act established nine RWQCB's (based on watershed boundaries as defined by their surrounding mountain chains and ridges) and the SWRCB, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRCB allocates rights to the use of surface water. The RWQCB have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrology regions. The SWRCB and RWQCBs have numerous nonpoint source¹ pollution-related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

The RWQCBs regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges for contaminants and waste discharge requirements for nonpoint source discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The SWRCB can make its own investigations or may require dischargers to carry out water quality investigations and report on water quality issues. The Porter-Cologne Act provides several options for enforcing waste discharge requirements and other orders, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions.

According to the U.S. EPA, "NPS pollution generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage or hydrologic modification." NPS pollution has many diffuse sources whereas point source pollution has a single, identified source. Retrieved from U.S. EPA Website: https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollution (accessed June 2021).

The Porter-Cologne Act also implements many CWA provisions, such as the NPDES permitting program. CWA Section 401 gives the SWRCB the authority to review any proposed federally permitted or federally licensed activity that may impact water quality and to certify, condition, or deny the activity if it does not comply with state water quality standards. If the SWRCB imposes a condition on its certification, those conditions must be included in the federal permit or license. Except for dredge and fill activities, injection wells, and solid waste disposal sites, waste discharge requirements may not "specify the design, location, type of construction, or particular manner in which compliance may be had...." (Porter-Cologne Act §13360). Thus, waste discharge requirements ordinarily specify the allowable discharge concentration or load or the resulting condition of the receiving water, rather than the manner by which those results are to be achieved. However, the RWQCBs may impose discharge prohibitions and other limitations on the volume, characteristics, area, or timing of discharges and can set discharge limits such that the only practical way to comply is to use management practices. RWQCBs can also waive waste discharge requirements for a specific discharge or category of discharges on the condition that management measures identified in a water quality management plan approved by the SWRCB or RWQCBs are followed.

The Porter-Cologne Act also requires adoption of water quality control plans that contain the guiding policies of water pollution management in California. A number of statewide water quality control plans have been adopted by the SWRCB. In addition, regional water quality control plans (basin plans) have been adopted by each of the RWQCBs and are updated as necessary and practical. These plans identify the existing and potential beneficial uses of waters of the state and establish water quality objectives to protect these uses. The basin plans also contain implementation, surveillance, and monitoring plans. Statewide and regional water quality control plans include enforceable prohibitions against certain types of discharges, including those that may pertain to nonpoint sources. Portions of water quality control plans, the water quality objectives and beneficial use designations, are subject to review by the U.S. EPA. When approved, they become water quality standards under the CWA. The Project is located within the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB).

The Porter-Cologne Act establishes a comprehensive program for the protection of beneficial uses of the waters of the State. California Water Code §13050(f) describes the beneficial uses of surface and groundwater that may be designated by the state or regional board for protection as follows: "Beneficial uses of the waters of the state that may be protected against quality degradation include, but are not necessarily limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves." Waterbodies with substantial evidence indicating that the waterbody supports rare, threatened, or endangered species are identified as RARE. Twenty-three beneficial uses are now defined statewide; of these 23, 20 beneficial uses are recognized in the Santa Ana Region.

NPDES General Permit for Discharges of Stormwater Associated with Construction Activity

Construction activities disturbing one acre or more of land are subject to the permitting requirements of the NPDES General Permit for Storm Water Discharges associated with Construction and Land Use Disturbance Activities (Construction General Permit). To apply for coverage under the Construction General Permit, a project applicant must submit a Notice of Intent for coverage under the Construction General Permit to the RWQCB and the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) prior to initiating construction activities. SWPPP implementation continues through project completion when an applicant must submit a Notice of Termination to the RWQCB notifying the agency that construction is completed. The disturbance to areas greater than one acre associated with construction and land disturbance for the project would require coverage under a Construction General Permit.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, that will be 2040. For the remaining high and medium priority basins, 2042 is the deadline. The latest basin prioritization project, SGMA 2019 Basin Prioritization, was completed in December 2019. SGMA 2019 Basin Prioritization identified 94 basins/sub-basins as medium or high priority. The City is located in the Orange County Basin's coastal plain, which is not identified as a critically over drafted basin.²

Regional

Santa Ana Regional Water Quality Control Board

As previously noted, the City is located within SARWQCB (Region 8) jurisdiction. The SARWQCB is required by law to develop, adopt, and implement a water quality control plan (WQCP) for the entire region. The WCCP's principal elements are a statement of beneficial water uses that the SARWQCB will protect; water quality objectives needed to protect the designated beneficial water uses; and strategies and time schedules for achieving water quality objectives. The water quality objectives are achieved primarily through the establishment and enforcement of waste discharge requirements. Both beneficial uses and water quality objectives comprise the relevant water quality standards. The SARWQCB WQCP or Basin Plan specifically: (1) designates beneficial uses for surface waters and groundwater; (2) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy; and (3) describes implementation programs to protect all waters in the region. In cases where the Basin Plan does not contain a criterion for a particular pollutant, other criteria are used to establish a water quality objective. These may be applied from SWRCB documents (e.g., the Inland Surface Waters Plan and the Pollutant Policy Document) or from water quality criteria developed under Clean Water Act §304(a) (e.g., California Toxics Rule). The SARWQCB has set water quality objectives for all surface waters in the region. Chemical constituents are regulated

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² California Department of Water Resources. Critically Overdrafted Basins Map. Retrieved from: https://water.ca.gov/programs/groundwater-management/bulletin-118/critically-overdrafted-basins#:~:text=As%20defined%20by%20SGMA%2C%20%22A,social%2C%20or%20economic%20impacts.%22 (accessed April 2022).

depending upon the beneficial use of the water body. Water quality objectives also are set for groundwater and enclosed bays and estuaries.

Orange County Drainage Area Management Plan

The purpose of the Orange County Drainage Area Management Plan (DAMP) was to satisfy NPDES permit conditions for creating and implementing an urban runoff management program to reduce pollutant discharges to the maximum extent practicable for protection of receiving waterbody water quality and support of designated beneficial uses. The DAMP contains guidance on both structural and nonstructural BMPs for meeting these goals.

Local

City of Huntington Beach General Plan

Environmental Resources and Conservation Element³

Following are the Environmental Resources and Conservation Element goals and policies relevant to the Project:

Goal ERC-16: Water conservation efforts are maximized in every aspect of use.

Policy ERC-16A: Continue to require incorporation of feasible and innovative water conservation

features in the design of new development and reuse projects.

Policy ERC-16C: Require the use of recycled water for landscaping irrigation, grading, and other non-

contact uses in new development or substantial retrofit projects where recycled water

is available or expected to be available.

Goal ERC-17: Enhance and protect water quality of all natural water bodies including rivers,

creeks, harbors, wetlands, and the ocean.

Policy ERC-17A: Require redevelopment to comply with the City's National Pollutant Discharge

Elimination System permit and other regional permits issued by the State Water

Resources Control Board and the Santa Ana Regional Water Quality Control Board.

Policy ERC-17B: Require that new development and significant redevelopment projects employ

innovative and efficient drainage technologies that comply with federal and state water quality requirements and reduce runoff and water quality impacts to

downstream environments.

Policy ERC-17C: Continue to require new development and significant redevelopment projects to

propose protective safeguards and implement best management practices that minimize non-point source pollution and runoff associated with construction activities

and ongoing operations.

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³ City of Huntington Beach. 2017. City of Huntington Beach General Plan - Environmental Resources and Conservation Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf (accessed December 2021).

Policy ERC-17D: Continue to require that new development and significant redevelopment projects to

incorporate low-impact development best management practices which may include

infiltration, harvest and re-use, evapotranspiration, and bio-treatment.

Policy ERC-17F: Reduce pollutant runoff from new development to marine biological resources and

wetlands by requiring the use of the most effective best management practices

currently available.

Policy ERC-17H: Reduce impacts of new development and significant redevelopment projects sites'

hydrologic regime (hydromodification).

City of Huntington Municipal Code⁴

To comply with NPDES permit requirements, the City has codified requirements in its municipal code. The following Huntington Beach Municipal Code (HBMC) sections would apply to the Project:

- HBMC Chapter 14.25 Stormwater and Urban Runoff Management
- HBMC Chapter 14.48 Drainage
- HBMC Chapter 14.52 Water Efficient Landscape Requirement
- HBMC Chapter 17.05 Grading and Excavation Code

The Huntington Beach Zoning and Subdivision Ordinance (HBZSO) Chapter 222 provides methods for reducing flood hazards (HBZSO §222.08) and provides development standards for construction (HBZSO §222.14) and development within the 100-year floodplain.

Huntington Beach Urban Water Management Plan

The City is a retail water supplier that provides water to its residents and customers using a combination of local groundwater from the Orange County Groundwater Basin and supplemental imported potable water supply obtained from its regional wholesaler, Municipal Water District of Orange County. The 2020 UWMP, which was prepared in compliance with the UWMP Act of 1983 and subsequent California Water Code requirements, was adopted by the City Council on June 1, 2021. This 2020 UWMP assesses present and future water supply sources and demands within the City's service area. It updates various 2015 UWMP items related to: water resource needs, water use efficiency, assessment of water reliability, and strategies to mitigate water shortage conditions. The 2020 UWMP adds a 2020 Water Shortage Contingency Plan (WSCP) to help the City effectively respond to potential water shortages. The 2020 UWMP contains all elements needed to comply with the UWMP Act's new requirements, as amended since 2015.

City of Huntington Beach Citywide Urban Runoff Management Plan

The City of Huntington Beach Citywide Urban Runoff Management Plan (CURMP) provides a broad framework for managing the quantity and quality of all urban runoff that reaches receiving waters from the land surfaces and through the storm drain system within the City. The CURMP's Water Quality Element

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⁴ City of Huntington Beach. 2020. City of Huntington Beach Municipal Code. http://www.qcode.us/codes/huntingtonbeach/ (accessed June 2021).

focuses primarily on managing runoff quality, while the Drainage Element addresses flood hazards and inconveniences. The CURMP identifies potential common solutions that can address both water quality and quantity concerns.

Water Quality Element

The CURMP's Water Quality Element provides a basis for implementing a comprehensive program for improving water quality through a combination of methods to reduce the level of urban runoff and pollutants emanating from private as well as public property and thus enhancing the quality of water discharged into the municipal storm drain system within the City. The Water Quality Element provides guidance on preparing a project-specific water quality management plan (WQMP), which describes how a project will achieve reducing urban runoff and pollutants being discharged from a project site.

Drainage Element

The CURMP's Drainage Element incorporates a City-based Master Plan of Drainage, which is a comprehensive drainage study that identifies and creates an inventory of existing storm drain facilities; identifies those areas where system elements do not meet the latest goals established by the C; ranks the severity of the difference between existing capacity and the capacity needed to achieve those goals; prepares planning-level cost options for system upgrades; and recommends system improvements to initiate corrections as funding becomes available. The City then initiates individual drainage projects within its budgetary, political, and discretionary constraints. Hydrologic and hydraulic modeling has determined that several areas within the C drainage system are undersized for the current storm flows and conveyance standards and are subject to potential flooding.

5.7.3 Existing Environmental Setting

As discussed, and detailed in **Section 5.2: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, this a SEIR to the GPU PEIR. The 6th Cycle HEU Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. The hydrologic setting, drainage, surface water quality, groundwater basin, and flooding hazards are described in detail in GPU PEIR Section 4.8.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf).

Candidate Housing Sites

Local Facilities

The City is responsible for its own sub-regional and local drainage facilities. As noted above, the City owns, operates, and maintains a stormwater drainage system for the purpose of conveying stormwater runoff to reduce or eliminate flooding under peak storm flow conditions. The storm drainage system begins with the streets and roads, and includes inlets, storm drains, open channels, pump stations, detention basins, and other appurtenances.

Runoff water is collected through the C's drainage facilities at each pump station and then transferred to the nearest Orange County Flood Control District (OCFCD) channel, which ultimately conveys to the Pacific Ocean. Under existing conditions, stormwater from candidate housing sites is conveyed through streets and gutters to City storm drain systems consisting of underground pipes, pump stations, and open channels, which ultimately convey runoff into OCFCD facilities. The channel nearest a development site may include the Santa Ana River, Bolsa Chica Wetlands, or other City and County channels. City storm drains also outlet to the beaches and Pacific Ocean at numerous locations. Dry weather flows at eight of the storm drain pump stations are diverted to the City's sanitary sewer system for treatment at Orange County Sanitation District (OCSD) Plant No. 1 and dry-weather runoff from eight other stormwater pump stations are diverted to OCSD's Plant No. 2. The City channels, originally designed to accommodate up to 65 percent of the 25-year flood events, were typically constructed at ground level or at grade; however, the at-grade channels accelerate flooding potential because the amount of water that may be pumped into an at-grade channel is less than that which can be pumped into a below-grade channel.⁵

Surface Water Quality

While the primary purpose of the City's storm drain system, as described above, is to reduce or eliminate flood hazards, the system carries both dry and wet weather urban runoff and the pollutants associated with activities from urban land that are transported by runoff. The discussion of water quality is within the context of urban runoff because the City is a highly urbanized landscape. Both dry- and wet-weather urban runoff discharges into storm drains and, in some cases, flows directly to creeks and rivers, lakes, beaches, and the ocean. Stormwater discharges from various areas within the City drain directly or indirectly into urban streams, City lakes, bays, wetlands, estuaries, and the Pacific Ocean. Urban runoff pollutants include a wide array of organic and inorganic compounds and/or biological hazards from both point and nonpoint sources. Untreated polluted runoff can have harmful effects on drinking water, recreational water, and wildlife. Impaired water bodies are waters that are too polluted or otherwise degraded to meet water quality standards. While many of the City's major water bodies contain pollutants listed on the 2010 Section 303(d) List of Water Quality Limited Segments, there are no pollutants listed as High Priority Total Maximum Daily Loads for these waters. Huntington Harbour has the greatest number of pollutants.

Groundwater Basins

Orange County Groundwater Basin

The Orange County Groundwater Basin underlies the northern half of Orange County inclusive of the City, beneath broad lowlands known as the Tustin and Downey plains. It covers an area of approximately 350 square miles. The aquifers comprising the Orange County Groundwater Basin extend more than 2,000 feet deep and form a complex series of interconnected sand and gravel deposits. The major surface water features overlying this groundwater basin are the San Gabriel and Santa Ana rivers, as well as San Diego and Santiago creeks, all of which have headwaters outside the groundwater basin. The Orange County

June 2022

⁵ City of Huntington Beach. 2017. *City of Huntington Beach General Plan Update Program Environmental Impact Report SCH No. 2015101032. Page 4.8-18.* https://www.huntingtonbeachca.gov/files/users/planning/Volume-II-Draft-Environmental-Impact-Report.pdf (accessed April 2022).

Groundwater Basin is recharged primarily from local rainfall (greater in wet years), base flow from the Santa Ana River (much of which is actually recycled wastewater from treatment plants in Riverside and San Bernardino counties), imported water deliberately percolated into the basin, and reclaimed wastewater directly recharged into the basin. The Orange County Water District (OCWD) considers the Orange County Groundwater Basin to be in an overdraft condition.

The City currently receives its water from two sources: approximately 77 percent from local well water from the Orange County Groundwater Basin (also known as the Lower Santa Ana River Groundwater Basin), which is managed by OCWD; and approximately 23 percent of imported water from the Metropolitan Water District of Orange County (MWDOC).

Flood Hazards

Flooding within the City can be caused by various natural events and typically is a result of heavy rains and coastal storms. It also can result from high tides (tidal flooding) or tsunamis. Additionally, flood events can result from infrastructure failure, such as a water main break or inundation from dam failure. Areas of elevated risks of flooding are divided into 100-year flood zones and 500-year flood zones. A 100-year flood zone has a 1 percent chance each year of being inundated by a major flood, while a 500-year flood zone has a 0.2 percent chance of inundation each year.

FEMA is involved in identifying and mapping flood-prone areas for jurisdictions that participate in the NFIP, such as the City. FEMA's primary missions are to reduce the loss of life and property and protect the nation from all hazards, including flooding. NFIP participation makes flood insurance available to residents and makes the City eligible for pre-disaster and disaster relief assistance. FEMA is the agency with the authority to determine the flood hazard in a given area, which the City implements through flood management policies and regulations at the local level.

Flood zones are geographic areas that are subject to periodic inundation due to coastal wave action or river flooding that FEMA has defined according to varying levels of flood risk. These flood-prone areas are depicted on a community's FIRM or Flood Hazard Boundary Maps. FEMA requires design standards for flood protection depending on the FIRM designation to ensure that new development is appropriately sited and constructed to minimize damage and avoid hazards. Each zone reflects the projected severity or type of flooding in the area based on historic flood event data and models.

Special Flood Hazard Areas, also referred to as the 100-year floodplain, are defined as areas that have a one percent chance of flooding within a given year. Special Flood Hazard Areas in the 100-year floodplain are designated on the FIRM map as Zone A, Zone AO, Zone AE or A1-A30, Zone V, Zone VE or V1-V30, and Zone B or Z500. Zone VE are "coastal high hazard area" designations that applies to property that is subject to high velocity wave action from storms or seismic forces. In the City, the VE zone applies to the shoreline and properties along the Interstate 1, or commonly referred as the Pacific Coast Highway (PCH). The AE zone is a special flood hazard area designation that applies to properties that are subject to river flooding. In the City, this designation applies shoreline and properties adjacent to the PCH, similarly to Zone VE. The FIRM maps also include properties in Zone B or X500, which are areas that represent areas between the limits of the 100-year and 500-year flood; or certain areas subject to 100-year floods with average depths

less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the 100-year flood.

There are several FIRMs within the City with effective dates ranging from 2009 to 2019. The floodplain areas and special flood hazard areas identified by the FIRM are subject to regulations in accordance with the City's Floodplain Overlay District (HBMC Chapter 222.02). There are three subdistricts of the Floodplain (FP) Overlay that includes FP 1 Subdistrict, FP 2 Subdistrict, and FP 3 Subdistrict. Neither FP1, FP2, or FP3 subdistricts directly prohibit residential development, but all development within the FP Overlay District is subject to HBMC Chapter 222.02 provisions. Some of the candidate housing sites are within the Floodplain Overlay Zone, as discussed below.

According to FEMA and **GPU PEIR Figure 4.8-2**: Designated Floodplains within Planning Area, flood hazards are identified in the City along the Pacific Ocean, PCH, Bolsa Chica Wetlands, and urban areas as mapped on the FIRMs that took effect in 2009 and 2019. The candidate housing sites' FIRM Zones and relative flood risk provided in **Table 5.7-1: FIRM Zone and Flood Risk**.

Candidate Housing Site FIRM Zone Relative Flood Risk 4, 6, 17, 18, 19, 56, 57, 58, 60, 61, 94, 107, Α 100-Year Floodplain 107, 108, 108, 111, 130, 136, 150, 160, 161, 162, 163, 164, 166, 167, 177, 182, 183, 184, 185, 186, 188, 189, 190, 191, 192, 193, 194, Χ 500-Year Floodplain & other flood area 1, 5, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, (area of 0.2% annual chance flood with 49, 50, 51, 52, 53, 54, 63, 64, 65, 66, 97, 98, average depths of less than one foot or 141, 172, 173, 181, 187, 199, 200, 201, 206, with drainage areas less than 1 square 208, 226, 227, 232, 239, 240, 242, 243, 244, mile; and areas protected by levees from 250, 253, 254, 255, 256, 260, 263, 264, 265, 1% annual chance flood). 266, 269, 270, 271, 272, 276, 277, 278, 280, 267 Outside of 500-Year Floodplain All remaining candidate sites Source: Federal Emergency Management Agency; FEMA Flood Map Service Center, 2022.

Table 5.7-1: FIRM Zone and Flood Risk

There are two dams near the City, the Seven Oaks Dam and Prado Reservoir Dam, which are flood control dams that control flood flow along the Santa Ana River. Approximately 47 billion gallons (145,600 acrefeet) of water can be stored in the Seven Oaks reservoir and 61 billion gallons (187,600 acre-feet) in the Prado reservoir.

The Seven Oaks Dam is located approximately 35 miles upstream of Prado Reservoir Dam and feeds into Prado Dam. ⁶ Accordingly, inundation due to Seven Oaks Dam failure would be in the event of a failure of the Prado Reservoir Dam. GPU Figure HAZ-8, Dam Flooding Areas, identifies areas of the City within the Prado Reservoir Dam inundation area. As also indicated on GPU Figure HAZ-8, more than 50 percent of the City would be subject to inundation by the Prado Reservoir Dam, if it were to experience a catastrophic

⁶ County of San Bernardino, Department of Public Works. 2022. Seven Oaks Dam. https://cms.sbcounty.gov/dpw/FloodControl/SevenOaksDam.aspx (accessed May 26, 2022).

failure. Both dams are flood control dams that usually store water during and after a flood event. However, Prado Reservoir Dam stores water most of the year and releases it in a controlled manner down the Santa Ana River to recharge the groundwater aquifer underlying Orange County. Although upstream dam failure could occur, it is likely only a threat to the City during a relatively small part of the year when the reservoir behind Prado Reservoir Dam is at its fullest.

As identified in GPU Figure HAZ-8, Dam Flooding Area, the following 154 candidate housing sites are completely or partially in the Prado Reservoir Dam inundation area: 1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 36, 37, 41, 42, 45, 46, 47, 48, 49, 50, 55, 56, 57, 58, 59, 60, 61, 62, 65, 80, 82, 83, 84, 89, 90, 94, 97, 98, 107, 108, 111, 115, 126, 130, 134, 135, 136, 139, 144, 146, 150, 151, 152, 153, 154, 158, 159, 161, 162, 163, 164, 166, 167, 168, 169, 171, 172, 176, 177, 182, 183, 184, 185, 186, 188, 189, 190, 191, 192, 193, 194, 195, 196, 199, 200, 201, 204, 205, 206, 207, 208, 220, 221, 222, 223, 225, 225, 226, 227, 228, 235, 238, 239, 250, 251, 254, 263, 264, 265, 266, 267, 269, 270, 271, 277, 279, 281, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, and 378.

Coastal Hazards

The City is at risk from two types of coastal hazards. High tides and high surf continually erode coastal bluffs located along the shoreline. This condition is often exacerbated by wind and inadequate drainage practices from development on top of bluffs. Beaches underneath the coastal bluffs can act as a protective buffer; however, these protective beaches themselves can be eroded away, particularly when structures such as seawalls, jetties, and breakwaters interrupt the natural processes that maintain the beaches.

Winds and atmospheric pressure can contribute to the formation of both seiches and tsunamis; however, winds are typically more important to a seiche motion, while pressure often plays a substantial role in tsunami formation. Both tsunamis and seiches can lead to flooding. Tsunamis are an important hazard of concern for the City, with the ability to impact the entire length of coastline within the City. The California Office of Emergency Services (CalOES) estimates that the Huntington Harbour neighborhood, the area northeast of the Bolsa Chica Wetlands, and the southeast corner of Huntington Beach are at an elevated risk of a tsunami.

As identified in GPU Figure HAZ-5: Tsunami Evacuation Map, no candidate housing sites are in tsunami evacuation areas.

Sea Level Rise

Global sea level has been rising over the past century, and the rate has increased in recent decades. Higher projected increases in sea levels can cause erosion of beaches and coastal bluffs and facilitate destructive storm surges to push farther inland and result in more frequent nuisance flooding. To support the General Plan, and in accordance with adopted guidelines of the California Coastal Commission (CCC) guidelines, the City prepared a vulnerability assessment estimating the consequences, probability, and resulting risk

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⁷ City of Huntington Beach. 2017. City of Huntington Beach General Plan Update. Figure HAZ-8, Dam Flooding Area, page 5-15. Retrieved from: https://www.huntingtonbeachca.gov/files/users/planning/Natural-and-Environmental-Hazards.pdf.

from various sea level rise scenarios. The 2018 City of Huntington Beach Sea Level Rise (SLR) Vulnerability Assessment and Adaptation Plan (Adaptation Plan) looks forward to 2100 to determine the specific extent of the City's vulnerability to sea level rise, including an inventory of potentially affected assets and their estimated replacement value. The Adaptation Plan did not identify any candidate housing sites in Groundwater Emergence Hazard Areas, which would be subject to sea level rise.

5.7.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning hydrology and water quality. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- Substantially alter the existing drainage pattern of the site or area, including through the
 alteration of the course of a stream or river or through the addition of impervious surface, in a
 manner which would;
 - result in substantial erosion or siltation on- or off-site;
 - substantially increase the rate or amount of surface runoff in a manner which would result
 in flooding on- or off-site;
 - 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;
 - impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

5.7.5 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds as described above, in determining whether Project implementation would result in impacts concerning the City's hydrology and water quality compared to the previous hydrology and water quality analysis conducted for the GPU PEIR. The evaluation was based on reviewing the regulations and determining their applicability for the Project. Hydrology and Water Quality information was acquired through review of relevant planning documents including but limited to the General Plan, HBMC, and consultation with City staff. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning hydrology and water quality considers the relevant federal, state, regional, and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

5.7.6 Project Impacts and Mitigation

Impact HYD-1 Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.8-7)

The GPU PEIR concluded that General Plan buildout would involve soil disturbance, construction, and operation of land uses that could each generate pollutants affecting stormwater. The GPU PEIR noted that all future development under the General Plan could potentially violate water quality standards or waste discharge requirements, substantially degrade water quality, and result in a potential for discharge of stormwater pollutions. Thus, all future development under the GPU would be required to comply with the HBMC (i.e., Chapter 14.25, Stormwater and Urban Runoff Management, Chapter 14.48, Drainage, Chapter 14.52, Water Efficient Landscape Requirement, and Chapter 17.05 Grading and Excavation Code); the Construction General Permit (2009-0009-DWQ); the Citywide Urban Runoff Management Plan NPDES Municipal Stormwater MS4 Permit; the De Minimus Threat General Permit. Development projects located on a site one-acre or greater would require a Stormwater Pollution Prevention Plan (SWPPP) pursuant to the Construction General Permit. The preparation of a SWPPP requires the individual developer to implement best management practices (BMPs) that are designed specifically to address the potential pollution risks that would be incurred during Project construction. For sites of less than one acre, projects would be required to comply with the City's water quality requirements pursuant to the HBMC. In addition, all future development within the City would be required to comply with federal, State, regional, and local policies, regulations, and laws pertaining to hydrology and water quality. Furthermore, the City would require that applicants for new development and significant redevelopment projects and priority projects prepare a preliminary WQMP and (final) WQMP in accordance with the Model WQMP and Technical Guidance Document requirements and all currently adopted permits. The WQMP is required to identify site-specific design and source control BMPs using Low Impact Development (LID) principles such as infiltration, harvest and reuse, evapotranspiration, and biotreatment.

The GPU PEIR concluded that while development could potentially violate water quality standards or waste discharge requirements, substantially degrade water quality, and result in a potential for discharge of stormwater pollutions, adherence to GPU policies and HBMC regulations; the Construction General Permit; NPDES Municipal Stormwater MS4 Permit requirements; DAMP, and other applicable regulations would reduce impacts to less than significant levels. Although the GPU PEIR concluded that impacts would be less than significant following compliance with the established regulatory framework, future projects would also be subject to **GPU PEIR MM 4.8-1** to ensure that water quality impacts are further reduced.

The addition/changes necessary to make the GPU PEIR applicable to the HEU are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons. As previously noted, there are two impaired water bodies in the City (Bolsa Chica

Channel for ammonia and Seal Beach for enterococcus). There are no candidate housing sites near these water bodies.

It is anticipated that construction activities for future housing development facilitated by the Project would include excavation, grading, and trenching, which would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion. Therefore, construction activities from future housing development could violate water quality standards or otherwise degrade water quality. However, construction activities that could affect water quality would be addressed through compliance with the NPDES program's Construction General Permit. Future housing developments that involve land disturbance equal to or greater than 1.0 acre would be subject to the Construction General Permit. To obtain coverage under the Construction General Permit, dischargers would be required to file compliance-related documents with the SWRCB. The Construction General Permit requires development and implementation of a SWPPP and monitoring plan, which must include erosion-control and sediment-control BMPs to control potential construction-related pollutants.

Project operations could result in pollutant discharges from certain uses including but not limited to housing developments, parking lots, and new streets, among others. Future housing development operations would generate materials (i.e., from vehicles, landscaping, general debris, pet waste, etc.) that would potentially contribute to pollutants in stormwater runoff, in addition to sediment. Therefore, future housing development operations could violate water quality standards or otherwise degrade water quality.

All future housing development subject to rezoning and within overlay zones would be subject to compliance with GPU Policy ERC-17.A, B and C, which require that project-specific developments comply with the City's NPDES permit and other regional permits issued by the SWRCB and SARWQCB, employ innovative and efficient drainage technologies that comply with federal and State water quality requirements and reduce runoff and water quality impacts to downstream environments, and implementation of protective safeguards and BMPs that minimize non-point source pollution and runoff associated with construction activities and ongoing operations. GPU Policies ERC-17.D, F and H require new development and significant redevelopment projects to incorporate LID BMPs which may include infiltration, harvest and re-use, evapotranspiration, and bio-treatment, reduce pollutant runoff from new development to marine biological resources and wetlands by requiring the use of the most effective BMPs currently available, and reduce impacts of new development and significant redevelopment projects sites' hydrologic regime (hydromodification), minimizing impacts to surface and groundwater quality.

GPU EIR MM 4.8-1 requires applicants for new development and significant redevelopment projects to prepare a project specific preliminary WQMP. Further, WQMP BMPs must be designed in accordance with the Municipal NPDES Permit, Model WQMP, Technical Guidance Document, Drainage Area Management Plan, and City of Huntington Beach Local Implementation Plan. Projects are required to include site design and source control BMPs in the project WQMP. Additionally, new development or significant redevelopment projects and priority projects must include LID principles to reduce runoff to a level consistent with the maximum extent practicable and treatment control WQMP BMPs. Further, adherence to regulations in HBMC Chapters 14.25, 14.48, and 17.05 aimed at avoiding/mitigating water quality

impacts would be required for future developments. While future housing development could affect water quality, future development would be subject to federal, State, and local regulations (i.e., GPU policies and HBMC standards), which are intended to control water quality impacts. Therefore, substantial adverse water quality impacts would be avoided, and impacts would be less than significant. To further minimize potential long-term water quality impacts, future housing development subject to rezoning and within overlay zones would be subject to compliance with **GPU PEIR MM 4.8-1**, which requires applicants for new development and significant redevelopment projects within the planning area to prepare a project specific preliminary WQMP which would include site design and source control BMPs to reduce runoff.

Considering these requirements, future housing development facilitated by the Project would result in a less than significant impact concerning water quality.

GENERAL PLAN POLICIES

See **Section 5.7.2: Existing Regulatory Setting** for complete policy text.

- Policy ERC-17.A
- Policy ERC-17.B
- Policy ERC-17.C

- Policy ERC-17.D
- Policy ERC-17.F
- Policy ERC-17.H

GPU PEIR MITIGATION MEASURES

Revisions to existing Final EIR mitigation measures are shown in underline and deletions are show in strikethrough.

GPU PEIR MM 4.8-1

The City of Huntington Beach shall require applicants for new development and significant redevelopment projects within the planning area to prepare a project-specific preliminary Water Quality Management Plan (WQMP) in accordance with the Model WQMP and Technical Guidance Document requirements and all current adopted permits. The WQMP shall be prepared by a Licensed Civil Engineer and submitted for review and acceptance by the City of Huntington Beach Public Works Department prior to issuance of a Precise Grading or Building permit.

Best management practices in the WQMP shall be designed in accordance with the Municipal NPDES Permit, Model WQMP, Technical Guidance Document, Drainage Area Management Plan, and City of Huntington Beach Local Implementation Plan. All projects shall include site design and source control best management practices in the project WQMP. Additionally, new development or significant redevelopment projects and priority projects shall include low impact development principles to reduce runoff to a level consistent with the maximum extent practicable and treatment control best management practices in the WQMP. If permanent dewatering is required and allowed by the city, OCWD, and other regulatory agencies, the applicant shall include a description of the

dewatering technique, discharge location, discharge quantities, chemical characteristics of discharged water, operations and maintenance plan, and Waste Discharger Identification number for proof of coverage under the De Minimus Permit or copy of the individual waste discharge requirements in the WQMP. Additionally, the WQMP shall incorporate any additional best management practices as required by the City of Huntington Beach Public Works Department.

The WQMP shall include the following additional requirements:

- 1) Project and Site Characterization Requirements
 - a) Entitlement Application numbers and site address shall be included on the title sheet of the WQMP
 - b) In the project description section, explain whether proposed use includes on-site food preparation, eating areas (if not please state), outdoor activities to be expected, vehicle maintenance, service, washing cleaning (if prohibited on-site, please state)
 - c) All potential pollutants of concern for a proposed project land use type as per **Table 2.1.1** of the Technical Guidance Document shall be identified
 - d) A narrative describing how all potential pollutants of concern will be addressed through the implementation of BMPs and describing how site design BMPs concepts will be considered and incorporated into the project design shall be included
 - e) Existing soil types and estimated percentages of perviousness for existing and proposed conditions shall be identified
 - f) In Section I of the WQMP, state verbatim the Development Requirements from the Planning Department's letter to the applicant
 - g) A site plan showing the location of the selected treatment control BMPs, and drainage areas shall be included in the WQMP
 - A Geotechnical Report shall be submitted to address site conditions for determination of infiltration limitations and other pertinent characteristics.
- 2) Pursuant to the County's Technician Guidance Document, the feasibility of Low Impact Development (LID) BMPs, such as infiltration, harvest and reuse, evapotranspiration, and biotreatment, shall be first in the stormwater treatment design for a new development or redevelopment priority project.
- 3) Project-Based Treatment Control BMPs
 - a) Infiltration-type BMPs shall not be used unless the Geotechnical Report states otherwise.

- Wet swales and grassed channels shall not be used because of the slow infiltration rates of project site soils, the potentially shallow depth to groundwater, and water conservation needs
- If proprietary Structural Treatment Control devices are used, they shall be sited and designed in compliance with the manufacturers design criteria
- d) Surface exposed treatment control BMPs shall be selected such that standing water drains or evaporates within 24 hours or as required by the County's vector control
- e) Excess stormwater runoff shall bypass the treatment control BMPs unless they are designed to handle the flow rate or volume from a 100-year storm event without reducing effectiveness. Effectiveness of any treatment control BMPs for removing the pollutants of concern shall be documented via analytical models or existing studies on effectiveness.
- f) A project WQMP shall incorporate water efficient landscaping using drought tolerant, native plants in accordance with Landscape and Irrigation Plans
- g) Pet waste stations (stations that provide waste pick-up bags and a convenient disposal container protected from precipitation) shall be provided and maintained
- h) Building materials shall minimize exposure of bare metals to stormwater.
 Copper or Zinc roofing materials, including downspouts, shall be prohibited. Bare metal surfaces shall be painted with non-lead-containing paint
- i)—Any applicant proposing development in the planning area is encouraged to consider LID BMPs for infiltration, harvest and reuse, evapotranspiration, and bio-treatment
- 4) <u>Structural and Non-Structural BMPs</u>. The WQMP shall include the following operations and maintenance BMPs, where applicable. Additionally, a commitment and mechanism to fund and implement an operational and maintenance program that includes the following must be included:
 - a) Minimum landscape maintenance standards and tree trimming requirements for the total project site. Landscape maintenance shall be performed by a qualified landscape maintenance company or individual in accordance with a Chemical Management Plan detailing chemical application methods, chemical handling procedures, and worker training. Pesticide application shall be performed by a certified applicator. No

- chemicals shall be stored on-site unless in a covered and contained area and in accordance with an approved Materials Management Plan. Application rates shall not exceed labeled rates for pesticides, and shall not exceed soil test rates for nutrients. Slow release fertilizers shall be used to prevent excessive nutrients in stormwater or irrigation runoff.
- b) Maintenance and tree trimming procedures per the ANSI A-300 Standards as established by the International Society of Arborist must be followed. All trees shall be trimmed by or under the direct observation/ direction of a licensed/ certified Arborist.
- c) Landscape irrigation shall be performed in accordance with an Irrigation Management Plan to minimize excess irrigation contributing to dry- and wet-weather runoff. Automated sprinklers shall be used and be inspected at least quarterly and adjusted yearly to minimize potential excess irrigation flows. Landscape irrigation maintenance shall be performed in accordance with the approved irrigation plans, the city Water Ordinance and per the city Arboricultural and Landscape Standards and Specifications.
- d) Proprietary stormwater treatment systems maintenance shall be in accordance with the manufacturer's recommendations. If a nonproprietary treatment system is used, maintenance shall be in accordance with standard practices as identified in the current CASQA handbooks, operations and maintenance procedures outlined in the approved WQMP, or other city-accepted guidance.
- e) Signage, enforcement of pet waste controls, and public education would improve use and compliance, and therefore, effectiveness of the program, and reduce the potential for hazardous materials and other pollution in stormwater runoff. The responsible entity (e.g., HOA, property manager) shall prepare and install and include pet waste controls (e.g., requirements for pet waste cleanup, pet activity area restrictions, pet waste disposal restrictions) in the Association agreement/Conditions, Covenants, and Restrictions.
- f) Street and parking lot/area sweeping shall be performed at an adequate frequency to prevent buildup of pollutants (for street sweeping effectiveness see http://www.fhwa.dot.gov/environment/ultraurb/).
- g) A maintenance plan for BMPs and facilities identifying responsible parties and maintenance schedules and appropriate BMPs to minimize discharges of contaminants to storm drain systems during maintenance operations.

- h) The responsible entity (e.g., HOA, property manager) must retain records of all maintenance of BMPs including outside vendor invoices.
- 5) Site Design BMPs. Any applicant proposing development in the planning area is required to incorporate low impact development principles as defined in the NPDES Permit and, if allowed in accordance with the geotechnical report and limitations on infiltration BMPs, encouraged the following LID BMPs: infiltration, harvest and reuse, evapotranspiration, and bio-treatment.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact HYD-2

Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.8-14)

The GPU PEIR concluded that GPU buildout would not substantially interfere with groundwater recharge due to an increase in the amount of impervious area. Groundwater wells typically supply about two-thirds of the City's water, while the remaining one-third is imported. The OCWD has developed a groundwater management plan that incentivizes sustainable groundwater production and recharge practices. Local rainfall is the primary recharge source for the Orange County Groundwater Basin, but it also receives water from the Santa Ana River, imported water percolated into the basin, and reclaimed wastewater directly recharged into the basin. OCWD manages the groundwater basin within which the City lies. Additionally, there are existing resources in place to protect and conserve groundwater supplies throughout the City, including, but not limited to, the groundwater management plan and GPU water resources protection and conservation policies. These aim to ensure adequate water supply is available to communities within the planning area through facilities, infrastructure, and appropriate allocation. Therefore, the GPU PEIR concluded that a less than significant impact would occur concerning the depletion or interference of groundwater supplies or recharge, respectively. Although the GPU PEIR concluded that impacts would be less than significant, future projects would be subject to GPU PEIR MM 4.8-2 to ensure that permanent groundwater dewatering does not cause or contribute to a lowering of the local groundwater table that would affect nearby water supply wells.

The addition/changes necessary to make the GPU PEIR applicable to the Project are presented below.

IMPACT ANALYSIS

Table 5.15-1: Water Supplies – Actual and Projected presents the City's actual (2020) and projected (2025-2045) water supplies. As shown in **Table 5.15-1**, for FY 2019-20, the City relied on approximately

70 percent (18,296 AF) groundwater and 30 percent (7,670 AF) imported water. It is projected that by 2030, which is proximate to the Project's horizon year of 2029, the water supply mix will be approximately 85 percent groundwater and 15 percent imported water. As discussed in detail in **Section 5.15: Utilities and Service Systems**, future housing demand facilitated by the Project would result in an unaccounted net water demand of approximately 823 AFY. Therefore, based on the UWMP's projected supplies, there may not be sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. As similarly concluded in the GPU PEIR, until the water supply situation improves, the Project-related water demands from future development would result in a significant and unavoidable impact concerning water supplies; see **Section 5.15** for a detailed discussion. As discussed above, the City's water supply mix in 2030 will be approximately 85 percent groundwater, and since the OCWD considers the Orange County Groundwater Basin to be in an overdraft condition and, as discussed in **Section 5.15**, until the water supply improves, Project-related water demands from future development would result in a significant and unavoidable impact concerning water supplies. Therefore, the Project could substantially decrease groundwater supplies resulting in a significant and unavoidable impact concerning sustainable management of the Basin.

Because all except two candidate housing sites are fully developed containing impervious surfaces, future housing development facilitated by the Project is not anticipated to significantly increase impervious surfaces, decrease water infiltration into the groundwater basin, or reduce groundwater recharge. Further, future housing development facilitated by the Project would be required to incorporate features that would reduce impervious area, as feasible, and promote water infiltration. Treatment control and hydromodification management facilities would promote stormwater retention and infiltration. Redevelopment of developed candidate housing sites would be subject to compliance with NPDES, and City standards intended to reduce runoff and increase infiltration. Also, there are measures in place to manage the groundwater basin. The OCWD has developed a groundwater management plan that incentivizes sustainable groundwater production and recharge practices.

All future housing development subject to rezoning and within overlay zones would be subject to compliance with GPU Policy ERC-16.A and C, which require incorporation of feasible and innovative water conservation features in the design of new development and reuse projects and the use of recycled water for landscaping irrigation, grading, and other non-contact uses in new development or substantial retrofit projects where recycled water is available or expected to be available. Compliance with these policies would reduce reliance on groundwater supplies and allow for the recharge of groundwater, thereby reducing impacts. Compliance with GPU HE-6.1 would also reduce impacts to groundwater supply through implementation of energy and water efficiency measures identified in the City's Green Building Program.

Future housing development facilitated by the Project would be required to HBMC standards for avoiding and minimizing construction and operations impacts to groundwater supplies, including HBMC Chapter 14.25 Stormwater and Urban Runoff Management, Chapter 14.48 Drainage, Chapter 14.52 Water Efficient Landscape Requirement, and Chapter 17.05 Grading and Excavation Code; and the Citywide Urban Runoff Management Plan NPDES Municipal Stormwater MS4 Permit. **GPU PEIR MM 4.8-2** would require applicants of future developments to prepare a groundwater hydrology study to determine the

lateral transmissivity of area soils and a safe pumping yield such that dewatering activities do not interfere with nearby water supplies. Adherence with GPU PEIR MM 4.8-2 would ensure that permanent groundwater dewatering would not cause or contribute to a lowering of the local groundwater table that would affect nearby water supply wells. Future housing development facilitated by the Project would be required to adhere to all federal, State, and local requirements for avoiding and minimizing construction and operations impacts to groundwater supplies, including GPU policies, HBMC standards, the Citywide Urban Runoff Management Plan NPDES Municipal Stormwater MS4 Permit, and GPU PEIR MM 4.8-2. Despite compliance with the established regulatory framework and GPU PEIR MM 4.8-2, until water supply improves, water demands from future development pursuant to the Project would result in a significant and unavoidable impact concerning groundwater supplies and sustainable management of the Basin.

GENERAL PLAN POLICIES

See **Section 5.7.2: Existing Regulatory Setting** for complete policy text.

- Policy ERC-16.A
- Policy ERC-16.C

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.8-2 The City of Huntington Beach shall require that any applicant prepare a groundwater hydrology study to determine the lateral transmissivity of area soils and a safe pumping yield such that dewatering activities do not interfere with nearby water supplies. The groundwater hydrology study shall make recommendations on whether permanent groundwater dewatering is feasible within the constraints of a safe pumping level. The applicant's engineer of record shall incorporate the hydrology study designs and recommendations into project plans. If safe groundwater dewatering is determined to not be feasible, permanent groundwater dewatering shall not be implemented. The City of Huntington Beach Director of Public Works, Orange County Water District, and other regulatory agencies shall approve or disapprove any permanent groundwater dewatering based on the groundwater hydrology study and qualified engineers' recommendations.

MITIGATION MEASURES

No feasible mitigation beyond GPU PEIR mitigation is available to reduce impacts to less than significant.

Level of Significance After Mitigation: Significant and Unavoidable

Impact HYD-3

Would the Project 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;
- substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- 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; or
- impede or redirect flood flows?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.8-16 to 4.8-17)

The GPU PEIR concluded that GPU implementation would not substantially change drainage patterns throughout the City and, therefore, would not alter those within the Santa Ana River Basin watersheds (primarily the City's Westminster and Talbert watersheds) under SARWQCB jurisdiction. Future projects would be subject to erosion and sediment control requirements; see Impact HYD-1 above regarding water quality. Furthermore, project applicants would be required to prepare a SWPPP that would outline BMPs that would serve to reduce the risk of water degradation from soil erosion-related construction activities, in addition to maintaining existing drainage patterns. Future projects would be required to comply with existing regulations for avoiding or minimizing erosion and sedimentation from such projects, as required by the RWQCB.

The OCFCD is responsible for the design, construction, operation, and maintenance of regional flood control facilities that carry out maintenance activities. The City's channels, originally designed to accommodate up to 65 percent of the 25-year flood events, typically were constructed at ground level or at-grade; however, the at-grade channels accelerate flooding potential because the amount of water that may be pumped into an at-grade channel is less than can be pumped into a below-grade channel. With predicted population increases and further urbanization of the City (albeit limited), urban runoff could exceed the capacity of the existing C stormwater drainage systems, which could result in localized flooding of the City. However, these impacts would be minimized since future development projects under the GPU would be subject to the specific water pollution control program elements documented in the DAMP, and the corresponding Coastal Element Policies. Furthermore, all construction projects would be required to implement BMPs to prevent runoff and discharges into the storm drain systems and nearby water bodies. In addition, future projects, at minimum, must include erosion and sediment controls, as well as waste and materials management controls. Therefore, the GPU PEIR concluded that General Plan buildout would not substantially increase runoff rates or volumes resulting in a substantial flooding, and impacts would be less than significant. Although the GPU PEIR concluded that a less than significant impact would occur, implementation of GPU PEIR MM 4.8-3 would assess each future, project-level development application for the contribution to potential system capacity constraints and provide for mitigation of constraints such that impacts to storm drain system capacities would be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the Project are presented below.

IMPACT ANALYSIS

The City is responsible for its own local and sub-regional drainage facilities. Because all except two candidate housing sites are fully developed, future housing development facilitated by the Project is not anticipated to significantly increase impervious surfaces or substantially alter the City's overall drainage patterns. It is anticipated that drainage from the candidate housing sites would continue to be directed through streets and gutters to City storm drain systems (i.e., underground pipes, pump stations, and open channels), then ultimately conveying runoff into OCFCD facilities. Future housing development facilitated by the Project would not result in substantial changes to the City's overall drainage patterns. Existing drainage areas, as well as the drainage characteristics/patterns for future housing development facilitated by the Project, would be similar to existing conditions.

Stormwater drainage and system modifications and improvements associated with future housing development facilitated by the Project would be required to comply with all applicable regulations, including discharge rate controls, and be designed for a 100-year storm event.

All future housing development subject to rezoning and within overlay zones would be subject to compliance with GPU Policy ERC-16.A and Policy ERC-16.C, which require incorporation of feasible and innovative water conservation features in the design of new development and reuse projects and the use of recycled water for landscaping irrigation, grading, and other non-contact uses in new development or substantial retrofit projects where recycled water is available or expected to be available. Compliance with these policies would reduce erosion and siltation and minimize surface runoff, thereby minimizing impacts to the stormwater drainage system. GPU Policy ERC-17.D and Policy ERC-17.H require new development and significant redevelopment projects to incorporate LID BMPs, which may include infiltration, harvest and re-use, evapotranspiration, and bio-treatment, the use of the most effective BMPs currently available, and hydromodification, thereby minimizing the rate or amount of surface runoff.

The GPU PEIR concluded that General Plan buildout would not substantially increase runoff rates or volumes resulting in a substantial flood hazard, and impacts would be less than significant. Although the GPU PEIR concluded that a less than significant impact would occur, the City would be required to comply with **GPU PEIR MM 4.8-3**, which requires each future, project-level development application to demonstrate adequate capacity in the storm drain system and provide for mitigation of constraints such that impacts to storm drain system capacities would be less than significant.

Future housing development facilitated by the Project would be subject to erosion and sediment control requirements; see Impact HYD-1 above regarding water quality. Further, applicants would also be required to adhere to all federal, state, and local requirements for avoiding construction and operations impacts that could substantially alter the existing drainage pattern or alter the course of a stream or river,

including the Construction General Permit (2009-0009-DWQ) adopted by the SWRCB; the Citywide Urban Runoff Management Plan NPDES Municipal Stormwater MS4 Permit; the De Minimus Threat General Permit, and SWPPP as required by the Construction General Permit. Future applicants would also be subject to HBMC Chapter 14.25 Stormwater and Urban Runoff Management, Chapter 14.48 Drainage, Chapter 14.52 Water Efficient Landscape Requirement, and Chapter 17.05 Grading and Excavation Code, and **GPU PEIR MM 4.8-3**.

Considering that through compliance with the established regulatory framework described above, as well as **GPU PEIR MM 4.8-3**, future housing development facilitated by the Project would not substantially alter the existing drainage pattern of the site or area. This includes no alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, 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, or impede or redirect flood flows. Project impacts would be less than significant with mitigation incorporated.

GENERAL PLAN POLICIES

See Section 5.7.2: Existing Regulatory Setting for complete policy text.

Policy ERC-17.A

Policy ERC-17.D

Policy ERC-17.B

Policy ERC-17.H

Policy ERC-17.C

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.8-3

The City of Huntington Beach shall require that adequate capacity in the storm drain system is demonstrated from a specific development site discharge location to the nearest main channel to accommodate discharges from the specific development. If capacity is demonstrated as adequate, upgrades may not be required. If capacity is not adequate, the City of Huntington Beach shall identify corrective action(s) required by the specific development applicant to ensure adequate capacity. Corrective action could include, but is not limited to:

- Construction of new storm drain infrastructure, as identified in the Master Plan of Drainage, or based on the Hydrology and Hydraulic Study, if the Hydrology and Hydraulic Study identifies greater impacts than the Master Plan of Drainage
- 2) Improvement of existing storm drain infrastructure, as identified in the Master Plan of Drainage, or based on the Hydrology and Hydraulic Study, if the Hydrology and Hydraulic Study identifies greater impacts than the Master Plan of Drainage

- 3) In-lieu fees to implement system-wide storm drain infrastructure improvements
- 4) Other mechanisms as determined by the City of Huntington Beach Public Works Department.
- 5) For nonresidential areas, if redevelopment would result in an impervious fraction of less than 0.9 and does not increase the directly connected impervious area compared to existing conditions, runoff is expected to remain the same or less than as assessed in the Master Plan of Drainage and only Master Plan of Drainage improvements would be required.

Because some storm drain system constraints may be located far downgradient from the actual development site, several properties may serve to contribute to system capacity constraints. Therefore, the City of Huntington Beach Public Works Department shall assess each site development and system characteristics to identify the best method for achieving adequate capacity in the storm drain system. Drainage assessment fees/districts to improve/implement storm drains at downstream locations or where contributing areas are large are enforced through Municipal Code (§14.20).

The City of Huntington Beach Public Works Department shall review the Hydrology and Hydraulic Study and determine required corrective action(s) or if a waiver of corrective action is applicable. The site-specific development applicant shall incorporate required corrective actions into their project design and/or plan. Prior to receiving a Certificate of Occupancy or final inspection, the Public Works Department shall ensure that required corrective action has been implemented.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact HYD-4 Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.8-20 to 4.8-22)

The GPU PEIR indicated that portions of the City are within both the 100-year and 500-year flood zones. Approximately 5.31 square miles of the City's coastal and central regions have a 1 percent chance of flooding each year, while approximately 9.02 square miles of the northern region have a 0.2 percent likelihood of inundation each year. Variables like climate change and sea level rise could worsen

conditions, causing coastal areas within the City to experience greater flooding and longer inundation times.

General Plan buildout is anticipated to place housing and structures within a 100-year flood hazard area and thus, expose people and structures to risk of loss, injury, or death involving flooding, including flooding by failure of a levee or dam, or tsunamis. As a result, future development under the General Plan and located within identified flood hazard areas would be required to apply the minimum development requirements to help prevent potential effects associated with on-site flooding. Consequently, with adherence to regulatory requirements, programs, and the GPU policies, impacts would be less than significant.

The GPU PEIR concluded that flood hazards associated with inundation by dam failure is not anticipated to occur since the City is not located near a dam or levee. The closest dams located upstream along the Santa Ana River (Seven Oaks Dam and Prado Reservoir Dam) are flood controlled, and the Prado Dam stores and then releases its water in a controlled manner to help recharge the groundwater aquifer underlying the planning area. Flooding from a Prado Dam failure is unlikely due to the short duration that the reservoir behind the dam is full.

The GPU PEIR concluded that because the City is located in a seismically active zone, there is a potential for a major earthquake or earthquake-related events, like tsunamis, to impact the City. Low-lying coastal areas within the City are subject to tsunamis, however; adherence to policies aimed to minimize flooding and tsunami impacts, such as increasing the local storm drain capacity, providing warning and evacuation assistance, and the identification of tsunami-prone areas and establishment of emergency response and recovery procedures, would minimize potential impacts resulting from tsunamis.

The addition/changes necessary to make the GPU PEIR applicable to the Project are presented below.

IMPACT ANALYSIS

Future housing development could be exposed to various flooding hazards, as summarized below. See Impact HYD-1 above regarding water quality.

<u>100-Year Floodplain</u>. As shown in **Table 5.7-1: FIRM Zone and Flood Risk***Error! Reference source not found.*, the following candidate housing sites would be within a 100-year floodplain: 4, 6, 17, 18, 19, 56, 57, 58, 60, 61, 94, 107, 107, 108, 108, 111, 130, 136, 150, 160, 161, 162, 163, 164, 166, 167, 177, 182, 183, 184, 185, 186, 188, 189, 190, 191, 192, 193, 194, and 195.

<u>Dam Inundation</u>. According to GPU Figure HAZ-8, Dam Flooding Area, portions of the City are in the Prado Reservoir Dam inundation area. As shown in GPU Figure HAZ-8, Dam Flooding Area, there are approximately 154 candidate housing sites completely or partially in the Prado Reservoir Dam inundation area.

<u>Tsunamis</u>. As shown in GPU Figure HAZ-5: Tsunami Evacuation Map, there are no candidate housing sites in tsunami evacuation areas.

<u>Seiches</u>. The potential for seiche-related hazards to impact candidate housing sites is considered low because they are not near an enclosed or semi-enclosed body of water.

Future development facilitated by the Project could place housing and structures within a 100-year flood hazard area and/or dam inundation area. FEMA requires municipalities that participate in the NFIP to adopt certain flood hazard reduction standards for construction and development in 100-year flood plains. Accordingly, the City requires all new development within a 100-year flood hazard area to obtain all necessary permits from applicable governmental agencies, comply with Floodplain Overlay District requirements (HBZSO Chapter 222), and ensure that proposed building sites would be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements must be designed (or modified) and adequately anchored to prevent the structure's flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Further, construction must be conducted with materials resistant to flood damage and use methods and practices that minimize flood damages, and constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment that are designed and located to prevent water from entering or accumulating within the components during conditions of flooding. New and replacement water supply systems are required to be designed to minimize or eliminate infiltration of flood waters into the systems and new and replacement sanitary sewage systems are required to be designed to minimize or eliminate infiltration of flood waters into the systems; discharges from the systems into flood waters and on-site waste disposal systems must avoid impairment or contamination from sanitary sewage systems during flooding.

Future housing development facilitated by the Project would be required to adhere to all federal, state, and local requirements for avoiding and minimizing impacts related to flood hazards or tsunami, or seiches, including the HBZSO. Therefore, Project impacts would be less than significant, and no mitigation is required.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

Impact HYD-5 Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.8-14 to 4.8-16)

The GPU PEIR concluded that future development under the GPU could increase the urban runoff in the planning area from its current levels. Wet- and dry-weather runoff typically contain similar pollutants of concern; however, after long dry periods between rainfall events, the concentrations of pollutants in dry-weather flows are higher and potentially more harmful.

In addition to adhering to GPU policies, all future development within the planning area would be required to comply with federal, State, and local regulations pertaining to urban runoff. Stormwater discharges from the City are regulated under the Municipal NPDES Permit. The City is a co-permittee of this Municipal NPDES Permit, responsible for the management of the City's storm drain systems and required to implement management programs, monitoring programs, implementation plans and all BMPs outlined in the DAMP and take any other actions as may be necessary to meet the Maximum Extent Practicable (MEP) standard. The Municipal NPDES Permit requires that discharges from the MS4s not cause or contribute to exceedances of receiving water quality standards (designated beneficial uses and water quality objectives) for surface waters or groundwater. The DAMP and its components are designed to achieve compliance with receiving water limitations.

The GPU PEIR determined that while development under the GPU has the potential to degrade water quality and result in exceedances in water quality and waste discharge standards, implementation of existing regulatory requirements would ensure that erosion and siltation from individual construction sites are minimized and that any violation of waste discharge requirements, violation of water quality standards, and contributions of additional sources of polluted runoff during construction would be less than significant. The GPU PEIR found that despite the projected increases to population and urban development anticipated from implementation of the GPU, adherence to maintaining water quality goals and policies outlined in the GPU Environmental Resources and Conservation Element, along with the current regulatory framework, would ensure that the GPU would not conflict or obstruct with a water quality plan and impacts would be less than significant.

The GPU PEIR determined that buildout of the planning area would not substantially interfere with groundwater recharge due to an increase in the amount of impervious area. Groundwater wells typically supply about two-thirds of the City's water, while the remaining one-third is imported. The GPU PEIR noted that the OCWD has developed a groundwater management plan that incentivizes sustainable groundwater production and recharge practices. Local rainfall is the primary recharge source for the Orange County Groundwater Basin, but it also receives water from the Santa Ana River, imported water percolated into the basin, and reclaimed wastewater directly recharged into the basin. OCWD manages the groundwater basin within which the City lies and conducts a comprehensive water quality monitoring program that assesses ambient conditions of the basin, monitors the effects of extraction and

effectiveness of seawater intrusion barriers, evaluates impacts from historic and current land use, addresses poor water quality areas, and provides early warning signs of emerging contaminants of concern. Although development under the GPU is anticipated to result in a less than significant impact to groundwater, the GPU PEIR determined that implementation of **GPU PEIR MM 4.8-2** would ensure that permanent groundwater dewatering does not cause or contribute to a lowering of the local groundwater table that would affect nearby water supply wells. Thus, implementation of **GPU PEIR MM 4.8-2** would ensure compliance with the OCWD groundwater management plan and impacts would be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the Project are presented below.

IMPACT ANALYSIS

The candidate housing sites are subject to the Orange County DAMP, the corresponding Huntington Beach Implementation Program, and conformance with the Orange County MS4 Permit. The MS4 Permit conformance entails considerations such as receiving water limitations (e.g., Basin Plan criteria), waste load allocations, and numeric water quality effluent limitations). The City is a MS4 Permit co-permittee and has implemented several regulations to ensure conformance with MS4 Permit requirements. The MS4 Permit implements a regional strategy for water quality and related concerns and mandates a watershed-based approach that often encompasses multiple jurisdictions. Conforming to the permit and reducing runoff and pollutant discharges involves interjurisdictional planning and coordination to employ best practices, including low-impact design measures, monitoring, reporting, and enforcement.

All future housing development subject to rezoning and within overlay zones would be subject to compliance with GPU Policies ERC-17.A, B and C, which require developments to comply with water quality regulations, such as the City's NPDES permit and other regional permits issued by the SWRCB and SARWQCB, employ innovative and efficient drainage technologies that comply with federal and state water quality requirements and reduce runoff and water quality impacts to downstream environments, and implement protective safeguards and BMPs that minimize non-point source pollution and runoff associated with construction activities and ongoing operations. GPU Policies ERC-17.D, F and H require new development and significant redevelopment projects to incorporate LID BMPs which may include infiltration, harvest and re-use, evapotranspiration, and bio-treatment, reduce pollutant runoff from new development to marine biological resources and wetlands by requiring the use of the most effective BMPs currently available, and reduce impacts of new development and significant redevelopment projects sites' hydrologic regime (hydromodification), minimizing impacts to surface and groundwater quality. Future housing development would be required to comply with these policies, and therefore would not conflict with or obstruct implementation of a water quality control or groundwater management control plan.

GPU EIR MM 4.8-1 requires applicants for new development and significant redevelopment projects within the planning area to prepare a project specific preliminary WQMP in accordance with the Model WQMP and Technical Guidance Document requirements and all current adopted permits. All projects are required to include site design and source control BMPs in the project WQMP. Additionally, new

development or significant redevelopment projects and priority projects are required to include low impact development principles to reduce runoff to a level consistent with the maximum extent practicable and treatment control BMPs in the WQMP.

Future housing development facilitated by the Project would be required to adhere to all federal, State, and local requirements for avoiding and minimizing construction and operations impacts to prevent conflicts with or obstruction of implementation of a water quality control plan or sustainable groundwater management plan. As a result, future housing development facilitated by the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Following compliance with **GPU EIR MM 4.8-1**, the Project's potential impacts associated with a conflict with, or obstruction of implementation of a water quality control plan or sustainable groundwater management plan would be reduced to a less than significant level. Thus, impacts would be less than significant with mitigation incorporated.

GENERAL PLAN POLICIES

See **Section 5.7.2: Existing Regulatory Setting** for complete policy text.

- Policy ERC-17.A
- Policy ERC-17.B
- Policy ERC-17.C

- Policy ERC-17.D
- Policy ERC-17.F
- Policy ERC-17.H

GPU PEIR MITIGATION MEASURES

See GPU PEIR MM 4.8-1 above

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

5.7.7 Cumulative Impacts

For purposes of the hydrology and water quality impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0: Basis for Cumulative Analysis**.

As concluded above, future housing development facilitated by the Project could potentially violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Compliance with GPU Policies ERC-17.A, ERC-17.B, ERC-17.C, ERC-17.D, ERC-17.F, ERC-17.H, and **GPU PEIR MM 4.8-1** would reduce impacts associated with potential violations of water quality standards by requiring compliance with the NPDES permit and other regional permits, requiring the inclusion of innovative and efficient drainage technologies that reduce runoff, and requiring new

development and significant redevelopment projects to incorporate LID BMPs to reduce pollutant runoff from new development to marine biological resources and wetlands. Compliance with these policies and regulations and implementation of **GPU PEIR MM 4.8-1** would ensure that the Project's potential impacts associated with causing a substantial adverse impact related to violations of water quality standards or waste discharge requirements would be reduced to a less than significant level. Cumulative projects would be required to adhere to similar General Plan Policies and **GPU PEIR MM 4.8-1**, to ensure that impacts to water quality are reduced to a less than significant level. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, the Project's impact to water quality would not be cumulatively considerable.

As concluded above, future housing development facilitated by the Project could decrease groundwater supplies or interfere substantially with groundwater recharge. Future housing development would be subject to General Plan Policies ERC-16.A, ERC-16.B, and GPU PEIR MM 4.8-2, which require the incorporation of feasible and innovative water conservation features and the use of recycled water for landscaping irrigation, grading, and other non-contact uses and require that applicants prepare a groundwater hydrology study and incorporate the hydrology study designs and recommendations into project plans. Cumulative projects impacting hydrology and water quality are required to adhere to similar General Plan Policies and GPU PEIR MM 4.8-2, which require project-specific applicants to incorporate water conservation features, use recycled water when feasible, and adhere to the recommendations of a groundwater hydrology study as part of future projects. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Despite compliance with GPU PEIR MM 4.8-2, and as similarly concluded in the GPU PEIR, until water supply improves, water demands from future development pursuant to the Project could substantially decrease groundwater supplies resulting in a significant and unavoidable impact concerning sustainable management of the Basin. Therefore, the Project's impact concerning groundwater supplies would be cumulatively considerable and a significant unavoidable impact would occur.

As concluded above, future housing development facilitated by the Project could potentially alter the course of a stream or river in a manner which would result in substantial erosion or siltation on- or off-site, substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, 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, or impede or redirect flood flows. Compliance with General Plan Policies ERC-17.A, ERC-17.B, ERC-17.C, ERC-17.D, and ERC-17.H, and **GPU PEIR MM 4.8-3** would reduce impacts to water quality standards to a less than significant level by requiring compliance with the NPDES permit and other regional permits, requiring the inclusion of innovative and efficient drainage technologies that reduce runoff, requiring new development and significant redevelopment projects to incorporate LID BMPs, and requiring adequate capacity in the storm drain system is demonstrated from a specific development site discharge location to the nearest main channel to accommodate discharges from the specific development. Cumulative projects impacting

hydrology and water quality are required to adhere to similar General Plan Policies and **GPU PEIR MM 4.8-3**, to ensure that impacts to the existing drainage pattern of the site or area, are reduced to a less than significant level. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, the Project's impact to the existing drainage pattern would not be cumulatively considerable.

As concluded above, future housing development facilitated by the Project could risk release of pollutants due to project inundation in a flood hazard, tsunami, or seiche zone. Following compliance with HBZSO Chapter 222, which requires that all new development within a 100-year flood hazard area obtain all necessary permits from applicable governmental agencies and comply with Floodplain Overlay District requirements, potential impacts associated with causing a substantial adverse impact related to violations of water quality standards or waste discharge requirements would be reduced to a less than significant level. Cumulative projects impacting hydrology and water quality are required to adhere to similar City Ordinances, to ensure that impacts of pollutant release due to project inundation in a flood hazard, tsunami, or seiche zone, are reduced to a less than significant level. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, the Project's impact to risk release of pollutants due to Project inundation would not be cumulatively considerable.

As concluded above, future housing development facilitated by the Project could potentially conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Following compliance with General Plan Policies ERC-17.A, ERC-17.B, ERC-17.C, ERC-17.D, ERC-17.F, ERC-17.H, and GPU PEIR MM 4.8-1, which reduce impacts to water quality standards by requiring compliance with the NPDES permit and other regional permits, requiring the inclusion of innovative and efficient drainage technologies that reduce runoff, and requiring new development and significant redevelopment projects to incorporate LID BMPs to reduce pollutant runoff from new development to marine biological resources and wetlands, the Project's potential impacts associated with causing a substantial adverse impact related to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan would be reduced to a less than significant level. Cumulative projects impacting hydrology and water quality are required to adhere to similar General Plan Policies and PEIR MM 4.8-1, to ensure that impacts to water quality are reduced to a less than significant level. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, the Project's impact related to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan would not be cumulatively considerable.

5.7.8 Significant Unavoidable Impacts

The Project could substantially decrease groundwater supplies resulting in a significant and unavoidable impact concerning sustainable management of the Basin.

5.7.9 References

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5.8 LAND USE AND PLANNING

5.8.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to divide an established community or cause an impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Mitigation to avoid/reduce impacts is identified, as needed.

The Subsequent Environmental Impact Report (SEIR) evaluates the candidate housing sites based on information available to the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect impacts to land use and planning could be considered. More specifically, the land use and planning information in this section is based on the City of Huntington Beach General Plan (General Plan) and the Huntington Beach General Plan Update Program Environmental Impact Report (GPU PEIR).

5.8.2 Existing Regulatory Setting

Federal

No federal plans, policies, regulations, or laws related to land use apply to the Project.

State

California Planning Law and General Plan Guidelines

California planning law requires cities and counties to prepare and adopt a "comprehensive, long-range general plan" to guide development (Government Code §65300). To successfully guide long-range development, general plans require a complex set of analyses, comprehensive public outreach and input, and public policy covering a broad range of topics. The general plan serves as a broad policy framework and guide for future development and must contain seven mandated elements addressing land use, circulation, housing, conservation, open space, noise, and safety. All other land use regulations, including specific plans, ordinances, and land use decisions within the jurisdiction must be consistent with the general plan. The "City of Huntington Beach General Plan" is the City's General Plan.

State Housing Law

In the face of mounting housing costs and lack of affordable housing throughout the State, the legislature has prioritized the provision of a decent home and suitable living environment to each Californian, with particular focus on housing affordable to low and very low-income households. As a result, the State Housing law (Government Code §§65583 et seq.) was established to assure the availability of affordable housing and uniform statewide code enforcement to protect the health, safety, and general welfare of the public and occupants of housing and accessory buildings. State Housing Law now requires all incorporated cities and unincorporated counties to regularly update their general plan Housing Element to ensure that each city and county in the State provides its fair share of housing at all economic levels. Further, State Housing law requires cities to regularly update their Housing Elements to identify and analyze housing need; establish reasonable goals, objectives, and policies based on those needs; and set forth a comprehensive list of actions to achieve the identified goals and substantially comply with State

Housing law requirements. The State Housing law and HEU Regional Housing Needs Assessment (RHNA) is discussed in further detail in **Section 3.0: Project Description**.

Assembly Bill 1233 (2005) and Senate Bill 375 (2008)

Assembly Bill (AB) 1233, approved by the Governor in 2005, requires each city, county, or city and county to prepare and adopt a general plan for its jurisdiction that contains certain mandatory elements, including a housing element. One part of the housing element is an assessment of housing needs and an inventory of land suitable for residential development in meeting the jurisdiction's share of the regional housing need, including vacant sites and sites having potential for redevelopment, and an analysis of the relationship of zoning facilities and services to these sites. AB 1233 also requires that the local government specify action programs that would be taken to make sites available, in this case, during the 6th Cycle Housing Element planning period (2021-2029), as necessary to accommodate the RHNA units assigned to the City for the 6th Cycle, plus any additional actions that are necessary to make sites available to accommodate any RHNA units that were assigned during the 5th Cycle Housing Element (2013–2021) that were not accommodated.

Senate Bill (SB) 375 approved by the Governor in 2008, requires that each city, county, or city and county identify the existing and projected housing needs of all economic segments of the community. Existing law requires the City to identify actions that would be undertaken to make sites available to accommodate various housing needs, including, in certain cases, the rezoning of sites to accommodate 100 percent of the need for housing for very low and low-income households. SB 375 instead would require the City's housing element action program to set forth a schedule of actions during the planning period, as defined, and require each action to have a timetable for implementation. SB 375 would generally require rezoning of certain sites to accommodate certain housing needs within specified times, with an opportunity for an extension time in certain cases, and would require the local government to hold a noticed public hearing within 30 days after the deadline for compliance expires. SB 375 would, under certain conditions, prohibit a local government that fails to complete a required rezoning within the timeframe required from disapproving a housing development project, as defined, or from taking various other actions that would render the project infeasible, and would allow the project applicant or any interested person to bring an action to enforce these provisions. SB 375 would also allow a court to compel a local government to complete the rezoning within specified times and to impose sanctions on the local government if the court order or judgment is not carried out, and would provide that in certain cases the local government shall bear the burden of proof relative to actions brought to compel compliance with specified deadlines and requirements.

Assembly Bill 1397

AB 1397 made a number of changes to Housing Element law by revising what could be included in a jurisdiction's inventory of land suitable for residential development. AB 1397 changed the definition of land suitable for residential development to increase the number of multi-family sites. AB 1397 requires that the inventory of land to be "available" for residential development in addition to being "suitable" for residential development and to include vacant sites and sites that have realistic and demonstrated potential for redevelopment during the planning period to meet the locality's housing need for a

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designated income level. By imposing new duties upon local agencies with respect to the housing element of the general plan, this bill would impose a state-mandated local program.

Housing Crisis Act of 2019 (SB 330)

The California Housing Crisis Act (SB 330) was enacted by Governor Newson in 2019 as a means to combat the State's growing housing crisis. This legislation's goal is to increase California's affordable housing stock by 3.5 million new units by 2025. To streamline residential development, a new preliminary development application process is required which includes a staff-level review of basic information regarding a project such as:

- Site characteristics;
- The planned project;
- Certain environmental concerns;
- Facts related to any potential density bonus;
- Certain coastal zone-specific concerns;
- The number of units to be demolished; and
- The location of recorded public easements.

SB 330 further streamlines housing development by reducing the amount of public meetings or hearings to five or less (e.g., workshops, design review board meetings, planning commission meetings, advisory committee meetings, and city council meetings). A shortened approval time of 90 days instead of 120 days from the time of EIR certification to streamline the development approval process. Local agencies are no longer able to remove or modify land use designations or allowances to inhibit the development of housing, unless the local agency replaces the lost housing potential; therefore, ensuring no net loss in housing availability. Further, local agencies would no longer be able to limit the annual number of housing-focused land use approvals, create caps on the amount of constructed housing units, or limit the population size of their city. Subjective design limitations on parcels where housing is an allowable use is also no longer permissible for projects that are subject to processing per SB 330 (any housing project).

Regional

Regional Housing Needs Assessment

The RHNA is a program that the State imposes to determine a local agencies fair share of the projected regional housing need for the applicable Housing Element planning period. The RHNA allocation is based on a jurisdiction's access to transit, including rail stations, rapid bus stations, and major stops; and the total number of jobs in the jurisdiction. The RHNA allocation for the 6th Cycle also included an equity adjustment to promote equity and fair housing and address patterns of segregation. As a result, the City was allocated a higher percentage of low and very low household income units than was allocated for past Housing Element cycles, because by comparison, the City has a lower percentage of low-income units than the regional average. The Southern California Association of Governments (SCAG) oversees the RHNA process for the region and provides figures and estimates generated from the RHNA. Per the RHNA for the 2021-2029 planning period, the City is allocated 13,368 units to accommodate the estimated growth

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need at various income levels. The 13,368 units are comprised of the following: 3,661 very low, 2,184 low, 2,308 moderate, and 5,215 above moderate.

SCAG Regional Comprehensive Plan

SCAG is responsible for most regional planning in southern California. SCAG represents a six-county region that includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties and 189 cities. The City is part of the Orange County Council of Governments (OCCOG), which is a sub-region of the SCAG planning area. SCAG prepared the 2008 Regional Comprehensive Plan (RCP) to address regional issues, goals, objectives, and policies related to growth and infrastructure challenges in the southern California region. The RCP is a plan to address issues such as housing, traffic/transportation, air quality, and water and serves as an advisory document to local agencies for their use in preparing local plans that deal with issues of regional significance. The RCP is based on the growth management framework of the Compass Blueprint, but further promotes environmental policies to support the RTP and SCS. ¹

SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS) or Connect SoCal Plan, is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2020-2045 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards. This long-range plan, required by the state of California and the federal government, is updated by SCAG every four years as demographic, economic, and policy circumstances change. The RTP/SCS is a living, evolving blueprint for the region's future. It identifies ten goals that fall into four categories: economy, mobility, environment, and healthy/complete communities. The goals are as follows:

- 1. Encourage regional economic prosperity and global competitiveness
- 2. Improve mobility, accessibility, reliability, and travel safety for people and goods
- 3. Enhance the preservation, security, and resilience of the regional transportation system
- 4. Increase person and goods movement and travel choices within the transportation system
- 5. Reduce greenhouse gas emissions and improve air quality
- 6. Support healthy and equitable communities
- 7. Adapt to a changing climate and support an integrated regional development pattern and transportation network
- 8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel

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¹ SCAG. 2008. 2008 Regional Comprehensive Plan.

http://libraryarchives.metro.net/DPGTL/scag/2008 regional comprehensive plan Complete.pdf (accessed June 2021).

² SCAG. 2021. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies: Connect SoCal. https://scag.ca.gov/program-environmental-impact-report (accessed June 2021).

- 9. Encourage development of diverse housing types in areas that are supported by multiple transportation options
- 10. Promote conservation of natural and agricultural lands and restoration of habitats

SCAG Intergovernmental Review Program

SCAG's Intergovernmental Review (IGR) Program provides informational resources to regionally significant plans, projects, and programs per State California Environmental Quality Act (CEQA) Guidelines §15206: Projects of Statewide, Regional, or Areawide Significance, ³ to facilitate review for these projects' consistency with SCAG's adopted regional plans, to be determined by the lead agencies. Informational resources include regional goals and policies, and jurisdictional-level growth forecasts and mitigation measures.

Local

City of Huntington Beach General Plan

The City of Huntington Beach General Plan is a policy planning document, which provides the framework for management and utilization of the City's physical, economic, and human resources. This document guides civic decisions regarding land use, the design/character of buildings and open spaces, conservation of existing housing and the provision of new dwelling units, provisions for supporting infrastructure and public services, protection of environmental resources, the allocation of fiscal resources, and protection of residents from natural and human-caused hazards.

The City's General Plan consists of nine elements. On October 2, 2017, the City Council adopted a comprehensive update to the General Plan. The following six elements were adopted as part of the GPU: Land Use, Circulation, Environmental Resources and Conservation, Natural and Environmental Hazards, Noise, and Public Services and Infrastructure.

Coastal Element⁴

The City's LCP is divided into two components: a Coastal Element; and an Implementation Program. There are no candidate housing sites located in the City's Coastal Zone; therefore, the LCP is not further analyzed in this PEIR.

Land Use Element⁵

The General Plan Land Use Element includes various policies related to land use and planning that were intended to provide the basis for what uses are allowed where and in what shape and form. The following Land Use Element goals and policies are relevant to the Project:

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The Lead Agency shall determine that a proposed project is of statewide, regional, or areawide significance if the project meets various criteria, including "A proposed local general plan, element, or amendment thereof for which an EIR was prepared" (State CEQA Guidelines § 15206(b)(1)).

⁴ City of Huntington Beach. 2017. City of Huntington Beach General Plan – Coastal Element. https://www.huntingtonbeachca.gov/government/departments/planning/gp/coastalelement.cfm (accessed May 2022).

⁵ City of Huntington Beach. 2017. City of Huntington Beach General Plan – Land Use Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU Adopted-October-2017.pdf (accessed December 2021).

Goal LU-1: New commercial, industrial, and residential development is coordinated to ensure that the land use pattern is consistent with the overall goals and needs of the community.

Policy LU-1.A: Ensure that development is consistent with the land use designations presented in the Land Use Diagram, including density, intensity, and use standards applicable to each land use designation.

Policy LU-1.C: Support infill development, consolidation of parcels, and adaptive reuse of existing buildings.

Policy LU-1.D: Ensure new development projects are of compatible proportion, scale, and character to complement adjoining uses.

Goal LU-3: Neighborhoods and attractions are connected and accessible to all residents, employees, and visitors.

Policy LU-3.A: Ensure that future development and reuse projects are consistent with the Land Use Map to provide connections between existing neighborhoods and city attractions.

Goal LU-4: Arrange of housing types is available to meet the diverse economic, physical, and social needs of future and existing residents, while neighborhood character and residences are well maintained and protected.

Policy LU-4.A: Encourage a mix of residential types to accommodate people with diverse housing needs.

The General Plan Land Use Element describes the City's existing land use characteristics and development patterns and establishes a plan for future development and redevelopment. The existing General Plan land use designations for the 378 candidate housing sites, which are based on General Plan Figure LU -2: Land Use Plan, are specified in **Appendix B**: **Candidate Housing Sites Inventory** and described in **Table 3-1**: **Existing General Plan Land Use Designations** - **Candidate Housing Sites**.

Land Use Designations

The General Plan establishes 20 land use designations (18 primary and two overlay) that govern land uses within the City. These designations apply density and intensity requirements, use characteristics, development standards, and land use policies to individual parcels. As most of the City is already developed and maintained in good condition, the designations generally correspond to the pattern of existing uses. The General Plan Land Use Element identifies the land use designations, land use characteristics associated with each designation, and the land use density/development intensity allowed within each designation. The descriptions as derived from Table General Plan LU-1 are provided below.

Four land use designations solely accommodate residential development in the City as described below. Collectively, these designations occupy the largest portion of the City (approximately 43 percent). The designations encompass a wide variety of densities and housing types, ranging from lower-density, primarily detached single-family residences in neighborhoods, to higher-density, mostly attached multifamily residences in and adjacent to Downtown, along the coast, and along select arterial roadway corridors.

- Low Density Residential (0 7.0 dwelling units per acre) designation provides for traditional detached single-family housing, zero-lot-line developments, mobile home parks, low-density senior housing, and accessory dwelling units.
- Medium Density Residential (7.0 15.0 dwelling units per acre) designation provides opportunities for housing of a more intense nature than single-family detached dwelling units, including duplexes, triplexes, town houses, apartments, multi-dwelling structures, or cluster housing with landscaped open space for residents' use. Single-family homes, such as patio homes, may also be suitable.
- Medium High Density Residential (15.0 25.0 dwelling units per acre) designation provides opportunities for a more intensive form of development than is permitted under the medium density designation while setting an upper limit on density that is lower than the most intense and concentrated development permitted in the City. One subdistrict has been identified with unique characteristics where separate development standards shall apply: RMH-A Small Lot. Maximum density is 25 units per acre.
- High Density Residential (30 dwelling units per acre) designation provides for uses allowed in the Low, Medium, and Medium High Density Residential designations as well as a broad range of multiple-family housing types.

Existing Land Use Designations – Candidate Housing Sites

The existing General Plan land use designations for the 378 candidate housing sites, which are based on General Plan Figure LU – 2: Land Use Plan, are specified in **Appendix B**: **Candidate Housing Sites Inventory**, and described in **Table 3-1**: **Existing General Plan Land Use Designations – Candidate Housing Sites**. As indicated in **Table 3-1**, the candidate housing sites involve the following existing land use designations:

- Low Density Residential (RL)
- High Density Residential (RH)
- Neighborhood Commercial (CN)
- General Commercial (CG)
- Office (CO)

- Mixed-Use (M)
- Research and Technology (RT)
- Industrial (I)
- Public (P)
- Public-Semipublic (PS)

Three candidate housing sites (Sites 3, 4, and 5) would require land use designation changes for consistency with the proposed rezoning; therefore, their existing land use designations are presented in **Table 5.8-1: Candidate Housing Sites Involving Land Use Changes**. As shown in **Table 5.8-1**, these three sites are designated I, and CN.

Table 5.8-1: Candidate Housing Sites Involving Land Use Changes

Site ID (Address)	Site Acres	Existing Land Use Designation			
Site 3 (7600 Redondo Circle)	9.52	Industrial (I)			
Site 4 (7292 Slater Avenue)	10.17	Industrial (I)			
Subtotal Industrial	19.69	-			
Site 5 (15511 Edwards Street)	1.87	Neighborhood Commercial (CN)			
Subtotal Commercial	1.87	-			
Total	21.56	-			
Source: City of Huntington, Reach, 2017, City of Huntington, Reach General, Plan, Land, Use Flement					

Source: City of Huntington Beach. 2017. City of Huntington Beach General Plan, Land Use Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf_(accessed April 2022).

Huntington Beach Municipal Code

The Huntington Beach Municipal Code (HBMC) Titles 20 through 25 are known and cited as the "Zoning and Subdivision Code of the City of Huntington Beach" (or the Huntington Beach Zoning and Subdivision Ordinance [HBZSO]). The HBZSO is intended to implement the General Plan policies, and without limiting the Huntington Beach Charter authority regarding local control of land use. The HBZSO is further intended to promote and protect the public health, safety, and general welfare of Huntington Beach residents and to provide the physical, economic, and social advantages which result from a comprehensive and orderly planned use of land resources.

HBMC Title 21: Zoning Code – Base Districts establishes the City's eight base districts, as outlined below, and provides the land use controls and property development standards for each.

- "R" Residential Districts;
- "C" Commercial Districts;
- "I" Industrial Districts;
- "OS" Open Space District;

- "PS" Public-Semipublic District;
- "SP" Specific Plan District;
- "CC" Coastal Conservation District; and
- "M" Mixed Use-Transit Center District.

HBMC § 210.02: Residential Districts Established, establishes the City's five residential districts, which are intended to implement the General Plan and LCP Land Use Plan residential land use designations.

- The RL Low Density Residential District provides opportunities for single-family residential land use in neighborhoods, subject to appropriate standards. Maximum density is 7.0 dwelling units per acre.
- The RM Medium Density Residential District provides opportunities for housing of a more intense nature than single-family detached dwelling units, including duplexes, triplexes, town houses, apartments, multi-dwelling structures, or cluster housing with landscaped open space for residents' use. Maximum density is 15 dwelling units per acre.
- The RMH Medium High Density Residential District provides opportunities for a more intensive
 form of development than is permitted under the RM designation, while setting an upper limit on
 density that is lower than the most intense and concentrated development permitted in the City.
 One subdistrict is identified with unique characteristics where separate development standards
 shall apply: RMH-A Small Lot. Maximum density is 25 dwelling units per acre.
- The RH High Density Residential District provides opportunities for the most intensive form of residential development allowed in the City, including apartments in garden type complexes and high rise where scenic and view potential exists, subject to appropriate standards and locational requirements. Maximum density is 35 dwelling units per acre.
- The RMP Residential Manufactured Home Park District provides sites for mobile home or manufactured home parks.

HBMC Title 22: Zoning Code – Overlay Districts establishes the City's nine overlay districts, as outlined below, and provides the area requirements, criteria for approval and site compliance, and land use controls, among other provisions for each.

"O" Oil Production Overlay District;

- "CZ" Coastal Zone Overlay District;
- "FP" Floodplain Overlay District (FP1, FP2, FP3);
- "IS" Interim Study Overlay District;
- "NC" Neighborhood Conservation Overlay District;
- "PAD" Pad Planned Area Development Overlay District;
- "H" High-Rise Overlay District;
- "MPH" Mobilehome Overlay District; and
- "SR" Senior Residential Overlay District.

Existing Zoning – Candidate Housing Sites

The existing zoning for each of the candidate housing sites is specified in **Appendix B** and described in **Table 3-2: Existing Zoning Districts – Candidate Housing Sites**. Eight candidate housing sites (Sites 199, 200, 237, 281, 291, 300, 322, and 325) are located within the "O" Oil Production Overlay District's O1 Subdistrict. The O1 Subdistrict provides areas where oil drilling is allowed, subject to a conditional use permit. As discussed in **Section 3.0: Project Description**, three candidate sites (Sites 3, 4, and 5) would be rezoned to accommodate future housing development opportunities; therefore, their existing zoning and estimated existing development capacities are summarized in **Table 3-3: Candidate Housing Sites Involving Rezoning.** As detailed in **Table 3-3**, the estimated development capacity of Sites 3, 4, and 5 is approximately 765,458 square feet of non-residential uses (i.e., approximately 643,272 square feet of industrial uses and approximately 122,186 square feet of commercial uses).

HBMC Title 24: Zoning Code - Administration includes, but not limited to, information regarding the City's environmental review process concerning fees and deposits, design review, permitting, development agreements, and notices, hearing, findings, and decisions. The following summarizes, in part, key HBMC Title 24 provisions relevant to the Project:

HBMC §240.02: Zoning Approval, specifies that zoning approval is required prior to issuance of a building, grading, coastal development, or demolition permit, certificate of occupancy, business license, or utility service connection to ensure that each new or expanded use of a site and each new, expanded, reconstructed or structurally altered structure complies with Titles 20 through 23.

HBMC §244.02: Applicability, specifies that design review is required for all projects pursuant to any other HBZSO provisions and for all projects located within redevelopment areas, specific plans as applicable, areas designated by the City Council, City facilities or projects abutting or adjoining City facilities, projects in or abutting or adjoining OS-PR and OS-S districts, and General Plan primary and secondary entry nodes.

HBMC §247.02: Initiation of Amendments, specifies that amendments to the zoning provisions, standards, or map may be initiated by motion of the City Council or Planning Commission, or any other person or agency.

5.8.3 Existing Environmental Setting

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, this a SEIR to the GPU PEIR. The 6th Cycle RHNA of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. Land use and planning information is described in detail in GPU PEIR Section 4.9.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08-04-17.pdf). Key City land use and planning conditions are summarized below to set the context for environmental analyses.

Candidate Housing Sites

The 378 candidate housing sites are comprised of as many as 378 parcels totaling approximately 419 acres. **Exhibit 1-1: Candidate Housing Sites** depicts the locations of the 378 sites and indicates they are generally located along the east and west sides of Beach Boulevard; at the City's northeastern portion along Edinger and McFadden Avenues; north of Warner Avenue; and north and south of Garfield Avenue. The candidate housing sites vary in sizes, ranging from a minimum of approximately 0.03 acre to a maximum of approximately 37.4 acres. Of the 378 candidate housing sites, only two sites (Sites 83 and 129) are vacant, comprising less than one-half percent (approximately 0.18 acre) of the approximately 419 acres. The remaining 376 candidate housing sites are currently developed to varying degrees with residential and non-residential land uses. Only two sites totaling approximately 14 acres and 312 dwelling units are developed with residential uses (Site 6, 14 acres with 311 dwelling units, and Site 86, 0.06-acre with 1 dwelling unit); see also **Table 5.10-5: Existing Housing - Candidate Housing Sites**. The remaining 374 developed sites include various non-residential land uses (i.e., commercial, office, research/technology, industrial, and public and semipublic).

North Huntington Center Specific Plan - Candidate Housing Sites

The North Huntington Center Specific Plan (SP1) encompasses 30 acres and provides for the orderly development of North Huntington Center Specific Plan area, which is bound by McFadden Avenue to the north, San Diego Freeway to the east, Center Drive to the south and the Southern Pacific Railroad to the west. This Specific Plan allows for a variety of land uses including residential, commercial, personal enrichment, and retail/services. There is one candidate housing site within SP1.

Holly-Seacliff Specific Plan - Candidate Housing Sites

The Holly-Seacliff Specific Plan (SP9) encompasses 565 acres and provides for the distribution of planned residential uses in the Holly Seacliff Specific Plan area, which is generally bound by Seapoint Street to the West, Garfield Avenue to the north, Main Street to the East, and Yorktown Avenue to the south. This Specific Plan allows for a variety of land uses including residential, commercial, industrial, open space, and mixed-use. There are 38 candidate housing sites within SP9.

Beach and Edinger Corridors Specific Plan – Candidate Housing Sites

The Beach and Edinger Corridors Specific Plan (SP14) encompasses 459 acres and presents the community's vision for the evolution and continued growth along Beach Boulevard and Edinger Avenue,

and establishes the primary means of regulating land use and development within the Specific Plan Area. This Specific Plan allows for a variety of land uses including, but not limited to, commercial, retail, hotel/lodging, civic/cultural, office, personal services, personal enrichment uses, and residential. There are 141 candidate housing sites within SP14.

Ellis-Goldenwest Specific Plan – Candidate Housing Sites

Ellis-Goldenwest Specific Plan (SP7) encompasses 160 acres and provides for the distribution of equestrian amenities, open space, recreational uses, and single-family detached residences on large lots within Specific Plan area. The Specific Plan area is bound by Ellis Avenue to the north, Edwards Street to the west, Garfield Avenue to the south, and Goldenwest Street to the east. The maximum density of any project within the Specific Plan area is three units per acre. There are 54 candidate housing sites within SP7.

5.8.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning land use and planning. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Physically divide an established community.
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect

5.8.5 Methodology

This analysis considers the City's Environmental Checklist Form thresholds in determining whether Project implementation, including future housing development facilitated by the Project, would create a significant impact concerning land use and planning. The evaluation was based on a review of existing policies and regulations to determine their applicability to the Project.

The baseline conditions and impact analyses are based on analysis of aerial and ground-level photographs, and review of various data available in public records, including local planning documents. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning land use and planning considers the relevant federal, state, regional, and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

5.8.6 Project Impacts and Mitigation

Impact LU-1 Would the Project physically divide an established community?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.9-4)

The GPU PEIR noted that the City is a developed, urban landscape consisting of a mixed distribution of residential, commercial, industrial, mixed-use, open space, and public use land use designations. In

addition, the City is primarily built-out with a limited inventory of vacant and underutilized parcels; the number of vacant parcels located in the planning area accounts for approximately one percent of the total acreage within the City. The GPU PEIR indicated that buildout of the City' would result in an additional 7,228 dwelling units and approximately 5,384,920 square feet of non-residential uses throughout the City, where development potential would be determined by applying the land use, density, and intensity assumptions to the parcels throughout the City. The GPU PEIR concluded that GPU implementation would preserve, conserve, and redevelop the majority of the City and would transform areas through guidelines provided by Specific Plans and by the updated land use goals and policies, included the Research and Development land use. A majority of development and change under the GPU would occur in transform areas that are underutilized.

Thus, General Plan implementation would support existing land use patterns and communities, while promoting future development in a manner consistent with the overall City character and would result in a less than significant impact based on the physical division of an existing community.

The addition/changes necessary to make the GPU PEIR applicable to the Project are presented below.

IMPACT ANALYSIS

As discussed above, only two sites are vacant and the remaining 376 candidate housing sites are developed with non-residential uses (i.e., commercial, office, research/technology, industrial, and public and semipublic), except two sites, which are developed with residential uses (312 dwelling units). Per the RHNA for the 2021-2029 planning period, the City is allocated 13,368 units to accommodate the estimated housing growth need at various income levels. When accounting for the 1,133 dwelling units associated with existing entitlement applications and pipeline projects, the City's remaining unmet RHNA need is 11,743 dwelling units. Therefore, Project implementation is anticipated to result in a net increase of 11,743 dwelling units, or approximately 14 percent additional units over the City's existing 82,620 dwelling units; see Table 5.10-8: Existing Plus Project Growth Projections. However, it is important to note that implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons. As discussed in detail in Section 3-8: Project Phasing, it is unlikely that the anticipated development would occur within the Housing Element's 2029 planning horizon. The Project's intent is to provide the capacity (i.e., through modifications to existing land use designations and zoning districts) for the housing market to adequately address housing needs for all income groups, rather than generating the full development capacity housing within the planning cycle. The HEU further directs the development capacity to occur where planned growth is best suited to occur.

The candidate housing sites' potential development capacities range from one dwelling unit to 601 dwelling units, as detailed in **Appendix B**. To provide representative residential developments, the maximum, mean, and 90th percentile development capacities were estimated; see **Table 5.8-2**: **Representative Development Capacities**. As shown **Table 5.8-2**, Site 217 provides the greatest/maximum development capacity with 601 dwelling units (i.e., the most dwelling units) of all 378 candidate housing sites. Site 53 with 51 dwelling units is representative of an average-sized residential development site, or what is reasonably expected for typical candidate housing site development. The 90th percentile site (Site

16 with 143 dwelling units) was provided to communicate that 90 percent of the sites would have development capacities less than this site's capacity of 143 dwelling units.

Table 5.8-2: Representative Development Capacities

Scenario	Size (Acres)	Zoning ¹	FAR ²	Development Capacity ¹		
	Mean/Average (Site 53)					
Existing	0.67	Research and Technology	1.0	29,185 SF		
Proposed	0.67	Residential Overlay	NA	51 Dwelling Units		
	Maximum (Site 217)					
Existing	7.55	Beach and Edinger Corridors Specific Plan	1.5	493,317SF		
Proposed	7.55	Residential Overlay	NA	601 Dwelling Units		
	90 th Percentile (Site 16)					
Existing	2.57	Research and Technology	1.0	111,949SF		
Proposed	2.57	Residential Overlay	NA	143 Dwelling Units		
Notes:						

^{1.} See Appendix B: Candidate Housing Sites Inventory.

On the two vacant sites (Sites 83 and 129), future housing development facilitated by the Project would replace vacant land with residential developments. On the remaining 376 candidate housing sites, future housing development facilitated by the Project would replace non-residential land uses (i.e., commercial, office, research/technology, industrial, and public and semipublic) with residential developments. As shown on **Exhibit 1-1: Candidate Housing Sites**, all future housing development facilitated by the Project and subject to rezoning and within overlay zones would occur through infill development. ADUs throughout the City would also occur through infill development. All future housing development facilitated by the Project and subject to hotel/motel conversion would occur through adaptive reuse. Given the City's urbanized nature, and since the future housing development facilitated by the Project would be generally surrounded by existing development and would occur through infill development, physical divisions to an established community are not anticipated to occur.

Future housing development facilitated by the Project would be subject to compliance with the HBMC, which is intended to allow the most appropriate use of land and prevent land use incompatibilities. Pursuant to HBMC §240.02: Zoning Approval, zoning approval would be required prior to issuance of a building, grading, coastal development, or demolition permit, certificate of occupancy, business license, or utility service connection to ensure that each new or expanded use of a site and each new, expanded, reconstructed or structurally altered structure complies with HBMC Titles 20 through 23. Further, pursuant to HBMC §244.02: Applicability, design review would be required for all projects for all projects located within redevelopment areas, specific plans as applicable, areas designated by the City Council, City facilities or projects abutting or adjoining City facilities, projects in or abutting or adjoining OS-PR and OS-S districts, and General Plan primary and secondary entry nodes. Additionally, future housing facilitated by the Project would not conflict with GPU Policies LU-1A, LU-1C, and LU-1D, which support the development, consolidation, or reuse of existing buildings; Policy LU-3A, which ensures that future development and reuse projects are consistent with the General Plan Land Use Map to provide connections between existing uses; and Policy LU-4A, which encourages a mix of residential types to accommodate people with diverse housing needs. Furthermore, the Project would not result in the division of an established community because the candidate housing sites are located throughout the City,

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^{2.} FAR = floor area ratio; SF = square feet

rather than in a single, concentrated area, and the Project does not propose any major roadways (e.g., expressway or freeway)that would traverse an existing community or neighborhood, Overall, the Project would not physically divide an established community. No impact would occur in this regard and no mitigation is required.

GENERAL PLAN POLICIES

See **Section 5.8.2: Existing Regulatory Setting** for complete policy text.

Policy LU-1A

Policy LU-3A

Policy LU-1C

Policy LU-4A

Policy LU-1D

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

Impact LU-2

Would the Project cause a significant environmental impact due to a conflict with any SCAG land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.9-7)

The GPU PEIR concluded that several regionally locally adopted land use plans, policies, and regulations would be applicable to development under the General Plan, which included the SCAG 2008 Regional Comprehensive Plan, SCAG 2016-2040 RTP/SCS, SCAG Compass Grown Visioning Plan, and the 2015 Orange County Transportation Authority (OCTA) Congestion Management Program. The GPU PEIR concluded that General Plan implementation would be consistent with regional and local plans and policies. Impacts associated with conflicts with any applicable land use plan or policy would be less than significant. The following plans and policies were addressed in the GPU PEIR:

SCAG 2008 RCP

The GPU PEIR concluded that the General Plan would be consistent with the relevant SCAG 2008 RCP's goals, objectives, and policies related to growth and infrastructure challenges based on SCAG 2016-2040 RTP/SCS growth management framework of the Compass Blueprint and the environmental policies. The GPU PEIR concluded that implementation of the General Plan would strengthen the land use plan within the City by promoting infill development; enhancing commercial centers and increasing economic opportunities; strengthening connectivity and increasing walkability among different districts and areas;

and better utilizing alternative modes of transportation. These implementation measures and outcomes align with the goals of the SCAG 2008 RCP, and the GPU would comply with the SCAG 2008 RCP.

SCAG 2016-2040 RTP/SCS

GPU PEIR Table 4.9-1: SCAG 2016-2040 RTP/SCS Goals, provides the consistency analysis of applicable SCAG 2016-2040 RTP/SCS goals related to the GPU PEIR. As concluded in GPU PEIR Table 4.9-1, General Plan implementation would be fully consistent with SCAG RTP/SCS policies.

SCAG Compass Growth Visioning Program

The GPU PEIR concluded that development under the General Plan would provide a wide variety of residential land uses ranging from low to high density residential as well as mixed-use, which would steadily increase the housing stock of the City. The increase in new housing options would allow for growth opportunities for existing residents as well as attract new residents to the City. Therefore, the GPU PEIR concluded implementation of the GPU would comply with the SCAG CGVP.

Conclusion

As concluded in the GPU PEIR and summarized above, implementation of the GPU would not conflict with the objectives or goals contained within the SCAG 2008 RCP, SCAG 2016-2040 RTP/SCS, and SCAG CGVP, or other applicable land use plans. The GPU PEIR concluded impacts due to inconsistencies with a SCAG land use plan, policy, or regulation would be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons. The following evaluates the Project's potential to conflict with any SCAG land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

SCAG 2008 RCP and SCAG Connect SoCal 2020-2045

SCAG has established a process to identify a project's impact on a regional scale and how it could contribute to the region's plan and vision, given SCAG is also the designated Regional Transportation Planning Agency under State law and is responsible for preparing the RTP, including the SCS. As previously noted, pursuant to SCAG's IGR Program, lead agencies are required to determine the consistency of a regionally significant plan, project, and program with SCAG's adopted regional plans. A project is considered to be of statewide, regional, or areawide significance if it meets various criteria, including among others, a proposed local general plan, element, or amendment thereof for which an EIR was prepared; see State CEQA Guidelines §15206(b)(1). The Project is considered regionally and areawide significant, given it is comprised of a comprehensive update to City's Housing Element and proposes to amend the City's General Plan. Therefore, pursuant to SCAG's IGR Program, as Lead Agency, the City is required to determine the Project's consistency with SCAG's adopted regional plans.

The future housing development facilitated by the Project would be consistent with the RCP's long-term goals and policies concerning air quality, water quality, transportation, and infrastructure; see Section 5.1: Air Quality, Section 5.7: Hydrology and Water Quality, Section 5.13: Transportation, and Section 5.15: Utilities and Service Systems, respectively, for further discussion concerning the Project's potential environmental impacts for these resource areas. Additionally, Table 5.8-3: Project Consistency with SCAG Connect SoCal, presents an analysis of the Project's consistency with applicable Connect SoCal goals. As is evidenced by the analysis provided in Table 5.8-3, and consistent with the GPU PEIR determination, the Project would not conflict with Connect SoCal goals. Therefore, the Project would result in a less than significant impact concerning a potential conflict with a SCAG land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Table 5.8-3: Project Consistency with SCAG Connect SoCal

RTP/SCS Strategies	Project Consistency
Goal 1: Align the plan investments and policies with improving regional economic development and competitiveness.	Consistent: Future housing development facilitated by the Project would occur as infill development in predominately developed areas and would increase opportunities to all economic segments including very low income, low income, moderate, and above moderate units.
Goal 2 : Maximize mobility and accessibility for all people and goods in the region.	Consistent: Future housing development facilitated by the Project would maximize mobility of people in the City. All future housing development facilitated by the Project and subject to rezoning and within overlay zones would be subject to compliance with GPU Policy CIRC-3.D, GPU Policy CIRC-6.C, and Policy CIRC-3.C concerning alternative modes of transportation. Further, proposed HEU Policy 6.4, Transportation Alternatives and Walkability, requires that transit and other transportation alternatives including walking and bicycling be incorporated into the design of new development, including affordable housing, particularly in areas within a half mile of designated transit stops; see also Response to Goal 2 and Section 5.13: Transportation.
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	Consistent : Future housing development facilitated by the Project would adhere to all applicable General Plan policies that accommodate all modes of travel in a safe and convenient manner for all users; see also Section 5.13 .
Goal 4: Preserve and ensure a sustainable regional transportation system.	Consistent: Future housing development facilitated by the Project would adhere to all applicable General Plan policies that are in furtherance of a sustainable transportation system, through the City's local system. Future housing development facilitated by the Project and subject to rezoning and within overlay zones would also be subject to compliance with: GPU PEIR MMs 4.14-1 through 4.14-3, which address intersection improvements; GPU Policy CIRC-1.F, which requires projects to provide circulation improvements; and GPU Policy CIRC-3.D, which requires new projects to contribute to the transit and/or active transportation network in proportion to their expected traffic generation. See also Section 5.13.
Goal 5: Maximize the productivity of our transportation system.	Consistent : Future housing development facilitated by the Project would adhere to all applicable General Plan policies that support the creation of a well-connected, productive transportation network. See also Responses to Goals 2 and 4, and Section 5.13 .
Goal 6: Protect the environment and health for our residents by improving air quality and encouraging active	Consistent : Future housing development facilitated by the Project would be consistent with the RCP's long-term goals and policies concerning air quality (see Section 5.1 : Air Quality), as well as policies

RTP/SCS Strategies	Project Consistency
transportation (e.g., bicycle and walking).	concerning alternative modes of transportation. See also Responses to Goals 2 and 4, and Section 5.13 .
Goal 7: Actively encourage and create incentives for energy efficiency, where possible.	Consistent : Future housing development facilitated by the Project would be required to comply with Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances, water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of the Title 24 standards significantly reduces energy usage. See also Section 5.3 : Energy .
Goal 8: Encourage land use and growth patterns that facilitate transit and active transportation.	Consistent: The Project would comply with applicable General Plan policies that promote increased walkability and connectivity as well as increased opportunities for alternative modes of transportation; see also Responses to Goals 2 and 4, and Section 5.13. Additionally, while the Project would facilitate the development of additional housing throughout the City, resulting in a forecast population growth of approximately 29,475 persons, this forecast population growth would be attributed to accommodating the City's remaining RHNA allocation of 11,743 dwelling units, as required by State law. Thus, although the Project would indirectly induce substantial population growth in the City, it is not considered unplanned given State law requirements. See also Section 5.10: Population and Housing, for a detailed discussion.
Goal 9: Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	Not Applicable. This policy addresses the security of the regional transportation system, which is beyond the proposed Project's scope.
Source: SCAG RTP/SCS Chapter 5: Land Use Strategie	S

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

Impact LU-3

Would the Project cause a significant environmental impact due to a conflict with any City of Huntington Beach land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.9-7)

The GPU PEIR concluded that the locally adopted land use plans, policies, and regulations that would be applicable to development under the General Plan included the HBMC, the HBZSO, and the City's LCP. The GPU PEIR concluded that General Plan implementation would be consistent with local plans and policies. Impacts associated with conflicts with any applicable land use plan or policy would be less than significant. The following plans and policies were addressed in the GPU PEIR:

Huntington Beach Municipal Code/Huntington Beach Zoning and Subdivision Ordinance

The GPU PEIR noted that the residential land use districts' allowable densities, design, and development standards would not change as a result of the GPU. Under the GPU, the allowable floor-to-area ratio (FAR) was proposed to be updated for several non-residential land use districts; however, these updates would align with the existing HBZSO FAR requirements. Furthermore, the zoning map was revised to ensure consistency with the updated General Plan land use plan. State Law requires the City's Zoning Code to be revised to reflect the adopted General Plan within a reasonable timeframe. Development within the City would be required to adhere to the General Plan as the overarching policy document. Therefore, the GPU PEIR concluded that implementation of the GPU would not conflict with the HBMC or HBZSO.

Huntington Beach LCP

The GPU PEIR concluded that the proposed changes to the Land Use Plan would not conflict with the LCP and the General Plan goals and policies would not conflict with the LCP.

IMPACT ANALYSIS

Huntington Beach General Plan

The Project does not propose any change to the 20 land use designations (18 primary and two overlay) that govern land uses within the City, including the four land use designations that solely accommodate residential development, as described in the *Existing Regulatory Setting* Section above. Further, no change is proposed to the designations' densities or housing types. However, the Project does propose to add the overlay designations listed below to the GP Land Use Element and to redesignate three sites as detailed in the *Huntington Beach Municipal Code/Huntington Beach Zoning and Subdivision Ordinance* Section below. The GP land use designation amendments are required for consistency with the HEU's proposed zoning and overlays, as described below. Further, Land Use Element updates are required to ensure consistency between General Plan elements (i.e., the Housing Element and the Land Use Element) in compliance with State law. The following overlay designations would be added to the GP Land Use Element:

• Beach and Edinger Corridors Specific Plan (SP14) 20 percent Affordable Overlay: The Project would increase affordable housing options in existing SP14 by expanding the 20 percent Affordable Overlay that was established in 2020. The 20 percent overlay would permit residential projects that propose at least 20 percent lower income units on-site by-right (ministerial approval rather than discretionary approval subject to an entitlement process). The SP14 Affordable Housing Overlay would expand the provisions of the existing affordable housing overlay to 151 additional sites within SP14, which can accommodate approximately 11,092 housing units.

- Affordable Housing Overlay: The Affordable Housing Overlay would create housing opportunities
 primarily in the City's well-connected nonresidential areas. The City has identified 167 sites to
 apply the Affordable Housing Overlay, which can accommodate approximately 7,194 housing
 units.
- Ellis Goldenwest Specific Plan (SP7) High Density Residential RH Overlay: This strategy utilizes the City's existing High Density Residential (RH) land use designation to create housing opportunities within SP7. The City has identified 53 sites to designate as RH Overlay to increase residential development opportunities within SP7.
- Medium High Density Residential Redesignations: This strategy utilizes the City's existing
 Medium High Density Residential (RMH) land use designation (density range 15.0 to 25.0 dwelling
 units/acre) to create housing opportunities in areas where residential development is
 appropriate. For consistency with the proposed rezoning, the City proposes to redesignate three
 candidate housing sites to RMH.

The existing General Plan land use designations for the 378 candidate housing sites are specified in **Appendix B** and described in **Table 3-1: Existing General Plan Land Use Designations – Candidate Housing Sites**. Of the 378 candidate housing sites, 372 sites would be assigned a land use designation overlay, as described above, to permit housing by right. These 372 sites, as well as the three sites that involve hotel conversions (Sites 69, 116, and 118), would retain their underlying land use designations. Only three sites (Sites 3, 4, and 5) would require land use designation changes for consistency with the proposed rezoning. **Table 5.8-4: Proposed Land Use Designation Changes – Candidate Housing Sites**, provides the existing and proposed land use designations for these three sites. As indicated in **Table 5.8-4**, the land use designations on Sites 3, 4, and 5 would change from I and CN to Medium High Density Residential; see the *Huntington Beach Municipal Code/Huntington Beach Zoning and Subdivision Ordinance* section below for details concerning development capacity changes resulting from Project implementation.

Table 5.8-4: Proposed Land Use Designation Changes – Candidate Housing Sites

Site ID (Address)	Site Acres	Existing Land Use Designation	Proposed Land Use Designation
Site 3 (7600 Redondo Circle)	9.52	Industrial (I)	Medium High Density
Site 4 (7292 Slater Avenue)	10.17	Industrial (I)	Residential
Subtotal Industrial	19.69	-	-
Site 5 (15511 Edwards Street)	1.87	Neighborhood Commercial (CN)	Medium High Density Residential
Subtotal Commercial	1.87	-	-
Total	21.56	-	-

Notes

Table 5.8-5: Project Consistency with General Plan Policies, presents an analysis of the Project's consistency with applicable General Plan Housing Element policies. As is evidenced by the analysis provided in **Table 5.8-5**, the Project would not conflict with key relevant Land Use Element policies adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the Project would

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^{1.} City of Huntington Beach. 2017. City of Huntington Beach General Plan, Land Use Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU Adopted-October-2017.pdf (accessed April 2022).

^{2.} See Appendix B: Candidate Housing Sites Inventory.

result in a less than significant impact concerning a potential conflict with a General Plan land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Table 5.8-5: Project Consistency with General Plan Policies

Project Consistency		
Consistent: The land use changes described above are proposed to ensure consistency with the proposed rezoning and overlays. Pursuant to HBMC § 240.02: Zoning Approval, future housing development would require zoning approval prior to issuance of specified permits to ensure compliance with the HBMC. Further, pursuant to HBMC § 244.02: Applicability, future housing development would require design review pursuant to HBZSO provisions and for projects located in various areas.		
Consistent: The existing zoning for each of the candidate housing sites is specified in Appendix B and described in Table 3-2 . None of the candidate housing sites are zoned "OS" Open Space District.		
Consistent: As shown on Exhibit 1-1, all future housing development facilitated by the Project and subject to rezoning and within overlay zones would occur through infill development. Similarly, ADUs throughout the City would occur through infill development. All future housing development facilitated by the Project and subject to hotel/motel conversion would occur through adaptive reuse. Given the City's urbanized nature, the future housing development facilitated by the Project would be generally surrounded by existing development as infill.		
Consistent: See Response to Policy LU-1.A.		
Consistent: The HEU is being prepared to ensure adequate, safe, and affordable housing conditions and accommodate diverse housing needs based on a comprehensive analysis of the City's current and projected demographic, economic, and housing characteristics and needs, including its identified RHNA requirement.		

Overall, the proposed land use changes described above would be required for consistency with the HBMC/HBZSO. The Project's proposed land use designation changes and rezoning would ensure internal consistency between the two land use documents governing development in the City, thereby resulting in less than significant impacts concerning the City's land use documents. Additionally, as is evidenced by the analysis provided in **Table 5.8-4**, the Project would result in less than significant impacts related to conflicts with key relevant Land Use Element policies adopted for the purpose of avoiding or mitigating an environmental effect.

Huntington Beach Municipal Code/Huntington Beach Zoning and Subdivision Ordinance.

The Project proposes Zoning Text Amendments to revise applicable sections of both the HBZSO and applicable sections of Specific Plans affected by the Project's rezoning/overlay program; and a Zoning Map Amendment to resolve any resolve potential zoning inconsistencies resulting from adoption of the Project's rezoning/overlay program. The Project proposes to amend HBMC Titles 20-25 (the HBZSO) to reflect the following rezoning and overlay strategies intended to create and encourage residential infill strategies:

- Beach and Edinger Corridors Specific Plan (SP14) 20 Affordable Overlay: This strategy would increase affordable housing options in the SP14 by expanding the 20 percent Affordable Overlay that was established in 2020. The 20 percent overlay would permit residential projects that propose at least 20 percent lower income units on-site by-right. The SP14 Affordable Housing Overlay would expand the provisions of the existing affordable housing overlay to 151 additional sites within SP14, which can accommodate approximately 11,092 housing units.
- Affordable Housing Overlay: The Affordable Housing Overlay would create housing opportunities
 primarily in the City's well-connected nonresidential areas. The City has identified 167 sites to
 apply the Affordable Housing Overlay, which can accommodate approximately 7,194 housing
 units.
- Ellis Goldenwest Specific Plan (SP7) High Density Residential RH Overlay: This strategy utilizes the City's existing RH High Density Residential District (maximum 35.0 dwelling units per acre) to create housing opportunities within SP7. This area is approximately 18 acres (Sites 395 through 448) and is mostly vacant. The sites in SP7 are currently designated as low density estate residential (maximum 3.0 dwelling units per acre) and are surrounded by residentially developed and/or designated land uses. The City has identified 53 parcels to be zoned RH Overlay to increase residential development opportunities within the specific plan area, which can accommodate the following housing units: 111 Low and Very Low-Income units, 89 Moderate Income units, and 291 Above Moderate-Income units.
- Medium High Density Residential RMH: This rezone strategy utilizes the City's existing RMH
 Zoning District to create housing opportunities in areas where residential development is
 appropriate. The City has identified three candidate housing sites (Sites 3, 4, and 5) for rezoning.
 The sites can accommodate the following housing units: 128 moderate income units; and 300
 above moderate-income units.

The existing and proposed Zoning for the 378 candidate housing sites are specified in **Appendix B**. Of the 378 candidate housing sites, 372 sites would be assigned an overlay, as described above, to permit housing by right. These 372 sites, as well as the three sites that involve hotel conversions (Sites 69, 116, and 118), would retain their underlying zoning. Only three sites (Sites 3, 4, and 5) propose zone changes. **Table 5.8-6: Proposed Zone Changes – Candidate Housing Sites**, provides the existing and proposed zoning for these three sites. As indicated in **Table 5.8-6**, the zoning on Sites 3, 4, and 5 would change from IL, IG, and CG to RMH, with a resultant development capacity of 428 housing units.

Proposed² Existing¹ Site ID (Address) Development Development **Site Acres Zoning District² Zoning District** Capacity (SF) Capacity (DU) Site 3 IL Limited 9.52 311,018 RMH Medium 190 **Industrial District** (7600 Redondo Circle) **High Density IG** General Site 4 10.17 332,254 Residential 202 **Industrial District** (7292 Slater Avenue) Subtotal Industrial 19.69 643,272 392 RMH Medium Site 5 CG General 1.87 122,186 High Density 36 (15511 Edwards Street) **Commercial District** Residential 1.87 Subtotal Commercial 122,186 36 Total 21.56 765,458 428 Change in Non-Residential -765,458SF Change in Residential +428 DU

Table 5.8-6: Proposed Zone Changes – Candidate Housing Sites

Notes:

- 1. Table 3-3: Candidate Housing Sites Involving Rezoning.
- 2. Appendix B: Candidate Housing Sites Inventory.
- 3. DU = dwelling unit

The intent of the proposed Project is to provide the capacity (i.e., through modifications to existing zoning (and land use designations) for the housing market to adequately address housing needs for all income groups, rather than generating the full development capacity housing within the planning cycle. The HEU further directs the development capacity to occur where planned growth is best suited to occur. Future housing development facilitated by the Project would be processed in accordance with the applicable zoning regulations and development standards in effect at the time a project is submitted. Future housing development facilitated by the Project would be subject to compliance with the HBMC, which is intended to allow the most appropriate use of land and prevent land use incompatibilities. Pursuant to HBMC §240.02: Zoning Approval, future housing development facilitated by the Project and subject to rezoning and overlay would require zoning approval prior to issuance of specified permits to ensure compliance with the HBMC. Further, pursuant to HBMC §244.02: Applicability, future housing development would require design review pursuant to HBZSO provisions and for projects located in various areas.

Overall, the proposed zoning changes described above would be required to meet the City's RHNA and for consistency with the HBMC/HBZSO. Therefore, upon approval of the Project's discretionary actions, the Project would result in less than significant impacts related to conflicts with HBMC/HBZSO plans and standards adopted for the purpose of avoiding or mitigating an environmental effect.

Huntington Beach Local Coastal Program

None of the Project's candidate housing sites are located within the City's coastal zone, and thus, are not subject to the LCP. Therefore, future housing development would not conflict with the LCP and no impact would occur in this regard.

Future housing development facilitated by the Project would be subject to the City's review and approval process and would need to comply with all applicable federal, State, and local laws and regulations.

Although this section focuses on the Project's compliance with land use plans and policies adopted for the purpose of avoiding or mitigating an environmental effect, other environmentally relevant policies and regulations are discussed in **Sections 5.1** through **5.15**.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

5.8.7 Cumulative Impacts

For purposes of the land use and planning impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0: Basis for Cumulative Analysis**.

As concluded above, the Project would not result in the physical divide of an established community or cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigation an environmental effect. Following compliance with GPU Policy LU-1A, Policy LU-1C, Policy LU-1D, Policy LU-3A and Policy LU-4A, and other applicable state, regional, and local planning documents, the Project's impacts would be less than significant. Consistent with this Project, cumulative projects would require separate discretionary review and approval under CEQA and implement mitigation if necessary, to address land use and planning impacts. Therefore, future development facilitated by the Project in conjunction with cumulative development would not result in a significant considerable land use impact and no mitigation is required.

As concluded above, the Project would not cause a significant environmental impact due to a conflict with any SCAG land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. All future housing development facilitated by the Project would be consistent with the RCP's long-term goals and policies concerning air quality, water quality and conservation, transportation, and infrastructure. Similarly, cumulative projects would be subject to City discretionary review and approval to ensure that each cumulative project shows consistency with applicable Connect SoCal goals. Therefore, future development facilitated by the Project, in conjunction with cumulative development, would not result in a cumulatively considerable impact concerning a potential conflict with a SCAG land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

As concluded above, the Project would not cause a significant environmental impact due to a conflict with any City land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. All future housing development facilitated by the Project and all future cumulative development projects would also undergo environmental review on a project-by-project basis pursuant to CEQA to evaluate all potential land use impacts and would need to comply with all applicable federal, state, and local laws and local policies and regulations as part of the project's review and approval process. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, the Project in conjunction with cumulative development would not result in a significant considerable land use impact and no mitigation is required.

5.8.8 Significant Unavoidable Impacts

No significant unavoidable impacts concerning land use and planning have been identified.

5.8.9 References

- City of Huntington Beach. 2017. City of Huntington Beach General Plan Coastal Element. https://www.huntingtonbeachca.gov/government/departments/planning/gp/coastalelement.cfm.
- City of Huntington Beach. 2017. *City of Huntington Beach General Plan Update*. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU Adopted-October-2017.pdf.
- City of Huntington Beach. 2017. *City of Huntington Beach General Plan Update Program Environmental Impact Report SCH No. 2015101032*. https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf. Atkins: San Diego, CA.
- City of Huntington Beach. 2017. *City of Huntington Beach General Plan Land Use Element*. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU <a href="https://www.h
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- SCAG. 2008. 2008 Regional Comprehensive Plan. http://libraryarchives.metro.net/DPGTL/scag/2008 regional comprehensive plan Complete.pdf.
- SCAG. 2021. 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies: Connect SoCal. https://scag.ca.gov/program-environmental-impact-report.

5.9 NOISE

5.9.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to generate a substantial temporary or permanent increase in ambient noise; generate groundborne vibration or noise; or, if located in the vicinity of an airport, expose people to excessive noise levels. Mitigation to avoid/reduce impacts is identified, as needed.

No site-specific surveys or technical studies were conducted for this analysis. Rather, the candidate housing sites were evaluated in this Subsequent Environmental Impact Report (SEIR) based on information available from the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. More specifically, the noise information in this section is based on the *City of Huntington Beach General Plan* (General Plan) and the *Huntington Beach General Plan Update Program Environmental Impact Report* (*GPU PEIR*).

5.9.2 Acoustic Fundamentals

Sound and Environmental Noise

Acoustics is the science of sound. Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a medium (e.g., air) to the human ear. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or hertz (Hz).

Noise is defined as loud, unexpected, or annoying sound. In acoustics, the fundamental model consists of a noise source, a receptor, and the propagation path between the two. The loudness of the noise source, obstructions, or atmospheric factors affecting the propagation path, determine the perceived sound level and noise characteristics at the receptor. Acoustics deal primarily with the propagation and control of sound. A typical noise environment consists of a base of steady background noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These sources can vary from an occasional aircraft or train passing by to continuous noise from traffic on a major highway. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a large range of numbers. To avoid this, the decibel (dB) scale was devised. The dB scale uses the hearing threshold of 20 micropascals (μ Pa) as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The dB scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels correspond closely to human perception of relative loudness. **Table 5.9-1: Typical Noise Levels**, provides typical noise levels.

Table 5.9-1: Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	-110-	Rock Band
Jet fly-over at 1,000 feet		
, , ,	-100-	
Gas lawnmower at 3 feet		
	-90-	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
· ·	-80-	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawnmower, 100 feet	-70 -	Vacuum cleaner at 10 feet
Commercial area		Normal Speech at 3 feet
Heavy traffic at 300 feet	-60-	· ·
,		Large business office
Quiet urban daytime	-50 -	Dishwasher in next room
,		
Quiet urban nighttime	-40-	Theater, large conference room (background)
Quiet suburban nighttime		
	-30-	Library
Quiet rural nighttime		Bedroom at night, concert hall (background)
	-20-	
		Broadcast/recording studio
	-10-	
Lowest threshold of human hearing	-0-	Lowest threshold of human hearing
Source: California Department of Transportation, Technical	Noise Supplement t	o the Traffic Noise Analysis Protocol, September 2013.

Noise Descriptors

The dB scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The equivalent noise level ($L_{\rm eq}$) is the average noise level averaged over the measurement period, while the day-night noise level ($L_{\rm dn}$) and Community Equivalent Noise Level (CNEL) are measures of energy average during a 24-hour period, with dB weighted sound levels from 7:00 p.m. to 7:00 a.m. Most commonly, environmental sounds are described in terms of an average level ($L_{\rm eq}$) that has the same acoustical energy as the summation of all the time-varying events. Each is applicable to this analysis and defined in **Table 5.9-2: Definitions of Acoustical Terms**.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The predicted models' accuracy depends on the distance between the receptor and the noise source.

Table 5.9-2: Definitions of Acoustical Terms

Term	Definitions
Decibel (dB)	A unit describing the amplitude of sound, equal to 20 times the logarithm to the
	base 10 of the ratio of the pressure of the sound measured to the reference
	pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in μPa (or 20
	micronewtons per square meter), where 1 pascal is the pressure resulting from
	a force of 1 newton exerted over an area of 1 square meter. The sound pressure
	level is expressed in dB as 20 times the logarithm to the base 10 of the ratio
	between the pressures exerted by the sound to a reference sound pressure (e.g., $20 \mu Pa$). Sound pressure level is the quantity that is directly measured by a sound
	level meter.
Frequency(Hz)	The number of complete pressure fluctuations per second above and below
	atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz.
	Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level	The sound pressure level in dB as measured on a sound level meter using the
(dBA)	A-weighting filter network. The A-weighting filter de-emphasizes the very low
	and very high frequency components of the sound in a manner similar to the
	frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level (L _{eq})	The average acoustic energy content of noise for a stated period of time. Thus,
Equivalent Noise Level (Leq)	the L_{eq} of a time-varying noise and that of a steady noise are the same if they
	deliver the same acoustic energy to the ear during exposure. For evaluating
	community impacts, this rating scale does not vary, regardless of whether the
	noise occurs during the day or the night.
Maximum Noise Level (L _{max})	The maximum and minimum dBA during the measurement period.
Minimum Noise Level (L _{min})	
Exceeded Noise Levels	The dBA values that are exceeded 1%, 10%, 50%, and 90% of the time during the
(L ₀₁ , L ₁₀ , L ₅₀ , L ₉₀)	measurement period.
Day-Night Noise Level (L _{dn})	A 24-hour average L _{eq} with a 10-dBA weighting added to noise during the hours
	of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity at nighttime. The
	logarithmic effect of these additions is that a 60 dBA 24-hour $L_{\rm eq}$ would result in a measurement of 66.4 dBA $L_{\rm dn}$.
Community Noise Equivalent	A 24-hour average L _{eq} with a 5-dBA weighting during the hours of 7:00 a.m. to
Level (CNEL)	10:00 a.m. and a 10-dBA weighting added to noise during the hours of 10:00 p.m.
Lever(entile)	to 7:00 a.m. to account for noise sensitivity in the evening and nighttime,
	respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour
	L _{eq} would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level
	of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given
	location. The relative intrusiveness of a sound depends on its amplitude,
	duration, frequency, and time of occurrence and tonal or informational content
	as well as the prevailing ambient noise level.

A-Weighted Decibels

The A-weighted decibel (dBA) sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method for describing either the sound's average character or the variations' statistical behavior must be used. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

The perceived loudness of sounds is dependent on many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by dBA values. There is a strong correlation between dBA and the way the human ear perceives sound. For this reason, the dBA has become the standard tool of environmental noise assessment. All noise levels reported in this document are in terms of dBA, but are expressed as dB, unless otherwise noted.

Addition of Decibels

The dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic dB is A-weighted, an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70 dBA sound is half as loud as an 80 dBA sound and twice as loud as a 60 dBA sound. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dBA higher than one source under the same conditions. Under the dB scale, three sources of equal loudness together would produce an increase of 5 dBA.

Sound Propagation and Attenuation

Sound spreads (propagates uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics.³ No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of 3 dB per doubling of distance is assumed.

Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA.⁴ The way older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more.⁵

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from

¹ FHWA, Noise Fundamentals, 2017.

Available at: https://www.fhwa.dot.gov/environMent/noise/regulations and guidance/polguide/polguide02.cfm.

² Ibid.

³ California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, Page 2-29, September 2013.

⁴ James P. Cowan, Handbook of Environmental Acoustics, 1994.

⁵ HUD, Noise Guidebook, 2009. Available at: https://www.hudexchange.info/resource/313/hud-noise-guidebook/.

interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. 6 Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted.

• Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived by humans. Outside the laboratory, a 3-dBA change is considered a just-perceivable difference. A minimum 5 dBA is required before any noticeable change in community response would be expected. A 5-dBA increase is typically considered substantial. A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Effects of Noise on People

While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise. The Occupational Safety and Health Administration has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over 8 hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. A noise level of about 55 dBA L_{dn} is the threshold at which a substantial percentage of people begin to report annoyance⁸

Groundborne Vibration

Sources of groundborne vibrations include natural phenomena (earthquakes, volcanic eruptions, sea waves, landslides, etc.) or man-made causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient

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⁶ Compiled from James P. Cowan, Handbook of Environmental Acoustics, 1994 and Cyril M. Harris, Handbook of Noise Control, 1979.

Compiled from California Department of Transportation, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013, and FHWA, Noise Fundamentals, 2017.

Federal Interagency Committee on Noise, Federal Agency Review of Selected Airport Noise Analysis Issues, 1992.

(e.g., explosions). Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the vibration wave's maximum instantaneous positive or negative peak. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

Table 5.9-3: Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations, displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in Table 5.9-3 should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the activity level or individual's sensitivity. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. Common sources for groundborne vibration are planes, trains, and construction activities such as earthmoving which requires the use of heavy-duty earth moving equipment. For the purposes of this analysis, a PPV descriptor with units of inches per second (in/sec) is used to evaluate construction-generated vibration for building damage and human complaints.

Table 5.9-3: Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibrations

Maximum PPV (in/sec)	Vibration Annoyance Potential Criteria	Vibration Damage Potential Threshold Criteria	FTA Vibration Damage Criteria
0.008		Extremely fragile historic buildings, ruins, ancient monuments	
0.01	Barely Perceptible		
0.04	Distinctly Perceptible		
0.1	Strongly Perceptible	Fragile buildings	
0.12			Buildings extremely susceptible to vibration damage
0.2			Non-engineered timber and masonry buildings
0.25		Historic and some old buildings	
0.3		Older residential structures	Engineered concrete and masonry (no plaster)
0.4	Severe		

Maximum PPV (in/sec)	Vibration Annoyance Potential Criteria	Vibration Damage Potential Threshold Criteria	FTA Vibration Damage Criteria		
0.5		New residential structures, Modern industrial/commercial buildings	Reinforced-concrete, steel, or timber (no plaster)		
PPV = peak particle velocity; in/sec = inches per second; FTA = Federal Transit Administration					
Source: California Department of Transportation, <i>Transportation and Construction Vibration Guidance Manual</i> , 2020 and Federal Transit					

administration, Transit Noise and Vibration Assessment Manual, 2018.

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise sensitive receptors typically include residences, hospitals, schools, childcare facilities, and places of assembly. Vibration sensitive receptors are generally similar to noise sensitive receptors but may also include businesses, such as research facilities and laboratories that use vibration-sensitive equipment. Sensitive receptors for vibration include buildings where vibration would interfere with operations within the building or cause damage (especially older non-engineered timber and masonry structures), locations where people sleep, and locations with vibration sensitive equipment.

5.9.3 **Existing Regulatory Setting**

Federal

Noise Control Act

The Noise Control Act of 1972 recognized the federal government's role in dealing with major commercial noise sources that require uniform treatment. Since Congress has the authority to regulate interstate and foreign commerce, regulation of noise generated by such commerce also falls under congressional authority. The federal government specifically preempts local control of noise from aircraft, railroads, and interstate highways. The U.S. Environmental Protection Agency has identified acceptable noise levels for various land uses to protect the public, with an adequate margin of safety, and to establish noise emissions standards for interstate commerce.

The Department of Housing and Urban Development's (HUD) standards define L_{dn} at below 65 dBA for outdoors as acceptable for residential areas. Outdoor levels up to 75 dBA L_{dn} may be made acceptable through the use of insulation in buildings (Department of Housing and Urban Development, 2009).

State

California Government Code

California Government Code §65302 (f) mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable" noise levels for various land use types. Single-family homes are "normally acceptable" in exterior noise environments up to 60 CNEL and "conditionally acceptable" up to 70 CNEL. Multiple-family residential uses are "normally acceptable" up to 65 CNEL and "conditionally

acceptable" up to 70 CNEL. Schools, libraries, and churches are "normally acceptable" up to 70 CNEL, as are office buildings and business, commercial, and professional uses.

Title 24 – Building Code

The State's noise insulation standards are codified in the California Code of Regulations, Title 24: Part 1, Building Standards Administrative Code, and Part 2, California Building Code. These noise standards are applied to new construction in California for interior noise compatibility from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, hotel rooms, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 65 dBA CNEL or higher. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new multi-family residential buildings and habitable rooms (including hotels), the acceptable interior noise limit for new construction is 45 dBA CNEL.

Local

City of Huntington Beach General Plan

Noise Element9

The General Plan Noise Element identifies noise-sensitive land uses and noise sources, evaluates existing noise issues, defines potential noise impact areas, and advocates creative methods to protect the community from excessive noise. Following are the goals and policies relevant to the Project:

- Goal N-1: Noise-sensitive land uses are protected in areas with acceptable noise levels.
- **Policy N.1.B:** Incorporate design and construction features into residential, mixed-use, commercial, and industrial projects that shield noise-sensitive land uses from excessive noise.
- Goal N-2: Land use patterns are compatible with current and future noise levels.
- Policy N.2.A: Require an acoustical study for proposed projects in areas where the existing or projected noise level exceeds or would exceed the maximum allowable levels identified in Table N-2 (refer to Table 5.9-4: General Plan Land Use Noise Compatibility Standards). The acoustical study shall be performed in accordance with the requirements set forth in this Noise Element.
- Goal N-3: The community is not disturbed by excessive noise from mobile sources such as vehicles, rail traffic, and aircraft.
- **Policy N.3.B:** Prioritize use of site planning and project design techniques to mitigate excessive noise. The use of noise barriers shall be considered a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

Oity of Huntington Beach. 2017. City of Huntington Beach General Plan - Noise Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf (accessed December 2021).

- **Policy N.3.C:** Employ noise-reducing technologies such as rubberized asphalt, fronting homes to the roadway, or sound walls to reduce the effects of roadway noise on noise-sensitive land uses.
- Goal N-4: Noise from construction activities associated with discretionary projects, maintenance vehicles, special events, and other nuisances is minimized in residential areas and near noise-sensitive land uses.
- **Policy N.4.A:** Reduce construction, maintenance, and nuisance noise at the source as the first and preferred strategy to reduce noise conflicts.
- **Policy N.4.C:** Encourage shielding for construction activities to reduce noise levels and protect adjacent noise-sensitive land uses.
- **Policy N.4.D:** Limit allowable hours for construction activities and maintenance operations located adjacent to noise-sensitive land uses.

Noise Standards and Land Use Compatibility

The City has developed land use compatibility standards, based on recommended parameters from the California Governor's Office of Planning and Research, that rate compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable; refer to **Table 5.9-4: General Plan Land Use – Noise Compatibility Standards**. Using these land use compatibility guidelines, the City has established interior and exterior noise standards. The standards are purposefully general, and not every specific land use is identified.

Table 5.9-4: General Plan Land Use – Noise Compatibility Standards

General Plan Land Use Designation	Use Proposed Uses		Exterior Conditionally Acceptable (dBA CNEL)	Exterior Normally Unacceptable (dBA CNEL)	Interior Acceptable (dBA CNEL)
Residential					
Low Density	Single-Family, Mobile Home, Senior Housing	Up to 60	61–65	≥66	45
Medium Density, Medium High Density, High Density	Medium High Duplex, Townhomes, Density, Multi-Family,		66–70	≥71	45
Mixed-Use					
Mixed-Use Combination of Commercial and Residential Uses		Up to 70	71–75	≥76	45
Commercial					
Neighborhood Commercial, General Commercial	Retail, Professional Office, Health Services, Restaurant, Government Offices, Hotel/Motel	Up to 70	71–75	≥76	45

General Plan Land Use Designation	Proposed Uses	Exterior Normally Acceptable (dBA CNEL)	Exterior Conditionally Acceptable (dBA CNEL)	Exterior Normally Unacceptable (dBA CNEL)	Interior Acceptable (dBA CNEL)
Visitor	Hotel/Motel, Timeshares,	Up to 65	66–75	>75	45
Commercial	Recreational Commercial, Cultural Facilities				
Office	Office, Financial Institutions	NA	NA	NA	NA
Public/Semi-Pul	blic				
Semi-Public (School)	Schools	Up to 60	61–65	≥66	45
Semi-Public (Other)	Hospitals, Churches, Cultural Facilities	Up to 65	66–70	≥71	45
Public	Public Utilities, Parking Lot	NA	NA	NA	NA
Industrial					
Researchand	Research and Development,	NA	NA	NA	NA
Technology	Technology, Warehousing, Business Park				
Industrial	Manufacturing, Construction, Transportation, Logistics, Auto Repair	NA	NA	NA	NA
Open Space and	d Recreational				
Conservation	Environmental Resource Conservation	NA	NA	NA	NA
Park	Public Park	Up to 65	65-75	≥76	NA
Recreation	Golf Courses, Recreational Water Bodies	Up to 65	65–75	≥76	NA
Shore	City and State Beaches	NA	NA	NA	NA

CNEL = community noise equivalent level; NA = not applicable

NORMALLY ACCEPTABLE: Land uses may be established in areas with the stated ambient noise level, absent any unique noise circumstances. CONDITIONALLY ACCEPTABLE: Land uses should be established in areas with the stated ambient noise level only when exterior areas are omitted from the project or noise levels in exterior areas can be mitigated to the normally acceptable level. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.

NORMALLY UNACCEPTABLE: Land uses should generally not be established in areas with the stated ambient noise level. If the benefits of the project in addressing other General Plan goals and policies outweigh concerns about noise, the use should be established only where exterior areas are omitted from the project or where exterior areas are located and shielded from noise sources to mitigate noise to the maximum extent feasible. Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.

INTERIOR ACCEPTABLE: Buildings must be constructed so that interior noise levels do not exceed the stated maximum, regardless of the exterior noise level. Stated maximums are as determined for a typical worst-case hour during periods of use.

Source: Table N-2 Land Use Noise Compatibility Standards, Huntington Beach General Plan Noise Element (2017)

City of Huntington Beach Municipal Code

The City also has adopted a Noise Ordinance (Huntington Beach Municipal Code [HBMC] Chapter 8.40, Noise Control), which identifies exterior and interior noise standards, specific noise restrictions, exemptions, and variances for sources of noise in the City. The noise level standards in the City Noise Ordinance are more stringent than state Office of Noise Control guidelines for residential and commercial noise levels. The Noise Ordinance applies to all noise sources, with the exception of any vehicle that is operated on any public highway, street, or right-of-way, or to the operation of any off-highway vehicle,

to the extent that it is regulated in the California Vehicle Code, and all other sources of noise that are specifically exempted. As such, the HBMC provides standards against intrusive noises such as loud gatherings, unauthorized construction-generated noise, and other intrusive noises.

Exterior noise standards established in HBMC §8.40.050, Exterior Noise Standards, are identified in Table 5.9-5: City of Huntington Beach Noise Ordinance Exterior Noise Standards, along with the exterior noise levels that are prohibited as established by HBMC §8.40.111, Prohibited Noises. For exterior noise levels, if the ambient noise level is greater than the identified noise standards, the noise standard becomes the ambient noise level without the offending noise.

In accordance with HBMC $\S 8.40.090(d)$, construction noise activities are exempt from the Noise Ordinance, provided that the applicant has been granted a permit from the City and that the construction activities do not occur between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and Saturdays, or at any time on Sundays or federal holidays, and that average construction noise do not exceed 80 dBA L_{eq} at nearby noise sensitive land uses. If construction activities are permitted by the City after 7:00 p.m. or before 7:00 a.m., the average construction Noise Levels at nearby noise-sensitive land uses shall be limited to 50 dBA L_{eq} . Additionally, HBMC $\S 8.40.100$ prohibits noise levels at the exterior of schools, hospitals, and churches from exceeding the standards set forth in HBMC $\S 8.40.50$ or from interfering with the activities at these institutions.

Table 5.9-5: City of Huntington Beach Noise Ordinance Exterior Noise Standards

Land Use	L _{eq} Noise Level dBA	L _{max} Noise Level dBA	Time Period
Low-Density Residential	55	75	7:00 a.m. to 10:00 p.m.
	50	70	10:00 p.m. to 7:00 a.m.
Medium-, High-Density Residential, Hotels,	60	80	7:00 a.m. to 10:00 p.m.
Motels	50	70	10:00 p.m. to 7:00 a.m.
Schools	55	75	Hours of Operation
Hospitals, Churches, Cultural, Museum, Library, Public Park, Recreational	60	80	Hours of Operation
Commercial/Office	65	85	Hours of Operation
Source: 8.40.050 Exterior Noise Standards			

Exterior Noise Levels Prohibited:

It shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary, or unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area. In determining whether a violation exists, the City will determine:

- 1. The level of the noise;
- 2. The level and intensity of background noise, if any;
- 3. The proximity of the noise to residences;
- 4. The zoning where the noise emanates;
- 5. The density of the area within which the noise emanates;
- 6. The time the noise occurs;

- 7. The duration of the noise and its tonal content; and
- 8. Whether the noise is recurrent, intermittent, or constant.

Vibration standards are established in the HBMC §8.40.113, Vibration, which states that it is unlawful for any person to create, maintain or cause any operational ground vibration on any property which exceeds 72 VdB at nearby vibration sensitive land uses. The vibration limit at vibration-sensitive uses with high sensitivity such as operations conducting medical research and imaging shall be 65 VdB.

In accordance with HBMC §8.40.130, an applicant is able to request a Noise Deviation Permit which requires an applicant to show at a minimum, the need to deviate from the noise level produces a greater benefit to the community which outweighs the temporary increase in noise level above the requirements set in HBMC §8.40.130. In part, the application is required to discuss: (1) all facts regarding the request for deviation; (2) all actions the applicant took to comply with the provisions of this chapter; (3) the reasons why compliance with this chapter cannot be achieved; (4) any proposed methods to minimize noise during the temporary activity; and (5) any such additional information the Director may require.

5.9.4 Existing Environmental Setting

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162,** this a SEIR to the GPU PEIR. The 6th Cycle Housing Element Update (HEU) Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. Existing noise levels, sources, and receptors are described in detail in GPU PEIR Section 4.10.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf).

Candidate Housing Sites

As previously stated, the Project includes an update to the City's Housing Element map of candidate housing sites to reflect properties that could accommodate future housing development. In total, the HEU identifies 378 candidate housing sites (approximately 419 acres), which are detailed in **Appendix B: Candidate Housing Sites Inventory** and illustrated on **Exhibit 1-1: Candidate Housing Sites**. In addition to the identified candidate housing sites, future development of accessory dwelling units (ADUs) could occur on residential sites throughout the City and would not be limited to the candidate housing sites.

Of the 378 candidate housing sites identified in the HEU, only two sites (Sites 83 and 129) are vacant, comprising less than one-half percent (approximately 0.18 acre) of the approximately 419 acres. The remaining 376 candidate housing sites are developed with residential and non-residential land uses (e.g., commercial and industrial) to varying degrees.

Only two sites totaling approximately 14 acres and 312 dwelling units are developed with residential uses (Site 6, 14 acres with 311 dwelling units, and Site 86, 0.06 acre with 1 dwelling unit); see also **Table 5.10-5: Existing Housing - Candidate Housing Sites**. Traffic is the single most important contributor to background noise levels in urban areas such as the City. The primary on-site noise source for residential uses would be heating, ventilation, and air conditioning (HVAC) systems. Other sources of residential noise

would include landscaping equipment, dogs barking, residents talking, idling vehicles and car stereos. Typically, residential noise levels range from 50 dBA to 70 dBA CNEL

The remaining 374 developed sites include various non-residential land uses (i.e., commercial, office, research/technology, industrial, and public and semipublic). Noise from non-residential uses can come from a variety of sources. These include stationary mechanical equipment (i.e., HVAC systems, generators, pumps, tools, etc.), loading and unloading products and materials, and parking lot noise (typically engines accelerating, doors slamming, caralarms, horns honking, tire squeals, and people talking). Non-residential noise levels can range from 50 dBA to 80 dBA CNEL, depending on the use.

5.9.5 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning noise. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Generate excessive groundborne vibration or groundborne noise levels.
- For a project located within the vicinity of a private airstrip or 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, expose people residing or working in the project area to excessive noise levels?

5.9.6 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds, as described above, in determining whether Project implementation would create a significant impact concerning substantial temporary or permanent increase in noise or vibration, or if the Project area is within the vicinity of a private airport or airport land use plan. The evaluation was based on a review of regulations and determining their applicability to the Project. The baseline conditions and impact analyses are based on the previous GPU PEIR impact analysis concerning noise and vibration, analysis of aerial and ground-level photographs, and review of various data available in public records, including local planning documents. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning noise considers the relevant federal, state, and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

The candidate housing sites were evaluated based on information contained in this GPU PEIR at a programmatic level, as discussed above. No site-specific surveys or technical studies were conducted for this analysis.

5.9.7 Project Impacts and Mitigation

Impact NOI-1

Would the Project cause a generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.10-5 through page 4.10-21)

Temporary

The GPU PEIR concluded that construction activities consistent with the Huntington Beach GPU would potentially exceed permitted noise levels on a temporary basis since each development project would vary on the amount of equipment in operation, and the location of the activity. The GPU PEIR concluded that sensitive receptors could experience noise levels up to 98 dBA $L_{\rm eq}$ as a result of construction activities, or as high as 107 dBA $L_{\rm eq}$ in the event that pile drivers are used. This would constitute a substantial temporary increase in ambient noise levels. Therefore, because construction activities would occur near noise-sensitive receptors and noise disturbances would occur towards year 2040 (GPU buildout), construction impacts were considered to be potentially significant.

The applicant for such a permit is required to show "at a minimum, the need to deviate from the noise level produces a greater benefit to the community which outweighs the temporary increase in noise level above the requirements of this chapter." To minimize significant noise levels, the GPU concluded that all noise generated by construction activities is subject to compliance with HBMC §8.40.090(d) noise level limitations. Additionally, future development would be required to adhere to General Plan Policies N.A.1, N.1.B, N.2.A, N.2.B, N.3.A, N.4.A, N.4.C, and N.4.D which would serve to reduce noise-related impacts associated with construction activities near sensitive receptors. Lastly, the GPU PEIR concluded that implementation of **GPU PEIR MM 4.10-1** through **4.10-5** would further reduce the identified impacts to less than significant. Therefore, the GPU PEIR concluded that temporary or periodic noise impacts to onor off-site receptors due to special events would not be anticipated and the impact would be less than significant.

The additions/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

Permanent

Anticipated increases in traffic volumes would increase ambient noise levels throughout the City. The GPU PEIR indicated that the greatest increase in noise levels would occur along Bolsa Avenue between Edwards Street and Goldenwest Street, from 61.3 to 66.0 dBA CNEL. Substantial increases would also occur at various points along Adams Avenue, Atlanta Avenue, Edinger Avenue, Pacific Coast Highway, Bolsa Chica Street, Goldenwest Street, and Brookhurst Street, where noise levels would increase above the established thresholds.

The GPU PEIR concluded that all noise-related impacts associated with future operational activity would be subject HBMC §8.40.060 and §8.40.080, which would allow normally acceptable interior and exterior noise limits to be increased if ambient noise levels also are higher than normally acceptable levels. Additionally, project applicants can request a Noise Deviation Permit (HBMC §8.40.130)

The GPU PEIR noted that applicants requesting a Noise Deviation Permit would be required to provide information in the application regarding actions taken to comply with the Noise Ordinance, reasons why compliance cannot be achieved, and a proposed method to achieve compliance as applicable. Applicant also must demonstrate the need to deviate from the noise level and whether the deviation produces a benefit to the community that outweighs the temporary increase in noise level.

Although the Noise Deviation Permit would not eliminate the noise created beyond the thresholds established by the City's Noise Ordinance, the GPU PEIR noted that it would permit the deviation to occur, and each project applicant must take measures to reduce noise impacts. While such events would result in temporary increases in ambient noise levels, the increases would be regulated and allowed to occur within the constraints of HBMC §8.40.130.

Lastly, the GPU PEIR noted that all development would be subject to compliance with General Plan Policies N.2.A, N.3.B and N.3.C, which require future applicants to prepare an acoustical study to reduce noise impacts on noise-sensitive land uses; ensure that new development consider such design elements as placing habitable spaces on building interiors and utilizing setbacks and community open spaces along the roadway-facing facades to reduce exterior and interior noise impacts; and requires that the City employ noise reducing technologies, such as rubberized asphalt and sound walls, in front of residential uses to reduce roadway noise from impacting sensitive land uses.

Nevertheless, the GPU PEIR concluded that community ambient noise levels still would increase substantially throughout the City by 2040. Therefore, impacts were anticipated to be potentially significant, and no available or feasible mitigation measures would reduce ambient noise levels and exposure below the significance thresholds.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City, but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons. The Project includes the potential development of up to 11,743 dwelling units throughout the City. Future housing development facilitated by the Project could occur on any combination of the 378 candidate housing sites, as well as ADUs on residential sites throughout the City.

Construction-Related Noise

Of the 378 candidate housing sites identified in the HEU, only two sites (Sites 83 and 129) are vacant. Therefore, construction activities would include demolition of existing improvements, and construction

of new residential developments and supporting infrastructure, and other similar types of construction related to residential land uses. Construction activities are short-term and have a temporary duration, lasting from a few weeks to several months. For each future development project, construction duration would vary depending on a particular site's development capacity. The candidate housing sites' potential development capacities range from one dwelling unit to 601 dwelling units, as detailed in **Appendix B**: **Candidate Housing Sites Inventory**. To provide representative residential developments, the maximum, 90th percentile, and mean development capacities were estimated; see **Table 5.8-2**: **Representative Development Capacities**. As shown **Table 5.8-2**, Site 53 with 51 dwelling units is representative of an average-sized residential development site, or what is reasonably expected for typical candidate housing site development.

Ground-borne noise and other types of construction-related noise impacts would typically occur during the initial site preparation, which can create the highest noise levels. Generally, site preparation has the shortest duration of all construction phases. Activities that occur during this phase include earthmoving and soils compaction. High ground-borne noise levels and other miscellaneous noise levels can be created by heavy-duty truck, backhoe, and other heavy-duty construction equipment operations. Noise from construction activities is generated by two primary sources: (1) the noise related to active construction equipment; and (2) the transport of workers and equipment to construction sites. These noise sources can be a nuisance to local residents and businesses or unbearable to sensitive receptors (i.e., residential, hospital, hotel/motel, schools, parks, and places of worship). The Federal Transit Administration (FTA) has compiled data regarding noise generating characteristics of specific types of construction equipment and typical construction activities. This data is presented in **Table 5.9-6: Construction Equipment Noise Emission Levels**. These noise levels would decrease rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling distance.

Operating cycles for these types of construction equipment used may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

Table 5.9-6: Construction Equipment Noise Emission Levels

Equipment	Typical Noise Level (dBA) at 50 feet from Source	
Air Compressor	80	
Backhoe	80	
Compactor	82	
Concrete Mixer	85	
Concrete Pump	82	
Concrete Vibrator	76	
Crane, Mobile	83	
Dozer	85	
Generator	82	
Grader	85	
Impact Wrench	85	
Jack Hammer	88	
Loader	80	
Paver	85	

Equipment	Typical Noise Level (dBA) at 50 feet from Source		
Pneumatic Tool	85		
Pump	77		
Roller	85		
Saw	76		
Scraper	85		
Shovel	82		
Truck	84		
Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.			

All future housing development facilitated by the Project would involve construction activities that would generate noise, including on-site noise from heavy construction equipment as well as off-site noise from heavy haul trucks and construction worker commutes. Furthermore, all future construction activities would occur incrementally throughout the entire planning horizon incremental phases over time based on market demand, economic, and planning considerations, with associated construction noise temporarily and intermittently affecting localized areas through 2029. As such, noise generated by construction activities associated with future housing development facilitated by the Project could result in a substantial temporary increase in ambient noise levels. Given the Project area is highly urbanized, future housing development could occur adjacent to or near a noise-sensitive receptor (i.e., residences and medical facilities). The degree of impact experienced by nearby sensitive receptors would depend upon existing ambient noise levels, the proximity of noise-sensitive receptors to construction areas and shielding provided by intervening structures between the receptor and the noise source. Therefore, as with the GPU, future construction activities facilitated by the Project could occur near noise-sensitive receptors resulting in a potentially significant impact.

All future housing development subject to rezoning and within overlay zones would be subject to compliance with General Plan Policies N.1.B, N.2.A, N.3.B, N.3.C, N.4.A, and N.4.C to minimize the generation of a substantial temporary noise. General Plan Policy N.2. A requires future housing projects in areas where existing or projected noise level exceeds or would exceed the maximum allowable levels to prepare an acoustical study to identify acoustical construction and operational impacts and include feasible mitigation to minimize substantial noise levels. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with General Plan Policies N.1.B, N.3.B, N.3.C, N.4.A, and N.4.C, which require the incorporation of design and construction features including, but not limited to, noise barriers, rubberized asphalt, sound walls to reduce noise levels and shield noise from surrounding sensitive receptors. All construction activities associated with future housing development would be subject to compliance with General Plan Policy N.4.D, which limits allowable hours of construction activities and operation maintenance activities. Additionally, all construction activities associated with future housing development would be subject to compliance with HBMC §8.40.090(d) which specifies that construction noise activities are exempt from the Noise Ordinance if the applicant has been granted a permit from the City and if the construction activities do not occur between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and Saturdays, or at any time on Sundays or federal holidays.

To further minimize impacts, future housing development facilitated by the Project subject to rezoning and within overlay zones would be subject to **GPU PEIR MMs 4.10-1** through **4.10-5**. GPU PEIR **MM 4.10-1**

requires that construction best management practices be implemented by contractors to reduce construction noise levels. **GPU PEIR MM 4.10-2** requires that construction staging areas, along with the operation of earthmoving equipment within the project area, be located as far away from vibration and noise sensitive sites as possible. **GPU PEIR MM 4.10-3** requires that heavily loaded trucks used during construction be routed away from residential streets. Prior to the issuance of any building permit, **GPU PEIR MM 4.10-4** requires that project applicants submit an acoustical study for each development, prepared by a certified acoustical engineer (pursuant to General Plan Policy N.2.A). Lastly, **GPU PEIR MM 4.10-5** requires that applicants for projects within 500 feet of noise-sensitive receptors implement certain best management practices prior to issuance of a construction permit.

Though precise locations would vary, construction activities at one or more locations within the City could potentially occur continuously through the year 2029. Further, the potential exists for larger construction projects located in the same area or on the same block to overlap construction schedules. Construction activities associated with any individual development could also occur near noise-sensitive receptors and noise disturbances could occur for prolonged periods of time. Therefore, consistent with the GPU PEIR, construction noise impacts associated with implementation of the Project are considered significant and unavoidable.

Long-Term Operation Noise

Stationary Mechanical Equipment

Although the Project area encompasses the entire area within the City limits, and ADUs can be constructed throughout the City, the areas affected by the rezoning program, housing overlays, and hotel/motel conversions are limited to the 378 candidate housing sites shown in **Exhibit 1-1**. Stationary mechanical equipment noise, such as HVAC systems or ventilation fans, would potentially be installed on the rooftops of new residential buildings associated with future housing developments facilitated by the Project. Large HVAC systems associated with new development can result in noise levels that average between 50 dBA L_{eq} and 65 dBA L_{eq} at a distance of 50 feet from the source equipment. However, potential noise from mechanical equipment would be subject to HBMC §8.40.050 (Exterior Noise Standards), which limits maximum exterior noise levels when measured at the property line. If required, future project applicants would be able to request a Noise Deviation Permit, which would allow normally acceptable interior and exterior noise limits to be increased if ambient noise levels also are higher than normally acceptable levels. Therefore, mechanical equipment noise associated with future housing development facilitated by the Project would be subject to compliance with the Noise Ordinance standards and impacts would be less than significant.

Traffic Noise

Table 5.13-1: Project Trip Generation provides the Project's forecast trip generation. As indicated in **Table 5.13-1,** the Project is forecast to generate approximately 56,277 average daily trips (ADT) based on 11,743 dwelling units. To provide forecast ADT for representative residential developments, the ADT for the maximum, mean, and 90th percentile development capacities were estimated; see **Table 5.13-2: Trip Generation – Representative Development Capacities**. As shown **Table 5.13-2**, Site 217, which provides the greatest/maximum development capacity of 601 dwelling units (i.e., the most dwelling units of all 378

candidate housing sites), would generate approximately 2,729 ADT. Site 53 with 51 dwelling units, which is representative of an average-sized residential development site, or what is reasonably expected for typical candidate housing site development, would generate approximately 232 ADT. Thus, future housing development facilitated by the Project would generate mobile source noise near the respective development sites. However, this forecast ADT does not account for the ADT credit/offset associated with the displaced land uses, as discussed below. Because all except two of the candidate housing sites are currently developed, the ADT associated with each candidate housing site would be offset to varying degrees by the current ADT from existing uses that would be displaced. The City is an established, built-out, urbanized community with various existing land uses including commercial, industrial, institutional, visitor serving, and residential uses. Therefore, future housing development on any combination of the 378 candidate sites facilitated by the Project would not result in noise levels substantially different than what was previously analyzed in the GPU PEIR.

Nevertheless, all future housing development facilitated by the Project and subject to rezoning and within overlay zones would also be subject to compliance with various General Plan policies, which would reduce ADT and corresponding mobile source noise. All future housing development would be subject to compliance with HBMC §8.40.060, §8.40.080, §8.40.130 to reduce operational-related noise impacts. Furthermore, all future housing development would be subject to compliance with: General Plan Policy N.3.A, which requires new projects to mitigate noise created by any new transportation noise source so that it does not exceed the exterior or interior sound level; General Plan Policy CIRC-3.D, which requires new projects to contribute to the transit and/or active transportation network in portion to their expected traffic generation; and Policy CIRC-5.A, which requires the maximum use of transportation demand management strategies to reduce trips. While implementing GPU policies would reduce roadway noise levels, the GPU PEIR determined that community ambient noise levels still would increase substantially throughout the City. The increase in ambient noise levels would reduce ambient noise levels and exposure below the identified thresholds. Therefore, as with the GPU PEIR, traffic noise levels resulting from the Project would be significant and unavoidable.

GENERAL PLAN POLICIES

See **Section 5.9.2: Existing Regulatory Setting** for complete policy text.

- Policy N.1.B
- Policy N.2.A
- Policy N.3.A
- Policy N.3.B

- Policy N.3.C
- Policy N.4.A
- Policy N.4.C
- Policy N.4.D

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.10-1 Project applicants will require by contract specifications that the following construction best management practices be implemented by contractors to reduce construction noise levels:

- (1) Ensure that construction equipment is properly muffled according to industry standards and be in good working condition
- (2) Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible
- (3) Schedule high noise-producing activities between the hours of 8:00 a.m. and 5:00 p.m. to minimize disruption on sensitive uses, Monday through Saturday. Schedule pile-driving activities between the hours of 8:00 a.m. and 4:00 p.m. on Monday through Friday only.
- (4) Implement noise attenuation measures, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources
- (5) Use electric air compressors and similar power tools rather than diesel equipment, where feasible
- (6) Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, will be turned off when not in use for more than 10 minutes
- (7) Construction hours, allowable workdays, and the phone number of the job superintendent will be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the City of Huntington Beach or the job superintendent receives a complaint, the superintendent will investigate, take appropriate corrective action, and report the action taken to the reporting party.

Contract specifications will be included in construction documents, which will be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

GPU PEIR MM 4.10-2

Project applicants will require by contract specifications that construction staging areas along with the operation of earthmoving equipment within the project area would be located as far away from vibration and noise sensitive sites as possible. Contract specifications will be included in construction documents, which will be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

GPU PEIR MM 4.10-3

Project applicants will require by contract specifications that heavily loaded trucks used during construction would be routed away from residential streets. Contract specifications will be included in construction documents, which will be reviewed by the City of Huntington Beach prior to issuance of a grading permit.

GPU PEIR MM 4.10-4

Prior to issuance of building permits, project applicants will submit an acoustical study for each development, prepared by a certified acoustical engineer. Should the results of the acoustical study indicate that that exterior and interior noise levels would exceed the standards set forth in the City of Huntington Beach Municipal Code §8.40.050 through §8.40.070, the project applicant will include design measures that may include acoustical paneling or walls to ensure that

noise levels do not exceed City standards. Final project design will incorporate special design measures in the construction of the residential units, if necessary.

MITIGATION MEASURES

No feasible mitigation beyond GPU PEIR mitigation is available to reduce impacts to less than significant.

Level of Significance After Mitigation: Significant and Unavoidable

Impact NOI-2 Would the Project cause the generation of excessive groundborne vibration or groundborne noise levels?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.10-21)

Construction

The GPU PEIR concluded that construction activities associated with GPU buildout would potentially result in sufficiently high levels of groundborne noise and vibrations. The GPU concluded the groundborne noise and vibration generated during construction activities would primarily impact existing sensitive land uses (e.g., residences, schools, hospitals) that are located adjacent to or in the vicinity of specific future projects.

For sensitive land uses that are at or within 25 feet of a construction site, the GPU concluded the sensitive receptors at these locations may be exposed to groundborne noise and vibration levels that exceed the FTA vibration impact threshold of 85 VdB for human annoyance, which would be considered excessive. Additionally, groundborne vibration can potentially damage the foundations and exteriors of historic structures. Groundborne vibration that can cause this kind of damage typically is limited to impact equipment, especially pile drivers.

Therefore, future development projects would be required to adhere General Plan Policies N.4.A and N-4.D to reduce groundborne noise and vibration levels associated with construction activity. Furthermore, all projects under the GPU would be subject to GPU PEIR **MM 4.10-5**, which requires for new development projects that require pile driving to incorporate the following vibration-reducing techniques as determined feasible by a project-related geotechnical study, prior to issuance of construction permits. However, the GPU PEIR concluded that levels would not be reduced to a less than significant level because certain construction activities could still be required near sensitive receptors. Impacts would remain potentially significant, and no available or feasible mitigation measures would reduce impacts to below the significance thresholds.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

Operation

The GPU PEIR concluded that background operational vibration levels are expected to average around 50 VdB. This level is substantially less than the 85 VdB exposure threshold for people in the City, which is

not considered to be excessive. Groundborne vibration resulting from operation of land uses consistent with the GPU would be generated primarily by trucks making periodic deliveries. However, those types of deliveries would be consistent with deliveries that are made currently for commercial uses and are not anticipated to increase groundborne vibration above existing levels. Lastly, the GPU concluded that future projects consistent with the GPU generally would increase the level of uses (residential) that do not typically require this type of delivery and would decrease the level of uses (office and commercial) that do. Therefore, impacts were considered to be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Construction-Related Vibration

The Project includes the potential development of up to 11,743 dwelling units throughout the City. Future housing development facilitated by the Project could occur on any combination of the 378 candidate housing sites, as well as ADUs on residential sites throughout the City. Of the 378 candidate housing sites identified in the HEU, only two sites (Sites 83 and 129) are vacant. Given the Project area is highly urbanized, future housing development would be surrounded by existing developments. Removal of existing uses and construction of new housing developments would generate short-term vibration impacts. Construction activities can generate varying degrees of groundborne vibration, depending on the construction procedure and equipment used. Construction equipment operations would generate vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located near a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). Groundborne vibrations from construction activities rarely reach levels that damage structures.

The City currently does not have a significance threshold to assess construction vibration impacts, as HBMC Section 8.40.113, Vibration threshold of 72 VdB only applies to operations. Therefore, the Caltrans 2020 Transportation and Construction Vibration Guidance Manual is used to identify the vibration threshold impacts. A vibration level of 0.04 in/sec is used to identify the threshold for human annoyance while levels of 0.2 in/sec is used as the threshold for building damage.

The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 25 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. Construction activities associated with future development have the potential to generate low levels of groundborne vibration. **Table 5.9-7: Noise Ranges of Typical Construction Equipment**, identifies various vibration velocity levels for various construction equipment types.

Table 5.9-7: Noise Ranges of Typical Construction Equipment

Construction Equipment	Noise Level in dBA L₀ at 50 feet
Front Loader	73-86
Truck	82-95
Crane (movable)	75-88
Crane (derrick)	86-89
Vibrator	68-82
Saw	72-82
Pneumatic Impact Equipment	83-88
Pile Driving (Peaks)	95-107
Jackhammer	81-98
Pump	68-72
Generator	71-83
Compressor	75-87
Concrete Mixer	75-88
Concrete Pump	81-85
Backhoe	73-95
Tractor	77-98
Scraper/Grader	80-93
Paver	85-88
Source: GPU Section 4.10 – Page 4.10-12 Table 4.10-3	

For typical construction activities occurring within 25 feet of sensitive receptors (i.e., residences, hospitals, schools, childcare facilities, places of assembly, and businesses that use vibration-sensitive equipment), caisson drilling could generate vibration levels reaching 0.089 in/sec at the receptors ¹⁰ (i.e., representative of a construction activity with the highest vibration levels associated with residential construction). If construction occurs within 25 feet or immediately adjacent to sensitive receptors, vibration levels could potentially exceed the threshold of 0.04 in/sec. Further, the use of pile driving would have the potential to generate significant vibration levels exceeding 0.2 in/sec at nearby sensitive receptors. All future housing development subject to rezoning and within overlay zones would be subject to General Plan Policies N.4.A and N.4.D, which require projects to reduce construction, maintenance, and nuisance noise at the source as the first and preferred strategy to reduce noise conflicts and limits allowable hours for construction activities and maintenance operations located adjacent to noise-sensitive land uses, respectively. Additionally, all future housing development subject to rezoning and within overlay zones would be subject compliance with **GPU PEIR MM 4.10-5** to reduce vibration-related impacts to nearby sensitive receptors. However, even with adherence to General Plan policies and **GPU PEIR MM 4.10-5**, construction ground-borne vibration impacts would remain significant and unavoidable.

Long-Term Operational Vibrations

Daily operations of residential land uses facilitated by Project implementation are not anticipated to generate excessive levels of ground-borne vibration. The Project does not plan for any changes related to industrial or commercial uses (e.g., airports, waste facilities, etc.) that would generate ongoing ground-borne vibration. Occasionally, vibration could occur as a result of large truck travel to and from individual residential developments for periodic deliveries and garbage pick-up. However, such incidences would be

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¹⁰ California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, 2020.

temporary in nature and would not be expected to exceed the threshold of 72 VdB. Therefore, operational ground-borne vibration impacts during future operations would be less than significant.

GENERAL PLAN POLICIES

See **Section 5.9.2: Existing Regulatory Setting** for complete policy text.

- Policy N.4.A
- Policy N.4.D

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.10-5 Prior to issuance of construction permits, applicants for new development projects that require pile driving must incorporate the following vibrationreducing techniques as determined feasible by a project-related geotechnical study:

- 1) Install intake and exhaust mufflers on pile-driving equipment.
- 2) Vibrate piles into place when feasible, and install shrouds around the piledriving hammer where feasible.
- 3) Implement "quiet" pile-driving technology (such as pre-drilling of piles and the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions.
- 4) Use cushion blocks to dampen impact noise, if feasible, based on soil conditions. Cushion blocks are blocks of material that are used with impact hammer pile drivers. They consist of blocks of material placed atop a pile during installation to minimize noise generated when driving the pile. Materials typically used for cushion blocks include wood, nylon, and micarta (a composite material).
- 5) At least 48 hours prior to pile-driving activities, notify building owners and occupants within 600 feet of the project area of the dates, hours, and expected duration of such activities.

MITIGATION MEASURES

No feasible mitigation beyond GPU PEIR mitigation is available to reduce impacts to less than significant.

Level of Significance After Mitigation: Significant and Unavoidable

Impact NOI-3

Would the Project be located within the vicinity of a private airstrip or 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?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.10-5)

The City is located approximately 12.5 miles away from Long Beach Airport and approximately 3.5 miles from John Wayne Airport. Due to the vast distance, the City is not located within neither noise contours for either airport. The GPU PEIR concluded that flights arriving at Long Beach Airport would result in noise levels of approximately 72 dBA near the intersection of Bolsa Chica Street and Edinger Avenue. The GPU PEIR also notes there are eight privately owned and operated heliports within the planning area. All existing heliports are operated in compliance with the Orange County Airport Land Use Commission (ALUC) and Federal Aviation Administration (FAA) requirements. The ALUC requires that an acoustical study be prepared for each proposed heliport. Heliport noise levels of 60 dB CNEL are considered to have a potential impact on surrounding sensitive land uses. ¹¹

The control of aircraft flying over the City is under FAA jurisdiction. The City does not have authority over the FAA. Therefore, the GPU PEIR concluded that the Huntington Beach GP would not alter the existing airport operations in nearby jurisdictions, nor would it expose people to excessive noise from airports. No impact was determined in the 2017 PEIR.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

As stated above, the nearest public airport to the City is John Wayne Airport. The candidate housing site nearest John Wayne Airport is Site 449, located 6.5 miles to the northwest. Thus, no future housing development facilitated by the Project would be within the John Wayne Airport Land Use Plan's Airport Influence Area. Additionally, there are no private airstrips near the City.

As discussed in the GPU PEIR, flights approaching Long Beach Airport (located approximately 8.5 miles northwest of the nearest candidate housing site) regularly pass over the area near the intersection of Bolsa Chica Street and Edinger Avenue at an altitude ranging between 1,600 feet and 2,100 feet. Individual commercial aircraft flying at these altitudes can result in noise levels of approximately 72 dBA on the ground. However, because the nearest candidate site is 1.5 miles to the northeast of this intersection, airplane noise affecting this site would result in a less than significant impact. Therefore, the Project would not result in an airport- or airstrip-related excessive noise for people residing or working on the candidate housing sites. No impact would occur in this regard, and no mitigation is required.

As previously noted, there are eight privately owned and operated heliports within the planning area. Any candidate housing site near a heliport would be subject to compliance with General Plan Policy N.2.A, which requires that an acoustical study be prepared for projects in areas where the existing or projected noise level exceeds or would exceed the maximum allowable levels identified in Table N-2 (refer to **Table 5.9-4: General Plan Land Use – Noise Compatibility Standards**). The acoustical study shall be performed in accordance with the requirements set forth in this Noise Element. Therefore, following compliance with General Plan Policy N.2.A, the Project would not expose people residing or working on a

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Orange County Airport Land Use Commission. 2008. Airport Environs Land Use Plan for Heliports. https://files.ocair.com/media/2021-02/Heliport AELUP-June-19-2008.pdf?VersionId=ZCMML3KsEaddi82kIk3HYBCu42zQdXMB

candidate housing site to excessive heliport-related noise levels. Impacts would be less than significant in this regard.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

5.9.8 Cumulative Impacts

For purposes of the noise impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0: Basis for Cumulative Analysis**.

As concluded above, future housing development facilitated by the Project could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the development site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Despite compliance with General Plan Policies N.1.B, N.2.A, N.3.A, N.3.B, N.3.C, N.4.A, N.4.C and N.4.D and implementation of **GPU PEIR MMs 4.10-1** through **4.10-4**, impacts would remain significant and unavoidable. Cumulative projects are similarly required to adhere to these General Plan policies and **GPU PEIR MMs 4.10-1** through **4.10-4** and other applicable State and local regulations to reduce ambient noise levels associated with construction activity. However, construction and operational activities associated with any individual development could occur near noise-sensitive receptors and noise disturbances could occur for prolonged periods of time. Therefore, the Project's impact concerning the substantial temporary and permanent increase of ambient noise levels would be cumulatively considerable.

As concluded above, future housing development facilitated by the Project could generate excessive groundborne vibration or groundborne noise levels. Despite compliance with General Plan Policies N.4.A and N.4.D and implementation of **GPU PEIR MM 4.10-5**, impacts would remain significant and unavoidable. Cumulative projects are similarly required to adhere to these General Plan policies and **GPU PEIR MM 4.10-5** and other applicable State and local regulations to reduce impacts from significant groundborne vibration and noise levels. Although operational groundborne vibration and noise levels would be reduced, construction groundborne vibration impacts would remain significant and unavoidable. Therefore, the Project's impact concerning construction-related groundborne vibration would be cumulatively considerable.

As concluded above, future housing development facilitated by the Project is not located within the vicinity of a private airstrip or 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, resulting in the exposure of people residing or working in the project area to excessive noise levels. As also concluded above, following compliance with General Plan Policy N.2.A, the Project would not expose people residing or working on a candidate housing site to excessive heliport-related noise levels. Therefore, the Project's impact is not cumulatively considerable.

Lastly, for future residential development subject to discretionary review, compliance with the applicable GPU PEIR mitigation measures would be confirmed through the discretionary review process. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures.

5.9.9 Significant Unavoidable Impacts

Despite compliance with GPU PEIR mitigation, the Project would result in significant and unavoidable impacts concerning construction-related noise and vibration levels and operational noise levels associated with traffic. The Project's impact concerning the substantial temporary and permanent increase of ambient noise levels would be cumulatively considerable. The Project's impact concerning construction-related noise and groundborne vibration would also be cumulatively considerable.

5.9.10 References

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5.10 POPULATION AND HOUSING

5.10.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to induce substantial unplanned population growth or displace people or housing. Mitigation to avoid/reduce impacts is identified, as needed. To provide regional context, this section analyzes the Project's estimated population, housing, and employment effects relative to the County of Orange (County) and the City of Huntington Beach (City).

Population growth, in and of itself, does not constitute a physical impact on the environment. However, population growth is relevant in that it could generate secondary environmental impacts as defined under the California Environmental Quality Act (CEQA), such as criteria air pollutant emissions (see Section 5.1: Air Quality), greenhouse gas (GHG) emissions (see Section 5.5: Greenhouse Gas Emissions), increased demands for public services (see Section 5.11: Public Services), and infrastructure capacity (see Section 5.15: Utilities and Service Systems). Further, housing growth relates to sustainable community development issues that may be of concern, such as providing affordable and workforce housing and integrating housing near employment to minimize vehicle miles traveled (VMT) (see Section 5.13: Transportation).

5.10.2 Existing Regulatory Setting

State

California State Housing Law

California State Housing Law (California Government Code [CGC] Article 10.6) establishes the requirements for the Housing Element of the General Plan, one of the seven mandatory General Plan Elements. The *City of Huntington Beach General Plan* (General Plan) is the City's General Plan. State law requires that Housing Elements identify and analyze existing and projected housing needs and provide goals, policies, objectives, financial resources, and programs for the preservation, improvement, and development of housing (CGC §65580). The City's Housing Element identifies strategies and programs that focus on; 1) preserving and improving housing and neighborhood; 2) Providing adequate housing sites; 3) Assisting in the provision of affordable housing; 4) Removing governmental and other constraints to housing investment; 5) Promoting fair and equal housing opportunities; and 6) Promoting sustainable housing. The California Legislature has determined that one of the State's primary housing goals is to ensure every resident has a decent home and suitable living environment.

California Government Code §65588 requires that local governments review and revise the Housing Element of their comprehensive General Plans not less than once every eight years. For each review cycle, the California Department of Housing and Community Development (HCD) conducts a regional housing needs assessment (RHNA).

California Government Code §65583 sets forth the specific housing element content requirements. Included in these requirements are a jurisdiction's obligations to provide their "fair share" of regional housing needs; see **SCAG Regional Housing Needs Assessment Section** below.

Housing Accountability Act

Senate Bill (SB) 167 or the Housing Accountability Act (CGC §65589.5 et seq.) became effective on January 1, 2020. The bill is the result of the Legislature's extensive findings regarding the California "housing supply crisis" with "housing demand far outstripping supply." In 2018, California ranked 49th the nation in having the least housing units per capita.

The Housing Accountability Act, which is part of the Planning and Zoning Law, prohibits a local agency from disapproving, or conditioning approval in a manner that renders infeasible, a housing development project for very low, low, or moderate-income households or an emergency shelter unless the local agency makes specified written findings based on a preponderance of the evidence in the record. The act specifies that one way to satisfy that requirement is to make findings that the housing development project or emergency shelter is inconsistent with both the jurisdiction's zoning ordinance and general plan land use designation as specified in any element of the general plan as it existed on the date the application was deemed complete. The act requires a local agency that proposes to disapprove a housing development project that complies with applicable, objective general plan and zoning standards and criteria that were in effect at the time the application was deemed to be complete, or to approve it on the condition that it be developed at a lower density, to base its decision upon written findings supported by substantial evidence on the record that specified conditions exist, and places the burden of proof on the local agency to that effect. The act requires a court to impose a fine on a local agency under certain circumstances and requires that the fine be at least \$10,000 per housing unit in the housing development project on the date the application was deemed complete.

Housing Crisis Act of 2019 — Senate Bill 330

Senate Bill 330 signed into law on October 9, 2019, and effective January 1, 2020, substantially limits the ability of municipalities to disapprove housing projects, condition housing projects to reduce density, or levy excessive standards on housing projects that raise costs and extend the permitting process. This is part of a continuing effort by the Legislature to encourage housing development in California by limiting a local agency's discretion where proposed projects are already consistent with General Plan and zoning standards.

Senate Bill 330 inserts and amends several different sections of the CGC to streamline housing development for projects that meet specified criteria. (see CGC §§65589.5, 65905.5, 65913.10, 65940, 65941.1, 65943, 65950, 66300, 66301.) These new and amended statutes limit a local agency's ability to disapprove housing projects or otherwise condition housing projects in a manner that reduces density or makes housing infeasible. Different restrictions apply to projects proposing affordable units than market rate units; but in both cases, agencies must make very narrow written findings in order to disapprove a project that is consistent with General Plan and zoning standards. SB 330 also limits the number of hearings and meetings that a local agency can hold in connection with certain housing development projects, and it shortens permissible timelines within which an agency must take action on a housing development application.¹

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¹ JDSUPRA. 2019. *California's Housing Crisis Action of 2019*. https://www.idsupra.com/legalnews/california-s-housing-crisis-act-of-2019-25164/ (accessed September 2021).

As stated in SB 330, the Legislature found that:

[T]he housing crisis has particularly exacerbated the need for affordable homes at prices below market rates... The housing crisis harms families across California and has resulted in all of the following... including increased poverty and homelessness, crowded and unsafe housing in urban areas, forced housing in green fields at the urban-rural interface with longer commute times and a higher exposure to fire hazard...as well as increase greenhouse gas emissions... the housing crises is severely impacting the state's economy and also harms the environment.

As part of the newly enacted SB 330, CGC §65589.5(a)(1) provides:

The lack of housing, including emergency shelters, is a critical problem that threatens the economic, environmental, and social quality of life in California. California housing has become the most expensive in the nation. The excessive cost of the state's housing supply is partially caused by activities and policies of many local governments that limit the approval of housing, increase the cost of land for housing, and require that high fees and exactions be paid by producers of housing. Among the consequences of those actions are discrimination against low-income and minority households, lack of housing to support employment growth, imbalance in jobs and housing, reduced mobility, urban sprawl, excessive commuting, and air quality deterioration... Many local governments do not give adequate attention to the economic, environmental, and social costs of decisions that result in disapproval of housing development projects, reduction in the density of housing projects, and excessive standards for housing development projects.

As state previously, SB 330 amends CGC §65589.5, adds CGC §865940, 65943 and 65950, and repeals and readopts §865906.5, 65913.10 and 65941.1. Senate Bill 330 has numerous provisions, for which the most relevant to the Project include new prohibitions against removing or downzoning residentially zoned land such that there would be a "net loss" in residential zoning capacity. The legislation adds Chapter 12 to Division 1 of Title 7 of the CGC (§66300 et seq.) that applies to "affected cities," which are identified as cities in urbanized areas as determined by the most recent census. In accordance with SB 330, the Department of Community Development and Housing (HCD) has prepared a list of affected cities and has determined that Huntington Beach is an "affected city." Therefore, pursuant to CGC §66300(b)(1)(A):

(b)(1) Notwithstanding any other law except as provided in subdivision (i), with respect to land where housing is an allowable use, an affected city shall not enact a development policy, standard, or condition that would have any of the following effects:

(A) Changing the general plan land use designation, specific plan land use designation, or zoning of a parcel or parcels of property to a less intensive use or reducing the intensity of land use within an existing general plan land use designation, specific plan land use designation, or zoning district below what was allowed under the land use designation and zoning ordinances of the affected county or affected city, as applicable, as in effect on January 1, 2018..."

This is except when approved by HCD or when the following exception is set out in CGC §66300(i)(1) applies:

(i)(1) This section does not prohibit an affected county or an affected city from changing a land use designation or zoning ordinance to a less intensive use if the city or county concurrently changes the development standards, policies, and conditions applicable to other parcels within the jurisdiction to ensure that there is no net loss in residential capacity.

Senate Bill 35 (Streamlined Approval Process)

Approved by the governor on September 29, 2017, SB 35 requires approval of qualified housing projects based on objective, regulatory standards. If a housing project meets certain requirements, then, depending on the size of the project, the local government must identify any objective planning standards the project is not compliant with within 60 or 90 days. In addition, the local government must identify the basis for which the project is not compliant with the objective planning standards. If the local government fails to identify any non-compliant standard within the requisite 60 or 90 days, then the project is automatically determined to qualify with the local, objective planning standards.

Likewise, any design review or public oversight must be objective and focused only on reasonable design standards previously adopted and broadly applied by the local agency. The design review or public oversight must be completed within 90 or 180 days, depending on the size of the housing project. Notably, local agencies are not permitted to utilize public hearings.

In order to qualify for this streamlined approval, the project must be:

- A multifamily housing development (at least two residential units) in an urbanized area;
- Located where 75 percent of the perimeter of the site is developed;
- Zoned or designated by the general plan for residential or mixed use residential;
- In a location where the locality's share of regional housing needs have not been satisfied by building permits previously issued;
- One that includes affordable housing in accordance with SB 35 requirements;
- Consistent with the local government's objective zoning and design review standards; and
- Willing to pay construction workers the state-determined "prevailing wage."²

Assembly Bill 1233 (2005)

Assembly Bill (AB) 1233 amended the State Housing Law to promote the effective and timely implementation of local Housing Elements. If a jurisdiction fails to implement programs in its Housing Element to identify adequate sites or fails to adopt an adequate Housing Element, this bill requires local governments to zone or rezone adequate sites by the first year of the new planning period. The rezoning of sites is intended to address any portion of the RHNA allocation that was not met because a jurisdiction

² JDSUPRA. 2020. How California's SB 35 Can Be Used to Streamline Real Estate Development Projects. https://www.idsupra.com/legalnews/how-california-s-sb-35-can-be-used-to-75984/ (accessed September 2021).

failed to identify or make available adequate sites in the previous planning period. Where a local government failed to identify or make adequate sites available in the prior planning period, the jurisdiction must zone or rezone adequate sites to address the unaccommodated housing need within the first year of the new planning period. In addition to demonstrating adequate sites for the new planning period, the updated Housing Element must identify the unaccommodated housing need by income level. To determine the unaccommodated need, jurisdictions could take the following steps:

- Subtract the number of units approved or constructed (by income) since the beginning of the previous planning period's RHNA baseline date.
- Subtract the number of units that could be accommodated on any appropriately zoned sites specifically identified in the element adopted for the previous planning period (not counted above).
- Subtract the number of units accommodated on sites that have been rezoned for residential development pursuant to the site identification programs in the element adopted for the prior planning period.
- Subtract the number of units accommodated on sites rezoned for residential development independent of the sites rezoned in conjunction with the element's site identification programs as described above.

California's Sustainable Communities and Climate Protection Act (Senate Bill 375 (2008))

Senate Bill 375 aligns land use and transportation planning to drive development towards transit-accessible places and reduce car dependency. Senate Bill 375 is the land use component of California's wider strategy to reduce greenhouse gas (GHG) emissions, codified by the 2006 Global Warming Solutions Act (AB 32). Assembly Bill 32 enabled the State to regulate emissions sources and set the aggressive goal of reducing emissions to 1990 levels by 2020. Senate Bill 375 requires California Metropolitan Planning Organizations (MPO) to create a Sustainable Communities Strategy (SCS) as part of the federally mandated Regional Transportation Plan (RTP). SCSs lay out the locations and types of development needed to lower vehicle miles traveled and meet GHG emission reduction targets.

Senate Bill 375 affects California's housing planning and policy in three main ways. First, SB 375 requires the MPOs to develop a SCS, as part of their federally mandated RTP. The SCS must lay out plans for development patterns that would accommodate projected growth, while reducing vehicle miles traveled and thus GHG emissions. Second, SB 375 aligns the existing RHNA planning process with the SCS, in an effort to encourage local jurisdictions to plan for housing development consistent with the SCS. Third, SB 375 allows for streamlining of the CEQA review process for SCS-consistent development projects.

Alignment of Housing and Transportation Plans

Senate Bill 375 promotes consistency between RTP's and regional housing policy. It requires the RTP to plan for the RHNA, and the RHNA to be consistent with the RTP's projected development pattern. Senate Bill 375 also aligned the RHNA with the regional transportation planning process and created an eight-year planning period for cities within MPOs. Allocation of housing share to various cities and counties must be consistent with the SCS.

Implementation of Housing Element

Senate Bill 375 extended the time for a local government to review and revise Housing Elements (i.e., the RHNA planning process) from five years to eight years in certain areas within the State, including nonattainment regions covered by an MPO. Senate Bill 375 requires the development of an eight-year program that includes a schedule of actions, with timetables for each action, during the program period. If the local agency fails to submit a valid Housing Element, it is subject to a four-year review cycle.

Rezoning

If a community does not have enough sites to accommodate its housing need, it must adopt a program to make adequate sites available, including a program for rezoning sites to provide lower-income housing. Pre-SB 375, cities asserted they were only required to identify actions that would be undertaken to make sites available to accommodate various housing needs- they were not mandated to actually adopt the rezonings included in the Housing Element programs. However, Senate Bill 375 requires communities preparing an eight-year housing element to complete all required rezonings if the available housing sites inventory does not identify adequate sites to accommodate the RHNA allocation. All future housing development facilitated by the Housing Element Update (HEU) would be subject to the City's development review process, which may include review pursuant to CEQA, and required to comply with all applicable requirements concerning by-right development, for which the approval process establishes a rule-based development approval process that improves the ability of the housing market to create new housing in response to increased demand. CEQA review cannot be required unless a subdivision map is needed. The programmed rezonings must be completed within certain time frames.

Assembly Bill 1397

California AB 1397 made a number of changes to Housing Element law by revising what could be included in a jurisdiction's inventory of land suitable for residential development. Assembly Bill 1397 amended CGC §65583 and requires that housing element consist of an identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing. The housing element shall identify adequate sites for housing, including rental housing, factory-built housing, mobile homes, and emergency shelters, and shall make adequate provision for the existing and projected needs of all economic segments of the community. The element shall contain all of the following:

1. An analysis of population and employment trends and documentation of projections and a quantification of the locality's existing and projected housing needs for all income levels, including extremely low-income households, as defined in subdivision (b) of Section 50105 and Section 50106 of the Health and Safety Code. These existing and projected needs shall include the locality's share of the regional housing need in accordance with Section 65584. Local agencies shall calculate the subset of very low-income households allotted under Section 65584 that qualify as extremely low-income households. The local agency may either use available census data to calculate the percentage of very low-income households that qualify as extremely low-income households or presume that 50 percent of the very low-income households qualify as extremely low-income households. The number of extremely low-income households and very low-income

households shall equal the jurisdiction's allocation of very low-income households pursuant to Section 65584.

- 2. An analysis and documentation of household characteristics, including level of payment compared to ability to pay, housing characteristics, including overcrowding, and housing stock condition.
- 3. An inventory of land suitable and available for residential development, including vacant sites and sites having realistic and demonstrated potential for redevelopment during the planning period to meet the locality's housing need for a designated income level, and an analysis of the relationship of zoning and public facilities and services to these sites.
- 4. The identification of a zone or zones where emergency shelters are allowed as a permitted use without a conditional use or other discretionary permit. The identified zone or zones shall include sufficient capacity to accommodate the need for emergency shelter identified in paragraph (7), except that each local government shall identify a zone or zones that can accommodate at least one year-round emergency shelter. If the local government cannot identify a zone or zones with sufficient capacity, the local government shall include a program to amend its zoning ordinance to meet the requirements of this paragraph within one year of the adoption of the housing element. The local government may identify additional zones where emergency shelters are permitted with a conditional use permit. The local government shall also demonstrate that existing or proposed permit processing, development, and management standards are objective and encourage and facilitate the development of, or conversion to, emergency shelters

Senate Bill 166

Senate Bill 166 (2017) requires a city or county to ensure that its Housing Element inventory can accommodate its share of the regional housing need throughout the planning period. Senate Bill 166 prohibits a city, county, or city and county from permitting or causing its inventory of sites identified in the housing element to be insufficient to meet its remaining unmet share of the regional housing need for lower and moderate-income households. The bill also would expand the definition of "lower residential density" if the local jurisdiction has not adopted a housing element for the current planning period or the adopted housing element is not in substantial compliance, as specified. Senate Bill 166 also requires a city, county, or city and county to make specified written findings if the city, county, or city and county allows development of any parcel with fewer units by income category than identified in the housing element for that parcel. Where the approval of a development project results in fewer units by income category than identified in the housing element for that parcel and the remaining sites in the housing element are not adequate to accommodate the jurisdiction's share of the regional housing need by income level, the bill would require the jurisdiction within 180 days to identify and make available additional adequate sites. The bill would provide that an action that creates an obligation to identify or make available additional adequate sites and the action to identify or make available those sites would not create an obligation under the CEQA to identify, analyze, or mitigate the environmental impacts of that subsequent action, as specified.

California Relocation Assistance Act

The California Relocation Law, California Public Resources Code §7260 (b), requires the fair and equitable treatment of persons displaced as a direct result of programs or projects undertaken by a public entity. The law requires agencies to prepare a relocation plan, provide relocation payments, and identify substitute housing opportunities for any resident that is to be displaced by a public project.

Regional and Local

Southern California Association of Governments Regional Housing Needs Assessment

The Southern California Association of Governments (SCAG) is the regional planning agency for Orange, Imperial, Los Angeles, Riverside, San Bernardino, and Ventura counties. The SCAG serves as the regional Council of Government (COG) for southern California and is responsible for issuing the RHNA for the six counties and 191 cities within the region, including the City of Huntington Beach. Huntington Beach is a member agency of SCAG. SCAG is designated as a COG, a Regional Transportation Planning Agency and a MPO for the aforementioned counties. As the designated MPO, SCAG is responsible for preparing the RHNA for all jurisdictions within the SCAG region. For the 2021-2029 planning period (6th Cycle), the City was allocated a total of 13,368 housing units, including 3,661 for very low-income, 2,184 for low-income, 2,308 for moderate-income, and 5,215 for above-moderate income households.

The purpose of the RHNA is to plan for population growth, such that the region and subregion will collectively produce sufficient housing to meet population needs and address social equity, with each jurisdiction providing its fair share of housing needs. The RHNA identifies the housing needs for very low income, low income, moderate income, and above moderate-income groups. The RHNA does not necessarily encourage or promote growth, but rather allows communities to anticipate projected growth and address existing need, so that they can grow in ways that enhance quality of life, improve access to jobs, transportation, and housing, and not adversely impact the environment.

As part of the RHNA process, SCAG must develop a final RHNA methodology, which is used to determine each jurisdiction's RHNA as a share of the regional determination. In prior cycles, factors such as household growth and household income distribution were the primary factors considered in determining a jurisdiction's RHNA. For the 6th Cycle RHNA, SCAG considered other factors in addition to household growth. These factors included transit accessibility, job accessibility, and indicators that influence a community's environmental, educational, and economic resource accessibility.

The final 6th Cycle RHNA for all jurisdictions within the SCAG region was adopted by the SCAG Regional Council on March 4, 2021. This allocation identifies housing needs for the planning period between January 2021 and October 2029. As described in **Section 3.0: Project Description**, based on SCAG's adopted RHNA allocation, the City's 6th Cycle RHNA is 13,368 dwelling units. As part of the Project (i.e., Housing Element Update), the City must demonstrate to the state that it has the policies and regulations in place as well as zoned land capacity to meet its targeted RHNA.

SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

As the regional planning agency for the Southern California region, SCAG is responsible for maintaining a continuing, cooperative, and comprehensive transportation planning process, which involves the preparation and updating of a RTP every four years. SCAG is also responsible for preparing, adopting, and updating every four years the SCS pursuant to CGC §65080. The SCS is a component of the RTP document that demonstrates how the region will meet its GHG reduction targets as determined by the California Air Resources Board (CARB).

On September 3, 2020, SCAG's Regional Council adopted the 2020-2045 RTP/SCS (Connect SoCal). SCAG's Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Further, the 2020-2045 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards. Connect SoCal includes a regional growth forecast that was developed by working with local jurisdictions using the most recent land use plans, policies, and assumptions. Connect SoCal's growth projects are utilized by SCAG for regional modeling purposes and were not adopted as part of Connect SoCal. The growth forecasts do not affect a local jurisdiction's authority or decision on future development projects or plans. When adopting Connect SoCal, SCAG recognized that cities and counties will foreseeably update their housing elements as part of General Plans and amend zoning designations to accommodate the 6th Cycle RHNA. For many cities and counties, SCAG acknowledged that the required RHNA and Housing Element may need to accommodate more housing units than reflected in the Connect SoCal's household and population growth projections for the jurisdictions.

City of Huntington Beach General Plan

Housing Element³

The current (5th Cycle) Housing Element goals and policies are available for review on the City's website at: https://www.huntingtonbeachca.gov/files/users/planning/Housing-Element-(2020).pdf

As discussed in detail in **Section 3.0: Project Description**, the proposed Project (6th Cycle HEU) is a comprehensive update to the 5th Cycle Housing Element, thus, the 5th Cycle goals and policies were superseded. The HEU policy plan (exclusive of the HEU Implementation Program analyzed in this Subsequent Environmental Impact Report [SEIR]) was previously evaluated under CEQA and determined to be exempt.⁴

City of Huntington Beach Zoning and Subdivision Ordinance

Section 230.26 Affordable Housing Regulations

The City's Affordable Housing Regulations (Huntington Beach Municipal Code [HBMC] §230.26) implement the goals and policies of the City's Housing Element. Huntington Beach Municipal Code

³ City of Huntington Beach. 2020. *Housing Element*. https://www.huntingtonbeachca.gov/files/users/planning/Housing-Element-(2020).pdf (accessed December 2021).

⁴ Notice of Exemption 2022060241. June 13, 2022.

§230.26 requires all housing projects with three or more units to provide a minimum of 10 percent affordable units. The units must be deed restricted as affordable for households with very low, low, or moderate incomes. The section also allows ownership residential projects proposing any number of units or rental residential projects proposing 100 or fewer units to pay a fee in lieu of providing the units on- or off-site. These regulations are used by the city to meet its commitment to providing housing that is affordable to all economic sectors, and to meet its regional fair-share requirements for construction of affordable housing.

5.10.3 Existing Environmental Setting

As discussed in detail in Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162, this a SEIR to the GPU PEIR. The 6th Cycle HEU Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. Population growth, employment, and GPU PEIR described in detail in Section 4.11.1 housing are (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08_04_17.pdf).

Key regional and City population, housing, and economic conditions are summarized below to set the context for environmental analyses. Refer to Draft Housing Element Update Section 2, Community Profile, for an in-depth discussion of population, employment, economics, and household characteristics considered during the Housing Element update process.

SCAG's Connect SoCal includes regional growth forecasts developed by working with local jurisdictions using the most recent land use plans, policies, and assumptions. SCAG uses existing census, historical trends, and expert-derived demographic and economic assumptions to determine its growth forecasts through the 2045 horizon year. SCAG specifically provides county population, household, and employment growth forecasts for 2016, 2020, 2030, 2035, and 2045, and City population, household, and employment growth forecasts for 2016 and 2045. The HEU implementation program evaluated in this SEIR addresses a planning period horizon of 2029. Therefore, this section provides SCAG's 2030 forecasts because they are most relevant to the Project's 2029 planning period horizon. Similarly, the General Plan addresses the City's buildout in 2040. Therefore, this section also provides SCAG's 2045 forecasts because they are most relevant to the City's 2040 buildout horizon.

Population

County of Orange

Table 5.10-1: Existing and Forecast Population – Orange County, presents population estimates and forecasts for Orange County based on California Department of Finance (DOF) and SCAG data. As identified in **Table 5.10-1**, the County's estimated 2021 population was 3,153,764 persons. The County's population is forecast to increase to 3,441,000 persons by 2030, resulting in 9.1 percent population growth between 2021 and 2030.

Table 5.10-1: Existing and Forecast Population – Orange County

Description	Persons
2016 Estimate ¹	3,160,401
2021 Estimate/Existing ¹	3,153,764
Change 2016:2021	-6,637
% Change 2016:2021	-0.21%
2030 SCAG Forecast ²	3,441,000
Change 2021:2030	+287,236
% Change 2021:2030	+9.1%
2045 SCAG Forecast ²	3,535,000
Change 2021:2045	+381,236
% Change 2021:2045	+12%

Sources:

City of Huntington Beach

Table 5.10-2: Existing and Forecast Population – City of Huntington Beach, identifies the City's population estimates and forecasts based on available DOF and SCAG data, respectively. As indicated in **Table 5.10-2**, the City's estimated existing 2021 population is 196,874 persons. The City's 2021 population represents approximately 6.2 percent of the County's 2021 population of 3,153,764 persons. The City experienced a population decrease of approximately 1.2 percent between 2016 and 2021, which was slightly greater than the County's population decrease for the same period of 0.21 percent.

As also indicated in **Table 5.10-2**, the GPU forecasts the City's buildout 2040 population will total 211,051 persons, which would represent a population growth rate of approximately 7.2 percent between 2021 and buildout in 2040. For the 2045 horizon year, SCAG forecasts the City's population will increase to approximately 205,300 persons, or 4.3 percent over the existing 2021 population of 196,874 persons.

Table 5.10-2: Existing and Forecast Population – City of Huntington Beach

Description	Persons
2016 Estimate ¹	199,224
2021 Estimate/Existing ¹	196,874
Change 2016:2021	-2,350
% Change 2016:2021	-1.2%
2030 SCAG Forecast ²	Not Available
Change 2021:2030	
% Change 2021:2030	
2040 General Plan Buildout Forecast ²	211,051
Change 2021:2040	+14,177
% Change 2021:2040	+7.2%
2045 SCAG Forecast ²	205,300
Change 2021: 2045	+8,426
% Change 2021:2045	+4.3%

^{1.} State of California, Department of Finance, *E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark*. Sacramento, California, May 2021. https://dof.ca.gov/forecasting/Demographics/estimates/estimates-e5-2010-2021/.

^{2.} SCAG. 2020. SCAG RTP/SCS: Connect SoCal Plan – Demographics and Growth Forecast. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal demographics-and-growth-forecast.pdf?1606001579.

Description Persons

Notes:

- 1. State of California, Department of Finance, E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark. Sacramento, California, May 2021. https://dof.ca.gov/forecasting/Demographics/estimates/estimates-e5-2010-2021/.
- SCAG. 2020. SCAG RTP/SCS: Connect SoCal Plan Demographics and Growth Forecast. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579.

Housing

County of Orange

Table 5.10-3: Existing and Forecast Housing Characteristics – Orange County, presents data on the County's past and present housing supply. As indicated in **Table 5.10-3**, the County's 2021 housing stock totals 1,118,971 dwelling units. With a vacancy rate of 5.4 percent, the County's 2021 households (occupied dwelling units) totaled 1,058,090 and had an average of 2.94 persons per household. SCAG forecasts the County's households will increase to 1,104,000 by 2030, representing a 4.3 percent increase over the 2021 existing 1,058,090 households.

Table 5.10-3: Existing and Forecast Housing Characteristics - Orange County

Description	Dwelling Units	Vacancy Rate	Households (Occupied Dwelling Units)	Persons per Household (Average)
2016 Estimate ¹	1,076,199	5.5%	1,017,539	3.06
2021 Estimate/Existing ¹	1,118,971	5.4%	1,058,090	2.94
Change 2016:2021	+42,772		+40,551	
% Change 2016:2021	+4.0%		+4.0%	
2030 SCAG Forecast ²	Not Available (NA)	NA	1,104,000	NA
Change 2021:2030			+45,910	
% Change 2021:2030			+4.3%	
2045 SCAG Forecast ²	NA	NA	1,154,000	NA
Change 2021:2045			+95,910	
% Change 2021:2045			+9.1%	

Notes:

City of Huntington Beach

Table 5.10-4: Existing and Forecast Housing, presents data on the City's past and present housing supply. As noted in **Table 5.10-4**, the City's estimated existing 2021 housing stock totals 82,620 dwelling units. With a vacancy rate of 5.5 percent, the City's 2021 households (occupied dwelling units) totaled 78,046 dwelling units and had an average of 2.51 persons per households. Comparatively, the City's existing vacancy rate of 5.5 percent is similar to the County's vacancy rate of 5.4 percent. However, the City's average household size of 2.51 persons per household is slightly lower than the County's average household size of 2.94 persons per household. As indicated in **Table 5.10-4**, the City's housing stock grew approximately 2.2 percent (1,783 dwelling units) between 2016 and 2021. The City's 2021 housing supply

^{1.} State of California, Department of Finance, *E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark*. Sacramento, California, May 2021. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/.

SCAG. 2020. SCAG RTP/SCS: Connect SoCal Plan – Demographics and Growth Forecast. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579.

represents approximately 7.0 percent of the County's 2021 housing supply of 1,118,971 dwelling units. Single-family dwelling units represent a majority of the City's housing supply, comprising approximately 59 percent of all dwelling units.

As also indicated in **Table 5.10-4**, the GPU forecasts the City's buildout housing supply will total 85,403 dwelling units, which would represent a growth rate of approximately 3.3 percent (an additional 2,783 dwelling units) between 2021 and buildout in 2040. For the 2045 horizon year, SCAG forecasts the City's households (occupied dwelling units) will total 80,300, representing a 2.8 percent increase (2,254 additional households), as compared to the existing 2021 households. It is noted, there is no direct comparison between the GPU's forecast dwelling units and SCAG's forecast households. This is because SCAG forecasts factor group housing and vacancy rates in their methodology.

Table 5.10-4: Existing and Forecast Housing Characteristics - City of Huntington Beach

Description	Dwelling Units	Vacancy Rate	Households (Occupied Dwelling Units)	Persons per Household (Average)
2016 Estimate ¹	80,837	5.5%	76,402	2.60
2021 Estimate/Existing ¹	82,620	5.5%	78,046	2.51
Change 2016:2021	+1,783		+1,644	
% Change 2016:2021	+2.2%		+2.15%	
2040 Forecast General Plan Buildout ²	85,403	NA	NA	NA
Change 2021:2040	+2,783			
% Change 2021:2040	+3.3%			
2045 SCAG Forecast ³			80,300	NA
Change 2021:2045			+2,254	
% Change 2021:2045			+2.8%	

Notes:

Candidate Housing Sites

As shown in **Table 5.10-5: Existing Housing - Candidate Housing Sites**, there are two candidate sites (Sites 6 and 86) that are occupied with a total of 312 dwelling units.

Table 5.10-5: Existing Housing on Candidate Housing Sites

APN¹	Address	Existing Dwelling Units	Acres	
165-081-08	17111 Goldenwest Street	311	14.05	
86 142-082-02 7952 Aldrich Drive		1	0.06	
Total 312 14.11				
Notes:				
,	165-081-08 142-082-02	165-081-08 17111 Goldenwest Street 142-082-02 7952 Aldrich Drive	Address Dwelling Units 165-081-08	

^{1.} State of California, Department of Finance, *E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark*. Sacramento, California, May 2021. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/.

SCAG. 2020. SCAG RTP/SCS: Connect SoCal Plan – Demographics and Growth Forecast. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal demographics-and-growth-forecast.pdf?1606001579.

^{3.} City of Huntington Beach. 2017. General Plan Update, Volume II, Draft Environmental Impact Report. https://www.huntingtonbeachca.gov/files/users/planning/Volume-II-Draft-Environmental-Impact-Report.pdf.

Employment

County of Orange

The State Employment Development Department (EDD) reports the County's labor force, based on the Annual Average for 2021, totaled 1,553,900. Of the County's labor force, 92,700 persons were unemployed representing an unemployment rate of 6.0 percent. **Table 5.10-6, Existing and Forecast Employment – County**, provides the County's existing and forecast employment. As shown in **Table 5.10-6**, the County's 2021 employment totaled 1,461,200 jobs. SCAG forecasts the County's employment will increase to 1,886,000 jobs by 2030, representing a 29 percent increase in jobs between 2021 and 2030.

Table 5.10-6: Existing and Forecast Employment - County

Description		Jobs	
2021 Estimate/Existing ¹		1,461,200	
2030 Forecast ²		1,886,000	
	Change 2021: 2030	+424,800	
	% Change 2021:2030	+29.0%	
2045 Forecast ²		1,980,000	
	Change 2021: 2045	+518,800	
	% Change 2021:2045	+35.5%	

Notes:

Typically, a jobs-to-housing ratio of 1.5 represents a healthy balance; ratios higher than 1.5 indicate that there may be more workers commuting into the area because of a jobs surplus. Based on 1,461,200 existing jobs and 1,118,971 existing housing units, the County's existing jobs-to-housing ratio is approximately 1.3. This indicates approximately 1.3 jobs are available for every housing unit in the County. Accordingly, the County's jobs-to-housing ratio suggests suitable housing is not available in the County to accommodate the County's workforce.

City of Huntington Beach

The State EDD reports the City's annual average employment totaled 97,700 jobs.⁵ Of the City's 2021 population of 196,874 persons, 97,700 persons were employed and 6,000 persons in the labor force were unemployed, representing an unemployment rate of approximately 5.8 percent. Comparatively, the City's existing 2021 unemployment rate is lower than the County's unemployment rate of 6.0 percent.

As also indicated in **Table 5.10-7 Existing and Forecast Employment - City**, the GPU forecasts the City's employment will total 93,165 jobs at buildout (2030), representing a 4.6 percent decrease in jobs that currently exist in the City. Given that SCAG forecasts are based on General Plan data, SCAG's employment forecast for the City (90,800 jobs) is also expected to decrease (7.1 percent or 6,900 fewer jobs) by 2045.

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^{1.} State of California, Employment Development Department. March 2022. https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html#Data.

^{2.} SCAG. 2020. SCAG RTP/SCS: Connect SoCal Plan – Demographics and Growth Forecast. https://scaa.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-arowth-forecast.pdf?1606001579.

⁵ State of California, Employment Development Department. (March 2022). Monthly Labor Force and Unemployment Rate for Cities and Census Designated Places – Annual Average 2021. Retrieved from https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html#Data. Accessed May 2022.

Description **Jobs** 2021 Estimate/Existing¹ 97,700 2030 SCAG Forecast² Not Available (NA) Change 2021:2030 % Change 2021:2030 2040 Forecast General Plan Buildout² 93,165 -4,535 Change 2021:2040 % Change 2021:2040 -4.6% 2045 SCAG Forecast³ 90,800 -6,900 Change 2021:2045 % Change 2021:2045 -7.1%

Table 5.10-7: Existing and Forecast Employment - City

Notes:

- 1. State of California, Employment Development Department. March 2022. Monthly Labor Force and Unemployment Rate for Cities and Census Designated Places Annual Average 2021. Retrieved from https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html#Data
- 2. SCAG. 2020. SCAG RTP/SCS: Connect SoCal Plan Demographics and Growth Forecast. https://scaq.ca.gov/sites/main/files/file-attachments/0903fconnectsocal demographics-and-growth-forecast.pdf?1606001579.
- City of Huntington Beach. 2017. General Plan Update, Volume II, Draft Environmental Impact Report. https://www.huntingtonbeachca.gov/files/users/planning/Volume-II-Draft-Environmental-Impact-Report.pdf.

Based on 97,700 existing 2021 jobs and 82,620 dwelling units, the City's existing job-to-housing ratio is approximately 1.2. This indicates approximately 1.2 jobs are available for every housing unit in the City. Accordingly, the City's jobs-to-housing ratio suggests suitable housing is not available in the City to accommodate the City's workforce.

5.10.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning population and housing. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extensions of roads or other infrastructure)?
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

5.10.5 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds, as described above, in determining whether the Project, including future development facilitated by the Project, would result in a substantial temporary or permanent impact on the City's population. The evaluation was based on a review of regulations and determining their applicability to the Project. Population and housing information was acquired through review of relevant documents. The baseline conditions and impact analyses are based on analysis of aerial photographs and review of various data available in public records, including local planning documents. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning population growth considers the relevant federal, state, regional, and local (i.e., GPU and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

5.10.6 Project Impacts and Mitigation

Impact POP-1

Would the Project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.11-4)

The GPU PEIR indicated that General Plan buildout would not significantly induce substantial unplanned population. The GPU PEIR proposed a maximum of 7,228 additional dwelling units and 5,384,920 square feet of non-residential uses by buildout in 2040. Thus, the General Plan would allow for 85,403 dwelling units within the City by 2040. The GPU PEIR concluded that the increase in housing would exceed SCAG's projection of 80,300 households by 2045. However, the GPU PEIR also concluded there is no direct comparison between the number of dwelling units that were proposed by the GPU PEIR and the number of households, as determined by SCAG. This is due to SCAG's 2040 household projections factor group housing and vacancy rates in their forecast methodology. Thus, the worst-case exceedance of 4,203 dwelling units would not constitute a significant adverse environmental impact. Furthermore, the GPU allowed for fewer dwelling units than the previous 1996 General Plan, which SCAG factored into their own forecast. Furthermore, the GPU took the Huntington Beach Zoning and Subdivision Ordinance RHNA and zoning regulations into consideration and determined that implementation of the City's General Plan would ensure a sufficient supply of housing for the City's residents.

The GPU PEIR concluded that General Plan implementation would result in greater employment opportunities within the City with the incorporation of the Research and Technology land use designation, as well as the enhancement of commercial centers. Although the GPU included changes to the land use plan and goals and policies to stimulate economic and employment growth, the buildout of housing allowed under the General Plan was a conservative estimate and would be able to accommodate an increase in population due to increases in businesses and employment.

The GPU PEIR concluded that although General Plan implementation would exceed SCAG's population and housing forecasts, the updates to the City's land uses and densities would accommodate the growth projected by SCAG. Further, as the previous (1996) General Plan was considered in the 2016 RTP/SCS and would anticipate a higher population growth than that under the General Plan, it was assumed that growth under the General Plan would not be inconsistent with the 2016 RTP/SCS. Therefore, the GPU PEIR concluded that General Plan implementation would result in a less than significant impact concerning inducing population growth, either directly through new housing and businesses or indirectly such as through the extension of roads or infrastructure.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

The Project would not induce unplanned population growth in the City, either directly by proposing new businesses, or indirectly through extension of roads or other infrastructure. As the City is built-out, it is anticipated that future housing development facilitated by the Project would be adequately served by fire, police, and other services, and located near established infrastructure (e.g., roads and utilities), with only minor modifications required; see also **Section 5.11: Public Services**, and **Section 5.15: Utilities and Service Systems**. Further, implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons. However, because the Project would facilitate development of up to 11,743 dwelling units (when considering projects that are currently in the pipeline) to meet the City's unmet RHNA, the Project would indirectly induce population growth in the City, as discussed below; see also **Section 3.0: Project Description** for a detailed discussion of the Project's characteristics.

As discussed in Section 3.0, the Project includes an update to the City's Housing Element map of candidate housing sites to reflect properties that could accommodate future housing development. In total, the HEU identifies 378 candidate housing sites (approximately 419 acres), which are detailed in Appendix B: Candidate Housing Sites Inventory. The Project area and candidate housing site locations are illustrated on Exhibit 1-1. In addition to the identified candidate housing sites, future development of accessory dwelling units could occur on residential sites throughout the City and would not be limited to the candidate housing sites. Recognizing that not all candidate housing sites will ultimately be included in the HEU, the 378 candidate housing sites addressed in the SEIR account for a 60 percent buffer (an additional 7,995 dwelling units), which is intended to serve as a sites contingency that may be considered after HEU certification to address future "no net loss," if it becomes necessary to identify a replacement site during the 6th Cycle. As shown in Table 3-6: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units), of the 378 candidate housing sites, the HEU identifies the following:

- 3 sites with opportunities for rezoning to achieve a development capacity of approximately 428 dwelling units,
- 372 sites proposed for a housing overlay to achieve a development capacity of approximately 18,329 dwelling units, and
- 3 sites proposed for hotel/motel conversion to residential uses to achieve a development capacity of approximately 416 dwelling units.

As shown in **Table 3-6**, the City's total potential development capacity for all candidate housing sites, in addition to the 565 accessory dwelling units that could be developed during the 2021-2029 planning period, is approximately 19,738 dwelling units. This would exceed the City's unmet RHNA of 11,743 dwelling units by approximately 7,995 dwelling units (or approximately 60 percent). It is noted, while this SEIR considers potential housing development on all 378 candidate housing sites, which have a development capacity 19,173 dwelling units, as well 565 accessory dwelling units throughout the City, only 11,743 additional dwelling units would be required to meet the City's RHNA. Because the 60 percent buffer (additional 7,995 dwelling units) is intended to serve only as a sites contingency, the Project is evaluated below for its potential to induce substantial unplanned population growth in the City based on 11,743 dwelling units, the City's unmet RHNA.

Existing Plus Project Conditions

Table 5.10-8: Existing Plus Project Growth Projections, compares the Project's anticipated housing and population growth to existing 2021 conditions. As indicated in **Table 5.10-8**, future residential development facilitated by the Project is anticipated to increase the City's existing 2021 housing stock by approximately 14 percent (11,743 additional dwelling units). This estimated housing growth is anticipated to increase the City's existing 2021 population by approximately 15 percent (29,475 additional persons).

Table 5.10-8: Existing Plus Project Growth Projections

Description	Housing (Dwelling Units) ¹	Population (Persons)
2021 Estimate/Existing ¹	82,620	196,874
2029 Estimated Project (HEU)	11,743³	29,475 ⁴
2021 Existing Plus Project	94,363	226,349
% Change 2021:2029	+14%	+15%

Notes:

- 1. State of California, Department of Finance, *E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark*. Sacramento, California, May 2021. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/.
- 2. Table 3-6: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units).
- 3. Based on 11,743 dwelling units and 2.51 persons per household (State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State January 1, 2011-2021*. Sacramento, California, May 2021).

General Plan Plus Project Conditions

To meet the City's RHNA, the HEU identifies candidate housing sites with opportunities for rezoning, with additional sites proposed for a housing overlay. For consistency with the proposed zoning and overlays, amendments to the GPU land use designations would be required. The GPU, which was adopted in October 2017, contains population and housing forecasts for City buildout in 2040; see **Table 5.10-9**: **General Plan Plus Project Growth Projections**. **Table 5.10-9** also provides the City's population and housing forecasts for 2030, which were extrapolated from the City's 2040 forecasts. Furthermore, the HEU implementation program evaluated in this SEIR addresses a planning period horizon of 2029. Therefore, General Plan forecasts extrapolated to 2030 are provided because they are most relevant to the Project's 2029 planning period horizon.

As indicated in **Table 5.10-9**, the City's forecast 2030 housing and population would be approximately 95,677 dwelling units and 233,063 persons, respectively, with Project implementation. Comparatively, future housing facilitated by the Project would result in housing and population growth of approximately 14 percent and 14.4 percent, respectively, over extrapolated General Plan 2030 forecasts without Project implementation. Project implementation would facilitate future housing development, and thus indirectly induce population growth in the City, beyond the General Plan 2030 extrapolated forecast population of 203,588 persons.

Housing **Population** Description (Dwelling Units)1 (Persons) 2021 Estimate/Existing¹ 82,620 196,874 2040 Forecast General Plan Buildout² 85,403 211,051 Change 2021:2040 +2,783 +14,177 Change per Year 2021:2040³ 746 146 % Change 2021:2040 +3.3% +7.2% 2030 Extrapolated Forecast General Plan⁴ 83,934 203,588 Change 2021:20304 +1,296 +6,714 % Change 2021:2030 +1.2% +3.4% 2029 Estimated Project (HEU) 11,7435 29,475⁶ 2030 Extrapolated General Plan Plus Project 95,677 233,063 2030 Extrapolated General Plan Plus Project % +14% +14.4% Difference 2040 General Plan Plus Project 97,146 240,526

Table 5.10-9: General Plan Plus Project Growth Projections

Notes:

- 1. State of California, Department of Finance, *E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark*. Sacramento, California, May 2021. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/.
- City of Huntington Beach. 2017. City of Huntington Beach General Plan.
 https://www.huntinatonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf
 (accessed January 2022). See
 Table LU-2: General Plan Development Capacity for buildout dwelling units and discussion on page 4-8 for buildout population.
- 3. Based on constant growth rates for 19 years between 2021 and 2040.
- 4. Based on constant growth rates for 9 years between 2021 and 2030.
- 5. Table 3-6: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units).
- 6. Based on 11,743 dwelling units and 2.51 persons per household (State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State January 1, 2011-2021.* Sacramento, California, May 2021).

SCAG Forecasts Plus Project Conditions

SCAG's Connect SoCal includes regional growth forecasts that were developed by working with local jurisdictions such as Huntington Beach using the most recent land use plans, policies, and assumptions. Thus, SCAG's population, household, and employment growth forecasts for the City were based on the City's adopted General Plan. **Table 5.10-10: SCAG Plus Project Growth Projections**, provides SCAG's 2045 population and household forecasts for the City, as well as extrapolated dwelling units. **Table 5.10-10** also provides 2030 population, household, and dwelling units for 2030, which were extrapolated from the City's 2040 forecasts. SCAG forecasts extrapolated to 2030 are provided because they are most relevant to the Project's 2029 planning period horizon.

Using the annual growth rates from 2021 to 2045, the City's population and households are forecast to be 200,033 persons and 78,892 households in 2030, respectively. As also indicated in **Table 5.10-10**, the City's population and households in 2030 would total approximately 229,679 persons and 90,634 households, respectively, with Project implementation. Comparatively, future housing facilitated by the Project would result in population and household growth of approximately 15 percent, over extrapolated SCAG 2030 forecasts. Project implementation would facilitate future housing development, thus, inducing indirect population growth in the City beyond the extrapolated SCAG 2030 forecast population of 200,034 persons.

Dwelling Households (Occupied **Population** Description Units **Dwelling Units)** (Persons) 2021 Estimate/Existing¹ 82,620 78,046 196,874 2045 SCAG² Not Available 80,300 205,300 Change 2021:2045 +2,254 +8,426 94 351 Change per Year 2021:2045³ % Change 2021:2045 +3% +4% 2030 Extrapolated SCAG Forecast⁴ 83,230⁵ 200,033 78,892 Change 2021:20304 +610 +846 +3,159 % Change 2021:2030 +1% +1% +2% 2029 Estimated Project (HEU) 11,743⁶ 11,743⁶ 29,475⁷ 94,973 229,679 90,634 2030 Extrapolated SCAG Forecast Plus Project +15% 2030 Extrapolated SCAG Forecast Plus Project % +15% +15% +14% Difference

Table 5.10-10: SCAG Plus Project Growth Projections

Notes:

- 1. State of California, Department of Finance, *E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark*. Sacramento, California, May 2021. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/.
- SCAG. 2020. SCAG RTP/SCS: Connect SoCal Plan Demographics and Growth Forecast. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal demographics-and-growth-forecast.pdf?1606001579.
- 3. Based on constant growth rates for 19 years between 2021 and 2040.
- 4. These estimates were extrapolated based on constant annual growth rates of 94 households and 351 persons (see also Note #3 above) for the 9 years between 2021 and 2030.
- 5. Extrapolated based on City's 2021 vacancy rate of 5.5 percent (DOF) and 80,300 households.
- 6. Table 3-6: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units).
- 7. Based on 11,743 dwelling units and 2.51 persons per household (State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State January 1, 2011-2021.* Sacramento, California, May 2021).

Conclusion

As discussed above, Project implementation would facilitate future housing development, inducing indirect population growth in the City beyond 2021 existing conditions and extrapolated 2030 General Plan and SCAG forecast conditions. However, State law requires that the City accommodate their RHNA "fair share" of the region's housing needs, which cannot be achieved without the Project's proposed rezoning/land use amendments. Thus, while the Project would facilitate the development of additional housing throughout the City, resulting in a forecast population growth of approximately 29,475 persons, this forecast population growth would be attributed to accommodating the City's remaining RHNA allocation of 11,743 dwelling units, as required by State law. Thus, although the Project would indirectly induce substantial population growth in the City, it is not considered unplanned given State law requirements. It is also important to note the following factors concerning the Project's forecast population growth:

- Future housing development would occur incrementally through 2029, based on market conditions and other factors, such that potential effects concerning population growth (i.e., utilities, fire, police, and other services and infrastructure) would not occur at any single point in time.
- All future housing developments facilitated by the Project and subject to rezoning and within
 overlay zones would be subject to compliance with all federal, State, and local requirements for
 minimizing growth-related impacts, including the City's development review process, which
 would occur on a project-by-project basis.

 The Project's forecast population growth may not be directly correlated with the additional housing since most of the anticipated new housing is needed to alleviate current overcrowding of existing housing.

Growth assumptions included in the HEU represent a theoretical development capacity (based on the City's RHNA allocation as determined by SCAG), which, consistent with the Housing Element planning period, is estimated to occur by 2029. Thus, while the Project's anticipated additional housing is 11,743 dwelling units, it is unlikely that the anticipated development would occur within the Project's 2029 planning horizon. The Project's intent is to provide the capacity (i.e., through modifications to existing land use designations and zoning) for the housing market to adequately address housing needs for all income groups, rather than generating the full development capacity housing within the planning cycle in order to meet the City's assigned RHNA allocation. The Project further directs the development capacity to occur where planned growth is best suited to occur. Therefore, this Project assumed buildout of all 11,743 dwelling units by 2029 to provide a conservative analysis (i.e., a "worst-case" scenario environmentally) of potential environmental impacts associated with Project implementation.

According to the GPU PEIR, a contributing factor to the City's low jobs/housing ratio is due to the large percentage of commuter employees, as only 19 percent of employed people lived within the City. Job availability for the City's residents would be improved with the increase in affordable housing units, which would provide housing opportunities near jobs for those employed within the City that meet these household income categories, including but limited to those working in local retail/commercial service businesses, hotels, industrial business, and public occupations. Therefore, job availability would not be readily affected by Project implementation and would not lead to unexpected population growth.

As stated above, future housing development would be subject to development review process and be assessed on a case-by-case basis for potential effects concerning population growth. Additionally, future housing development would be subject to compliance with all federal, State, and local requirements for minimizing growth-related impacts. Upon approval of the proposed discretionary actions (e.g., the proposed zoning and overlays), future housing development facilitated by the Project would be considered planned development and help the City meet its RHNA allocation. Therefore, impacts would be less than significant.

GENERAL PLAN POLICIES

As discussed in detail in **Section 3.0: Project Description**, the proposed Project (6th Cycle HEU) is a comprehensive update to the 5th Cycle Housing Element, thus, the 5th Cycle goals and policies were superseded. The HEU policy plan (i.e., 6th Cycle HEU) goals and policies are available for review on the City's website at:

https://www.huntingtonbeachca.gov/housing-element-update/

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

Impact POP-2

Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.11-3)

The GPU PEIR concluded that General Plan buildout would not displace a substantial number of people or housing. The majority of land use changes occurred within areas identifies as "transforming, including the Northwest Industrial District and the Gothard Corridor, as these areas are currently underutilized and underdeveloped. The intent of the added "Research and Technology" land use designation in these areas in order to attract new businesses in emerging high-tech industry into the city, as well as provide a transitional land use between existing heavy industry and residential land uses. As a result, General Plan implementation changed heavy industrial and vacant land uses to the Research and Technology land use designation within the Northwest Industrial District and the Gothard Corridor. This would not change or displace existing residential land uses. In addition, the General Plan did not directly propose new development or constriction that would displace existing housing or residents. Therefore, the GPU PEIR concluded that impacts concerning displacement of existing people or housing would be less than significant would occur.

The additions/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Of the 378 candidate housing sites, only two (Sites 6 and 86) are occupied with existing housing (312 dwelling units). Should these candidate housing sites redevelop in the future, 312 dwelling units and approximately 783 persons would be displaced. However, the Project proposes to rezone these to Housing Overlay 70 and SP14 – 20% Affordable Overlay, resulting in a forecast development capacity of 474 dwelling units, or a net increase of approximately 162 dwelling units over existing conditions; see Table 5.10-11: Displaced Housing.

Table 5.10-11: Displaced Housing

Site No.	APN	Address	Existing Dwelling Units	Dwelling Unit Development Potential	Project Net Dwelling Units
6	165-081-08	17111 Goldenwest Street	311	473	162
86	142-082-02	7952 Aldrich Drive	1	1	0
Total			312	474	162
APN = Assessor Parcel Number					

Therefore, although the Project would displace existing housing and people, the Project would facilitate development of replacement housing on Sites 6 and 86, resulting in a net increase of 162 dwelling units

to meet the 11,743-dwelling unit RHNA. Any residents displaced by future development facilitated by the Project would receive assistance pursuant to the California Relocation Assistance Act, which includes assistance finding housing, moving cost assistance, and additional payments for certain other costs incurred which would minimize potential impacts from displacement. Additionally, there were approximately 4,574 vacant housing units in the City in 2021,⁶ which indicates there would be available options for displaced persons to relocate elsewhere in the City.

Project buildout would be not conflict with SB 166, which prohibits a city or county from reducing, requiring, or permitting the reduction of the residential density to a lower residential density below what was utilized by the California HCD in determining compliance with the Housing Element law. The Project's inventory of candidate housing sites would be sufficient to accommodate the City's RHNA allocation, and therefore, a no net loss of residential unit capacity would occur. The HEU/6th Cycle policy plan included various policies to facilitate housing development, which supersede the 5th Cycle policies and are being implemented through the HEU Implementation Program analyzed in this SEIR. The Project, which is the HEU's Implementation Program, would be in furtherance of the updated 6th Cycle HEU policies.

Although future development facilitated by the Project would displace people and housing on Sites 6 and 86, the Project would result in a net increase of 11,743 dwelling units. Therefore, impacts would be less than significant.

GENERAL PLAN POLICIES

As discussed in detail in **Section 3.0: Project Description**, the proposed Project (6th Cycle HEU) is a comprehensive update to the 5th Cycle Housing Element, thus, the 5th Cycle goals and policies were superseded. The HEU policy plan (i.e., 6th Cycle HEU) goals and policies are available for review on the City's website at:

https://www.huntingtonbeachca.gov/housing-element-update/

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

5.10.7 Cumulative Impacts

For purposes of the population and housing impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout. As concluded above, the Project would provide for a planned increase in housing capacity to meet the City's RHNA allocation. Although the Project does not propose any housing development, it would facilitate future housing

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State of California, Department of Finance, E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark. Sacramento, California, May 2021. https://dof.ca.gov/forecasting/Demographics/estimates-e5-2010-2021/.

development on the candidate housing sites through the year of 2029. Future housing development facilitated by the Project, when combined with cumulative development pursuant to the General Plan, would result in 97,137 dwelling units in the City, with a resultant population of approximately 240,526 persons by 2040. Future development throughout the City and development on candidate housing sites subject to rezoning and within overlay zones would be subject to environmental review on a project-by-project basis pursuant to CEQA to evaluate potential impacts concerning recreational facilities. Additionally, cumulative development would be subject to compliance with the established federal, State, and local regulatory framework concerning population growth on a project-by-project basis. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, projected population growth impacts associated with future development facilitated by the Project would not be cumulatively considerable.

As concluded above, future housing development could displace numbers of existing people or housing. However, a less than significant impact would occur in this regard since the Project does not include any development but would facilitate future housing growth that would not necessitate the need to build additional housing. Additionally, the actual rate of housing development would be outside of the City's control and would be dictated by economic conditions, market demand, and other planning considerations. The Project also includes several discretionary actions that would make future housing development consistent the City's land use and zoning designations. Future development in conjunction with cumulative development would undergo environmental review on a project-by-project basis to evaluate if additional housing is needed. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, the Project's impact concerning displacement of housing would not be cumulatively considerable.

5.10.8 Significant Unavoidable Impacts

No significant unavoidable impacts concerning population and housing have been identified.

5.10.9 References

City of Huntington Beach. 2017. City of Huntington Beach General Plan Update.

https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU Adopted-October-2017.pdf.

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- State of California, Employment Development Department. 2021. Labor Force and Unemployment Rate for Cities and Census Designated Places. Retrieved from https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html#CCD. Accessed January 25, 2021.
- State of California, Department of Finance. 2021. *E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark*. Sacramento, California, May 2021. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/.

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5.11 PUBLIC SERVICES

5.11.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. Mitigation to avoid/reduce impacts is identified, as needed. Public services are those entities that serve the City's residents, businesses, and community members. For purposes of this analysis, the term "public services" includes fire protection, police protection, emergency medical services, public schools, and libraries. Public services information was acquired through review of various readily available data in public records, including local planning documents. Refer to **Section 5.12: Recreation**, for potential impacts concerning parks and recreation.

This Subsequent Environmental Impact Report (SEIR) evaluates the candidate housing sites based on information available to the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect impacts to public services could be considered. More specifically, the public services information in this section is based on the City of Huntington Beach General Plan (General Plan) and the Huntington Beach General Plan Update Program Environmental Impact Report (GPU PEIR).

5.11.2 Existing Regulatory Setting

Federal

Fire Protection Services

Federal Fire Protection Standards

The National Fire Protection Association Standard 1710 contains minimum requirements relating to the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by career fire departments. The requirements address functions and objectives of fire department emergency service delivery, response capabilities, and resources. The code also contains general requirements for managing resources and systems, such as health and safety, incident management, training, communications, and pre-incident planning. The code addresses the strategic and system issues involving the organization, operation, and deployment of a fire department and does not address tactical operations at a specific emergency incident.

Police Protection Services

There are no applicable federal regulations related to police protection services.

Emergency Medical Services, Public Schools, and Libraries

There are no applicable federal regulations related to emergency medical services, public schools, and libraries.

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State

California Penal Code

All law enforcement agencies within the State of California are organized and operated in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under State law, all sworn municipal and county officers are State peace officers.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations Title 8 §1270 "Fire Prevention" and §6773 "Fire Protection and Fire Equipment" the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance, and use of all fire-fighting and emergency medical equipment.

2019 Fire and Building Codes

The California Fire and Building Codes address general and specialized fire safety requirements for buildings. Topics addressed in the code include, but are not limited to, fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions to protect and assist first responders, and industrial processes. The City, as stated in the Huntington Beach Municipal Code (HBMC), currently enforces the latest version of the fire and building codes in HBMC §17.56, which incorporates the 2019 California Fire Code and 2018 International Fire Code.

2019 California Building Code, Chapter 7A

California Building Code (CBC) Chapter 7A focuses primarily on preventing ember penetration into homes, a leading cause of structure loss from wildfires.

Fire hazard designations are based on topography, vegetation, and weather, amongst other factors with more hazardous sites including steep terrain, unmaintained fuels/vegetation, and developed areas adjacent to wilderness. Developments situated in Very High Fire Hazard Severity Zones (VHFHSZ) require fire hazard analysis and application of fire protection measures that have been developed to specifically result in defensible communities.

These codes have been developed through decades of after fire structure "save" and "loss" evaluations to determine what causes buildings to ignite or avoid ignition during wildfires. The resulting fire codes now focus on mitigating former structural vulnerabilities through construction techniques and materials so that the buildings are resistant to ignitions from direct flames, heat, and embers, as indicated in the 2019 CBC (Chapter 7A, §701A Scope, Purpose and Application). There are no VHFHSZ within the City.¹

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¹ CalFire. (2022). FHSZ Viewer. Retrieved from: https://eqis.fire.ca.gov/FHSZ/.

California Health and Safety Code

State fire regulations are set forth in California Health and Safety Code §13000 et seq. This includes regulations for building standards (as also set forth in the CBC), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California 2015 Emergency Services Act

The State passed legislation authorizing the Office of Emergency Services (OES) to prepare a Standard Emergency Management System (SEMS) program, which sets forth measures by which a jurisdiction should handle emergency disasters. Non-compliance with SEMS could result in the State withholding disaster relief from the non-complying jurisdiction in the event of an emergency disaster.

Assembly Bill 2926

The State of California traditionally has been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the State passed Assembly Bill (AB) 2926 in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees also were referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction. Development within the City is required to pay school impact fees in accordance with State regulations. Generally, school impact fees are collected prior to issuance of a building permit.

Senate Bill 50

Senate Bill (SB) 50 (1998), which is funded by Proposition 1A, limits cities and counties' power to require mitigation of developers as a condition of approving new development and instead authorizes school districts to impose fees in amounts limited by law. Senate Bill 50 anticipated that the State would fund one-half of new school facilities construction and the remainder would be funded by the local school district. SB 50 provides for three levels of statutory impact fees. The level depends on whether State funding is available; whether the school district is eligible for State funding; and whether the school district meets certain additional criteria involving bonding capacity, year-round schools, and the percentage of moveable classrooms in use. Consistent with this authority, Huntington Beach Unified School District implements a \$4.08 fee per square foot for new residential development.²

California Government Code §§65995-65998 set forth provisions to implement SB 50 and limits the City's discretion to mitigate for development's impact on schools. Specifically, in accordance with §65995(h), the payment of statutory fees is "deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization...on the provision of

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Huntington Beach Unified School District. (2021). Retrieved from: https://4.files.edl.io/4eca/05/27/21/143605-cc08957b-3a91-43a8-b41b-e869712e41d7.pdf.

adequate school facilities." The school district, rather than the City, is responsible for implementing the specific methods for mitigating school impacts under the Government Code.

Furthermore, California Government Code (CGC) §65995(i) provides that: "A State or local agency may not deny or refuse to approve a legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization as defined in §56021 or §56073 on the basis of a person's refusal to provide school facilities mitigation that exceeds the amounts authorized pursuant to this section or pursuant to §65995.5 or §65995.7, as applicable."

California Education Code §17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the district boundaries, for the purpose of funding the construction or reconstruction of school facilities.

California Government Code, §65995(b), and Education Code §17620

Senate Bill 50 amended CGC §65995, which contains limitations on Education Code §17620, the statute that authorizes school districts to assess development fees within school district boundaries. Government Code §65995(b)(3) requires the maximum square footage assessment for development to be increased every two years, according to inflation adjustments. In April 2021, the Board of the Huntington Beach Union High School District resolved to increase developer fee rates. The new rates follow: \$4.08 per square foot for residential construction and \$0.66 per square foot for commercial/industrial construction.

The Kindergarten-University Public Education Facilities Bond Act of 2002 (Proposition 47)

This act was approved by California voters in November 2002 and provides for a bond issue of \$13.05 billion to fund necessary education facilities to relieve overcrowding and to repair older schools. Funds are targeted at areas of greatest need and must be spent according to strict accountability measures. Funds are also used to upgrade and build new classrooms in the California Community Colleges, the California State University, and the University of California to provide adequate higher education facilities to accommodate growing student enrollment.

Comprehensive School Safety Plan

It Comprehensive School Safety Plan's intent that all California public schools that offer kindergarten and/or grades 1 through 12 that are inclusive and that are operated by school districts develop a comprehensive school safety plan that addresses the safety concerns identified through a systematic planning process. The schools must work in cooperation with local law enforcement agencies, community leaders, parents, pupils, teachers, administrators, and other persons who may be interested in the prevention of campus crime and violence (California Education Code, Title 1, §32280).

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Local

City of Huntington Beach General Plan

Public Services and Infrastructure Element

The General Plan Public Services and Infrastructure Element includes a number of adopted goals and policies related to public services that were intended to examine current and desired future fire protection, police protection, marine safety, and school services. The following Public Services and Infrastructure Element goals and policies are relevant to the Project:

- Goal PSI-1: Public safety services, education, facilities, and technology protect the community from illicit activities and crime.
- Dalieu A. Consider the relationship between the location and rate of planned
- **Policy A:** Consider the relationship between the location and rate of planned growth and resulting demands on police facilities and personnel.
- **Policy D:** Ensure that new development and reuse projects and existing land uses promote community safety.
- Goal PSI-2: Huntington Beach residents and property owners are protected from fire hazards and beach hazards, and adequate marine safety and emergency medical services are provided by modern facilities and advanced technology.
- **Policy E:** Ensure that new development and reuse projects and existing land uses promote fire and marine safety.
- **Policy G:** Ensure development provides adequate access for public safety responders in the event of an emergency.
- Goal PSI-3: Libraries are central community facilities and library services respond to changing community needs.
- **Policy B:** Consider constructing new libraries and rehabilitating and expanding existing libraries and programs to meet changing community needs.
- Goal PSI-4: A broad range of public and private programs meet diverse community needs, including mental health, arts, educational, and cultural programs.
- **Policy D:** Support the provision of educational and other social services in existing public facilities, such as libraries and community centers.
- Goal PSI-5: A range of educational programs and facilities meets the needs of all ages of the community.
- **Policy D:** Ensure that developers consult with the appropriate school district with the intent to mitigate a potential impact on school facilities prior to project approval by the City.

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Huntington Beach Municipal Code³

The HBMC §17.73, Development Impact Fees — General, outlines development impact fees for public facilities for residential and non-residential uses and fee reductions for developers who construct their own public facilities. The general section includes a mechanism for assessing the impacts of new development on school facilities, and appropriate mitigation measures for the provision of school facilities if necessary. Specifically, HBMC Title 17, §17.74, establishes standards to provide a mechanism for assessing the impacts of new development on fire facilities, and appropriate mitigation measures for the provision of fire facilities if necessary. HBMC Title 17, §17.75, of the establishes standards to provide a mechanism for assessing the impacts of new development on police facilities, and appropriate mitigation measures for the provision of police facilities if necessary.

5.11.3 Existing Environmental Setting

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, this is a SEIR to the GPU PEIR. The 6th Cycle Housing Element Update (HEU) Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. The major public services settings in and around the City are described in detail in GPU PEIR Section 4.12.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf).

Fire Protection⁴

The City is served by the Huntington Beach Fire Department (HBFD), which operates eight fire stations within the City. The HBFD is a member of MetroNet, an eight-city Joint Powers Authority for fire and medical emergency communications and the Orange County-City Hazardous Materials Emergency Response Authority. The HBFD responds to fires, medical emergencies, marine safety, hazardous materials incidents, natural and man-made disasters, automaticand mutual aid assistance to neighboring departments, and related emergencies in an effort to reduce life and property loss. The HBFD is made up of four divisions, Fire Administration, Emergency Response, Community Risk Reduction, and Marine Safety, as discussed below.

Fire Administration Division

The Fire Administration Division provides management, research, clerical, financial, and records support for the HBFD; establishes and modifies Fire Department strategies, tactics, and policies; administers the Central Net Operations Joint Powers Authority Training Center and the FireMed Membership Program.

Fire Operations Division

The Emergency Response Division provides a professionally trained and emergency force equipped for fire, medical, rescue, and hazardous materials incidents. Eight fire stations are strategically located

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³ City of Huntington Beach 2020. Huntington Beach Municipal Code. Retrieved from: http://www.gcode.us/codes/huntingtonbeach/ (Accessed June 10, 2021)

⁴ City of Huntington Beach. Huntington Bach Fire Department Annual Report. (2017). Retrieved from: https://www.huntingtonbeachca.gov/files/users/fire-fire-department-annual-report-2017.pdf

throughout the City to provide quick emergency response. Paramedic engine companies are located in each station and staffed by four personnel, a configuration that allows the department to meet the City's annual call volume. Additionally, two truck companies, a State Office of Emergency Services engine, a hazardous materials response vehicle, a mobile decontamination unit, an urban search and rescue/light and air vehicle, six emergency medical transport units and a Battalion Chief/shift commander complete the 24-hour emergency response capabilities. The Division includes the Emergency Management and Homeland Security Office, and coordinates the Community Emergency Response Team (CERT) Program and Radio Amateur Civil Emergency Services (RACES) Program.

Community Risk Reduction Division

The Community Risk Reduction Division is responsible for enforcing local, State, and federal codes in order to reduce the loss of life and property from preventable fires and other emergencies. This is accomplished through inspection and code enforcement, plan review, public education and fire investigative services. Oil inspections are conducted to enforce regulations in environmental and oil industry safety, including the Huntington Beach Oil Code. The Community Risk Reduction Division operates the Hazardous Materials Business Plan Program (HMBP) as a Participating Agency to the Certified Unified Program Agency (CUPA). The HMBP Program is responsible for identifying, inspecting, and monitoring businesses that use and store hazardous materials.

Marine Safety Division

The Marine Safety Division's purpose is to provide quality open water and beach safety through education, prevention, and emergency response.

The HBFD has automatic aid agreements in place with the Orange County Fire Authority, Fountain Valley Fire Department, Costa Mesa Fire Department, and Newport Beach Fire Department, providing automatic aid assistance to neighboring communities when required. The current daily staffing of fire and Emergency Medical Services (EMS) equals the minimum required staffing level for the City.

Police Protection⁵

The City is served by the Huntington Beach Police Department (HBPD). The HBPD currently has 224 funded sworn positions. These individuals are responsible for providing law enforcement services to over 200,000 residents and 11 million visitors to the City every year. All 32 square miles of the City and 8.5 miles of beaches are patrolled by the HBPD using police vehicles, ATVs, motorcycles, bicycles, helicopters and on foot. The management team has responsibility for major work units of the Patrol Division, Investigation Division, Special Operations Division, Support Services Division, and Administrative Operations Division.

The HBPD's Dispatch Center is an integral and essential part of the HBPD's communication with the public as well as their response to crimes and incidents in the City. HBPD serves over 200,000 citizens and hundreds of thousands of visitors in the city covering over 32 square miles and 8.5 miles of coastline. The Dispatch Center is staffed by 6 Supervisors, 17 full-time dispatchers, and 6 part-time dispatchers. On an

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⁵ City of Huntington Beach. About HB Police Department. (2022). Retrieved from: https://www.huntingtonbeachca.gov/government/departments/pd/about-us/.

average day, three to six dispatchers staff the Communications Center at any given time with additional staffing as needed during special events and holidays. In 2021, the HBPD's dispatchers answered 75,887 emergency/911 phone calls and 194,397 non-emergency phone calls for an average of approximately 750 daily calls.⁶

Schools7

The City is served by the Huntington Beach City School District (HBCSD), Westminster School District (WSD), Ocean View School District (OVSD), and the Fountain Valley School District (FVSD). Collectively, the City provides capacity for nearly 50,000 students. The City offers 35 elementary schools and five high schools within its limits. Together, more than 50 public and private schools offer elementary, middle, and high school and adult education to the City's residents. Further educational opportunities are offered at Golden West and Coastline community colleges, which are within the City limits. Further educational opportunities are offered nearby at the University of Irvine, the California State Universities of Long Beach and Fullerton, and a number of private colleges.

Libraries9

The City is served by five Huntington Beach Library System branches: Banning Branch; Helen Murphy Branch; Main Street Branch; and Oak View Branch.

5.11.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning public services. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - fire protection
 - police protection
 - schools
 - parks (see Section 5.12: Recreation)
 - other public facilities or governmental services (e.g., libraries)

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⁶ City of Huntington Beach. Communications (Dispatch). (2022). Retrieved from: https://www.huntingtonbeachca.gov/government/departments/pd/divisions/administration/communication.cfm

⁷ City of Huntington Beach. Education. (2022). Retrieved from: https://www.huntingtonbeachca.gov/about/education/.

City of Huntington Beach. (2021). Fiscal Year 2020/2021 Adopted Budget. Retrieved from: https://huntingtonbeachca.gov/files/users/finance/FY-2020-21-Adopted-Budget.pdf.

⁹ City of Huntington Beach. (2022). Library. Retrieved from: https://www.huntingtonbeachca.gov/government/departments/library/hours_location/.

5.11.5 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds, as described above, in determining whether Project implementation would create a significant impact concerning public services. The evaluation was based on reviewing the regulations and determining their applicability to the Project. Public services information was acquired through review of relevant planning documents including the General Plan, the GPU PEIR, and HBMC, and consultation with City staff. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning public services resources considers the relevant federal, state, and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

5.11.6 Project Impacts and Mitigation

Impact PUB-1

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.12-5)

The GPU PEIR concluded that although GPU would permanently increase population and the demand on existing fire, emergency, and marine safety services, all future development would be subject to the City's environmental review process, which includes project-specific environmental review under CEQA, in conjunction with their application to ensure adequate services would be available at the time development is proposed. Additionally, General Plan Policy PSI-P.3 aims to minimize the HBFD response time and identify actions to reduce travel time. Furthermore, response times to all emergency services are proposed to be monitored and evaluated for their efficiency under General Plan Policy CIRC-P.3 and statistics are reported annually in line with General Plan Policy PSI-P.2. Therefore, due to the program-level analysis of the GPU, the GPU PEIR concluded no immediate impacts would occur. However, each additional development project would require analysis on a project-by-project basis. The analysis concluded that at the program-level of review, the GPU would not result in a need for expanded or newly constructed facilities, and impacts associated with fire/emergency services would be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons. Future housing development facilitated by the Project would increase the City's population, and thereby increase the demand for fire protection services and equipment/infrastructure. However, because all except two of the candidate housing sites are currently developed, fire protection services and equipment/infrastructure are already in place throughout the City to serve the existing land

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uses. Therefore, future housing development facilitated by the Project is not anticipated to require construction of new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts. Further, future housing development would occur incrementally through 2029, based on market conditions and other factors, such that fire protection services and facilities are not overburdened by substantially increased demands at any single point in time. Given the City is built-out, modifications to existing fire protection facilities are anticipated to be nominal. Notwithstanding, construction of new/expanded fire protection facilities would be subject to environmental review under CEQA. Therefore, the Project would result in a less than significant impact concerning adverse physical impacts from the provision of new or physically altered fire protection facilities.

To further minimize potential impacts concerning fire protection services, all future housing development subject to rezoning and within overlay zones would be subject to compliance with General Plan Policy PSI-1.D, which ensures all new development within the City promotes community safety; Policy PSI-2.E, which would ensure all new development promotes fire safety; and Policy PSI-2.G, which ensures development provides adequate access for public safety responders in the event of an emergency. Additionally, in compliance with GPU PEIR MM 4.12-1, the City would continue to provide the staffing levels needed to provide acceptable response time for fire services. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with GPU PEIR MM 4.12-2, which requires applicants of future individual development projects to pay required development impact fees for fire suppression facilities, as required by HBMC §17.74. Following compliance with the listed General Plan Policies, and GPU PEIR MM 4.12-1 and 4.12-2, the Project's potential impacts associated with fire protection services would be less than significant.

GENERAL PLAN POLICIES

See **Section 5.11.2: Existing Regulatory Setting** for complete policy text.

- Policy PSI-1.D
- Policy PSI-2.E
- Policy PSI-2.G

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.12-1 Subject to the city's annual budgetary process, which considers available funding and the staffing levels needed to provide acceptable response time for fire and police services, the city shall provide sufficient funding to maintain the city's standard, average level of service through the use of General Fund monies.

GPU PEIR MM 4.12-2

The applicant of future individual development projects shall pay required development impact fees for fire suppression facilities, as required by HBMC §17.74. These fees are currently \$349.85 for any new attached dwelling unit, \$844.11 for any new detached dwelling unit, \$1,449.23 for each mobile home dwelling unit, \$0.00 per hotel/motel unit, \$0.301 per square foot of commercial/office uses, and \$0.0275 per square foot of industrial uses.

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MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact PUB-2

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection 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.

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.12-8)

The GPU PEIR concluded that future development would not directly or indirectly conflict with City policies or regulations concerning police protection services. Furthermore, with increased population results in increased seasonal uses of the City's resources, it was determined that the increase in HBPD staffing levels would be required to ensure adequate services. Policy PSI-1.C established new performance measures based on proactive time targets and clearance rates. In addition, Policy PSI-P.9 and CIRC-P.3 required a review of response times and police performance objectives. These policies ensure that staffing levels are reviewed based on workload and proactive hours rather than arbitrary staffing goals or thresholds. Compliance with these policies, would result in police services mitigating for the added demands on service requirements resulting from anticipated increased permanent population as well as nonresidential construction, along with seasonal increases in the visiting/tourist population. Although the GPU would not immediately increase population, it was assumed that future development would increase the demand on existing police services. However, each additional development project would have been required to be analyzed on a project-by-project basis. The analysis concluded that at the program-level of review, GPU Buildout would not result in a need for expanded or newly constructed facilities, and impacts associated with police services would be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Future housing development facilitated by the Project would increase the City's population, and thereby incrementally increase the demand for police protection services. However, because all except two of the candidate housing sites are currently developed, police protection services are already provided throughout the City to serve the existing land uses. Therefore, future housing development facilitated by the Project is not anticipated to require construction of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts. Further, future housing development would occur incrementally through 2029, based on market conditions and other factors, such that police protection services are not overburdened by substantially increased demands at any single point in time. Given the City is built-out, modifications to existing police protection facilities are anticipated to be nominal. Notwithstanding, construction of new/expanded police protection facilities, if

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any, would be subject to environmental review under CEQA. Therefore, the Project would result in a less than significant impact concerning adverse physical impacts from the provision of new or physically altered police protection facilities.

To further minimize potential impacts concerning police protection services, all future housing development subject to rezoning and within overlay zones would be subject to compliance with General Plan Policy PSI-1.A, which considers the relationship between the location and rate of planned growth and resulting demands on police facilities and personnel; PSI-1.D, which ensures all new development within the City promotes community safety; and Policy PSI-1.E, which considers emergency response needs of police when improving streets and critical intersections. Additionally, in compliance with **GPU PEIR MM 4.12-1** and **MM 4.12-3**, the City would continue to provide the staffing levels needed to provide acceptable response time for police services and that funding is available and ensured, and that applicants of future individual development projects would pay required development impact fees for police facilities as required by HBMC § 17.75. Following compliance with the listed General Plan Policies, and **GPU PEIR MM 4.12-1** and **4.12-3**, the Project's potential impacts associated with police protection services would be further minimized.

GENERAL PLAN POLICIES

See **Section 5.11.2: Existing Regulatory Setting** for complete policy text.

- Policy PSI-1.A
- Policy PSI-1.D
- Policy PSI-1.E

GPU PEIR MITIGATION MEASURES

See GPU PEIR MM 4.12-1 above.

GPU PEIR MM 4.12-3

The applicant of future individual development projects shall pay required development impact fees for police facilities as required by HBMC §17.75. These fees are currently \$746.48 for any new attached dwelling unit, \$362.05 for any new detached dwelling unit, \$337.64 for each mobile home dwelling unit, \$0.00 per hotel/motel unit, \$0.953 per square foot of commercial/office uses, and \$0.406 per of industrial uses.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

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Impact PUB-3

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services.

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.12-10)

The GPU PEIR concluded that future development would not directly or indirectly conflict with City policies or regulations concerning schools. While population growth resulting from implementation of the GPU PEIR would increase the number of students within the Huntington Beach City School District, Ocean View School District, and Huntington Beach Union High School District through 2040, the majority of schools within the districts serving the City are currently operating below maximum capacity. Additionally, all three of the school districts anticipate that the enrollment would be lower in the upcoming years and would continue to decline in the future. Due to declining enrollment within each district, new students generated as a result of future development would not result in overcrowding and would likely help offset the current declining student population. Furthermore, the State is responsible for funding public schools. To assist in providing facilities to serve students generated by new development, the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the district boundaries, for the purposes of funding the construction or reconstruction of school facilities. These fees would be required for all new development as outlined in mitigation measures MM 4.12-4 through MM 4.12-6 and are based on the size and use characteristics of any future project. In summary, the GPU PEIR allowed for an increase in residential development in the City, with certain areas, likely to result in more residential development than others. This development would most likely lead to an increased demand for school services to address the increase in school-aged children. However, due to the existing capacities within each of the districts, the GPU PEIR expected that the increase in school-aged children could be accommodated within existing school facilities. If new facilities would need to be constructed at a future date to accommodate increased demand on schools, the GPU PEIR determined that further environmental review would be required as project-specific plans are developed to determine which school districts and schools specific development proposals would have the potential to impact. All new school or other educational development would be subject to an environmental review process, which includes project-specific environmental review under CEQA.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Future housing development facilitated by the Project would incrementally increase the City's population, and thereby incrementally increase the City's student population and the demand for school facilities. **Table 5.11-1: Projected HEU Student Population**, shows the projected student population growth resulting from Project implementation. As shown in **Table 5.11-1**, future housing development is

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projected to generate a student population increase of approximately 10,768 students, or approximately 7,751 elementary, 1,410 middle, and 1,606 high school students.

School Level	Student/Dwelling Unit ¹	Number of Dwelling Units ²	Number of Students
Elementary	0.66		7,751
Middle School	0.12	11,743	1,410
High School	0.1367		1,606
Total	-	-	10,763

Notes:

- 1. Demand factor used for student populations, per the GPU PEIR Section 4.12 Public Services, page 4.12-11.
- 2. Table 3-6: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units).

However, as previously noted, the City offers 35 elementary schools and five high schools within its limits. Together, more than 50 public and private schools offer elementary, middle, and high school and adult education to the City's residents. As concluded in the GPU PEIR, although population growth resulting from future housing development would generate an increased number of students within the Huntington Beach City School District, Ocean View School District, and Huntington Beach Union High School District, most schools within these districts are operating below maximum capacity. Furthermore, as noted in the GPU PEIR, all three school districts anticipate that student enrollment would be lower in the upcoming years and would continue to decline in the future. Further, future housing development would occur incrementally through 2029, based on market conditions and other factors, such that school facilities are not overburdened by substantially increased demands at any single point in time. Thus, future housing development facilitated by the Project is not anticipated to require construction of new or physically altered school facilities, the construction of which could cause significant environmental impacts. Notwithstanding, construction of new/expanded school facilities would be subject to environmental review under CEQA. Therefore, the Project would result in a less than significant impact concerning adverse physical impacts from the provision of new or physically altered school facilities.

To further minimize potential impacts concerning school facilities, all future housing development subject to rezoning and within overlay zones would be subject to compliance with General Plan Policy PSI-4.D, which supports the provision of educational and other social services in existing public facilities; and Policy PSI-5.D, which would ensure that developers consult with the appropriate school district with the intent to mitigate a potential impact on school facilities prior to project approval by the City. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with **GPU PEIR MM 4.12-4** through **4.12-6**, which would ensure project applicants for any new development within the Huntington Beach City School District, Ocean View School District, and Huntington Beach Union High School District, would pay all applicable development impact fees in effect at the time of building permit issuance.

GENERAL PLAN POLICIES

See **Section 5.11.2: Existing Regulatory Setting** for complete policy text.

- Policy PSI-4.D
- Policy PSI-5.D

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GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.12-4

Project applicants for future development located within the Huntington Beach City School District shall pay all applicable development impact fees in effect at the time of building permit issuance to the Huntington Beach City School District to cover additional school services required by the new development. These fees are currently \$1.52 per square foot for any new multi-family attached residential unit, \$0.29 per of commercial/industrial development, and \$0.25 per square foot of hotel/motel development.

GPU PEIR MM 4.12-5

Project applicants for future development located within the Ocean View School District shall pay all applicable development impact fees in effect at the time of building permit issuance to the Ocean View School District to cover additional school services required by the new development. These fees are currently \$1.37 per square foot of accessible interior space for any new residential unit and \$0.22 per square foot of covered floor space for new commercial/retail development.

GPU PEIR MM 4.12-6

Future project applicants shall pay all applicable development impact fees in effect at the time of building permit issuance to the Huntington Beach Union High School District to cover additional school services required by the new development. These fees are currently \$1.15 per square foot of accessible interior space for any new residential unit and \$0.16 per square foot of covered floor space for new commercial/retail development.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact PUB-4

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered park/recreational 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.

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.13-6)

Refer to Section 5.12: Recreation.

IMPACT ANALYSIS

Refer to Section 5.12: Recreation.

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GENERAL PLAN POLICIES

See **Section 5.12: Recreation** for complete policy text.

GPU PEIR MITIGATION MEASURES

See GPU PEIR MM 4.13-1 and MM 4.13-2 in Section 5.12: Recreation.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact PUB-5

Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered libraries 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:

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.12-12)

At the time of the GPU PEIR, it was determined that buildout of the GPU PEIR would contribute to the libraries' current staffing conditions; however, it would not result in the need for additional library facilities to accommodate the library materials or the additional staff, the construction of which could result in environmental impacts. Further, as outlined in MM 4.12-7, the development of any new housing units under the GPU PEIR would be required to pay library development impact fees that would ensure any necessary improvements to library facilities and collections can take place as growth occurs. If new library facilities would need to be constructed to accommodate increased demand on library services in the future, further environmental review would be required as project-specific plans are developed. The GPU EIR determined that all new private development would be subject to the City's environmental review process which includes project-specific environmental review under CEQA.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Future housing development facilitated by the Project would increase the City's population, and thereby increase the demand for library facilities. However, as previously noted, the City is served by five of the Huntington Beach Library System branches: Banning Branch; Helen Murphy Branch; Main Street Branch; and Oak View Branch. As concluded within the GPU PEIR, although population growth resulting from future housing development would generate an increased demand for library facilities, demands are not anticipated to require the construction of new or physically altered library facilities, the construction of which could cause significant environmental impacts. Further, future housing development would occur incrementally through 2029, based on market conditions and other factors, such that library facilities are

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not overburdened by substantially increased demands at any single point in time. Notwithstanding, construction of new/expanded library facilities would be subject to environmental review under CEQA. Therefore, the Project would result in a less than significant impact concerning adverse physical impacts from the provision of new or physically altered library facilities.

To further minimize potential impacts concerning library facilities, all future housing development subject to rezoning and within overlay zones would be subject to compliance with General Plan Policy PSI-3.B, which ensures the City would continue to consider constructing new libraries and rehabilitating and expanding existing libraries and programs to meet changing community needs. All future housing development subject to rezoning and within overlay zones would be subject to compliance with GPU PEIR MM 4.12-7, which requires applicants of future development projects to pay required library development impact fees per HBMC §17.67 (Library Development Fee) prior to issuance of building permits to ensure that impacts to library facilities would remain less than significant.

GENERAL PLAN POLICIES

See **Section 5.11.2: Existing Regulatory Setting** for complete policy text.

Policy PSI-3.B

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.12-7 The applicant of future individual development projects shall pay required library development impact fees per §17.67 of the city's Municipal Code (Library Development Fee), prior to issuance of building permits. These fees are currently \$866.48 for any new attached dwelling unit, \$1,179.72 for any new detached dwelling unit, \$708.85 for each mobile home dwelling unit, \$0.041 per square foot of hotel/motel unit, with no fee for commercial/office and industrial uses.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

5.11.7 **Cumulative Impacts**

For purposes of the public services impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see Section 4.0: Basis for Cumulative Analysis.

As concluded above, future housing development facilitated by the Project is not anticipated to substantially increase the need for public services in the City such that the provision of new or physically altered governmental facilities would be necessary. Following compliance with General Plan Policies above and GPU PEIR MM 4.12-1 through MM 4.12-7, the Project's potential impacts associated with causing a substantial adverse change in the significance of public services would be reduced to less than

June 2022 5.11-17 5.11 | Public Services significant. Cumulative projects could involve actions that can have potential land use impacts specific to those development sites. However, all cumulative development would undergo environmental and design review on a project-by-project basis pursuant to CEQA to evaluate potential impacts to public services. All cumulative projects would be subject applicable General Plan Policies including, but not limited to, those listed above. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Additionally, cumulative development would be subject to compliance with the established federal, State, and local regulatory framework concerning the impact on public services on a project-by-project basis. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. Consequently, the Project combined with other cumulative development would not result in significant cumulative environmental impacts concerning public services. Therefore, the Project would not cause a cumulatively considerable impact concerning public services.

5.11.8 Significant Unavoidable Impacts

No significant unavoidable impacts concerning public services have been identified.

5.11.9 References

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5.12 RECREATION

5.12.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to increase recreational facility use such that physical deterioration would occur or be accelerated or include recreational facilities which might have an effect on the environment. Mitigation to avoid/reduce impacts is identified, as needed. Information on existing parks or other recreational facilities was acquired through consultation with City staff, and review of aerial photographs and various readily available data in public records, including local planning documents.

This Subsequent Environmental Impact Report (SEIR) evaluates the candidate housing sites based on information available to the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect impacts to cultural resources could be considered. More specifically, the recreation information in this section is based on the City of Huntington Beach General Plan (General Plan) and the Huntington Beach General Plan Update Program Environmental Impact Report (GPU PEIR).

5.12.2 Existing Regulatory Setting

State

Quimby Act

The Quimby Act (California Government Code [CGC] §66477) states that "the legislative body of a City or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative or parcel map." Quimby Act requirements apply only to the acquisition of new parkland and do not apply to the physical development of new park facilities or associated operations and maintenance costs. The Quimby Act seeks to preserve open space needed to develop parkland and recreational facilities; however, the actual development of parks and other recreational facilities is subject to discretionary approval and is evaluated on a case-by-case basis with new residential development.

Mitigation Fee Act

California Government Code §66000 through §66008, the Mitigation Fee Act, gives cities the authority to impose a fee, other than a tax, that is charged to the applicant in connection with approval of a development project for the purpose of offsetting all or a portion of public facilities cost related to a development project, such as wear and tear of public recreational facilities.

State Public Park Preservation Act

The primary instrument for protecting and preserving parkland is the State Public Park Preservation Act. Under the Public Resource Code, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the parkland acquired. This provides no net loss of parkland and facilities.

Landscaping and Lighting Act

The Landscaping and Lighting Act (California Streets and Highways Code §22500 et seq.) enables cities, counties, and special districts to acquire land for parks, recreation, and open space. A local government may also use the assessments to pay for improvements and maintenance to these areas. In addition to local government agencies (i.e., counties and cities), park and recreation facilities may be provided by other public agencies, such as community service districts, park and recreation districts, etc. If so empowered, such an agency may acquire, develop, and operate recreational facilities for the public.

California Coastal Act

The California Coastal Act (California Public Resources Code §30000 et seq.) intent is to protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources. The California Coastal Commission regulates land and water use in the coastal zone, and the California Coastal Act includes specific policies that address issues, including visual resources, land/water uses, and the protection and provision of shoreline public access and recreation.

State of California Open Space Standards

State planning law provides a structure for the preservation of open space by requiring every city and county in the State to prepare, adopt, and submit to the Secretary of the Resources Agency a "local open-space plan for the comprehensive and long-range preservation and conservation of open-space land within its jurisdiction" (CGC §65560). The following open space categories are identified for preservation:

- Open space for public health and safety, including, but not limited to, areas that require special management or regulation due to hazardous or special conditions.
- Open space for the preservation of natural resources, including, but not limited to, natural vegetation, fish and wildlife, and water resources.
- Open space for resource management and production, including, but not limited to, agricultural
 and mineral resources, forests, rangeland, and areas required for the recharge of groundwater
 basins.
- Open space for outdoor recreation, including, but not limited to, parks, and recreational facilities, areas that serve as links between major recreation and open space reservations (such as trails, easements, and scenic roadways), and areas of outstanding scenic and cultural value.
- Open space for the protection of Native American sites, including, but not limited to, places, features, and objects of historical, cultural, or sacred significance such as Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines located on public property (further defined in California Public Resources Code §§5097.9 and 5097.993)).

Local

City of Huntington Beach General Plan

Environmental Resources and Conservation Element¹

The General Plan Environmental Resource Conservation Element includes a number of adopted goals and policies related to recreational facilities that were intended to examine current and desired future services. The following Environmental Resources and Conservation Element goals and policies are relevant to the Project:

Goal ERC-1:	Adequately sized and located parks meet the changing recreational and leisure

needs of existing and future residents.

Policy ERC-1.A: Maintain or exceed the current park per capita ratio of 5.0 acres per 1,000 persons, including the beach in the calculations.

Policy ERC-1.B: Seek opportunities to develop and acquire additional parks and open space in underserved areas where needed, including pocket (mini) parks, dog parks, athletic

fields, amphitheaters, gardens, and shared facilities.

Policy ERC-1.C: Distribute future developed park and recreational sites to equitably serve

neighborhood and community needs while balancing budget constraints.

Policy ERC-1.D: Require all park improvement projects to consider ways to improve access to park

facilities by foot and bicycle.

Policy ERC-1.E: Continue to locate future neighborhood parks adjacent to elementary schools with

independent street frontage when possible.

Policy ERC-1.F: Continue to balance and maintain a mix of recreational focused and passive and

natural environment areas that preserve and protect special-status species within

open spaces.

City of Huntington Beach Municipal Code

Huntington Beach Municipal Code (HBMC) Chapter 254.08, Parkland Dedication, was adopted to implement the provisions of the Quimby Act, which authorizes the City to require the dedication of land for park and recreational facilities or payment of in-lieu fees incident to and as a condition of the approval of a tentative tract map or tentative parcel map for a residential subdivision. The park and recreational facilities for which dedication of land/payment of an in-lieu fee as required by this section are in accordance with the policies, principles and standards for park, open space and recreational facilities contained in the General Plan. Among other purposes and objectives, this Chapter is intended to provide a procedure for the acquisition, development, and rehabilitation of local parks and recreational facilities.

5.12.3 Existing Environmental Setting

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, of this SEIR to the GPU PEIR. The 6th Cycle HEU Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in

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City of Huntington Beach. (2017). City of Huntington Beach General Plan Update – Public Services and Infrastructure. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf. (Accessed December 2021)

excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. Existing facilities are described in detail in GPU PEIR Section 4.13.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08_04_17.pdf).

Parks²

The City is served by a wide variety of recreational programs run by the City of Huntington Beach Department of Community Services. There are 78 parks and public facilities, totaling 767 acres, 190 playground apparatus, and irrigation systems. In addition to the 767 acres of parkland, the City also has 208 acres of public beach and a 98-acre public golf course. City recreational facilities also include community centers, senior centers, clubhouses, a gym and pool, bikeways and equestrian trail systems, and campgrounds. City-run marine-based amenities, such as beaches, a pier, and harbor channels, as well as two State beaches and one regional park (operated by Orange County), are also be available for recreational usage.

Parks/Parkland

Based on the City's existing population of 196,874 persons (see **Table 5.10-2: Existing and Forecast Population - City**) and City target to maintain or exceed the current park per capita ratio of 5.0 acres per 1,000 persons, including the beach in the calculations (see General Plan Policy ERC-1.A), the City's current parkland demand is 985 acres. As discussed above, there are 975 acres of parkland in the City, including 767 acres of parks and 208 acres of public beach. Therefore, the City is currently under its parkland demand by approximately 10 acres.

5.12.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning recreational facilities. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Increase the use of existing neighborhood, community, and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated
- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

5.12.5 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds, as described above, in determining whether Project implementation would create a significant impact concerning recreational facilities. The evaluation was based on reviewing the regulations and determining their applicability to the Project. Recreational facility information was acquired through review of relevant planning documents including the General Plan, the GPU PEIR, and HBMC, and consultation with City staff. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning

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² City of Huntington Beach. City Parks. (2022). Retrieved from: https://www.huntingtonbeachca.gov/residents/parks facilities/parks/.

recreational resources considers the relevant state and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

5.12.6 Project Impacts and Mitigation

Impact REC-1 Would the Project increase the use of existing neighborhood, community and

regional parks or other recreational facilities such that substantial physical

deterioration of the facility would occur or be accelerated?

Impact REC-2 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?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.13-2 and 4.13-5)

The GPU PEIR concluded implementation of development allowed under the GPU would result in a total population of 211,051 residents by 2040. However, the GPU PEIR did not propose the allocation or construction of additional parkland. With this population increase, assuming no net change in the acreage of parkland, the City estimated 5.08 acres of recreational land be provided per 1,000 population with this expected population increase. Therefore, the GPU PEIR concluded that the City's parkland and recreational space would meet the demands under all housing strategies and that buildout of the GPU would not result in a need for expanded or newly constructed recreational facilities.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons.

Future housing development facilitated by the Project would incrementally increase the City's population by approximately 29,475 persons; see **Table 5.10-8**: **Existing Plus Project Growth Projections**. This forecasted population growth would increase the use of existing recreational facilities such that substantial physical deterioration of a facility could occur or be accelerated. Additionally, this forecast population growth would require the construction or expansion of recreational facilities to meet General Plan Policy ERC-1.A's park per capita target ratio of 5.0 acres per 1,000 persons. **Table 5.12-1: Projected Parkland Demand – Project and Representative Development Capacities**, provides the projected parkland demand for Project buildout and indicates the Project would generate a demand for approximately 147 acres of parkland. It is noted that Project buildout would occur incrementally through 2029, based on market conditions and other factors, such that recreational facilities are not overburdened by substantially increased demands at any single point in time. For context, **Table 5.12-1**, also provides the projected parkland demand for the average size development (Site 53 with 51 dwelling units) and

maximum size development (Site 217 with approximately 601 dwelling units), respectively. As also indicated in **Table 5.12-1**, at most, the parkland demand associated with a single housing development site would be 8.4 acres.

Table 5.12-1: Projected Parkland Demand – Project and Representative Development Capacities

Scenario	Units	Population ¹	Demand Factor ²	Projected Parkland Demand (AC)		
Mean (Site No. 53)						
Proposed	51	128	5.55 ac/1000 residents	0.7		
Maximum (Site No. 217)						
Proposed	601	1,509	5.55 ac/1000 residents	8.4		
90 th Percentile (Site No. 16)						
Proposed	143	359	5.55 ac/1000 residents	2.0		

Notes

All future housing development subject to rezoning and within overlay zones would also be subject to compliance with General Plan Policy ERC-1.A, which ensure existing parks and their current and future development meet the changing recreational and leisure needs of existing and future residents through processes such as: current park per capita would be maintained or exceeded; Policy ERC-1.B, which seeks opportunities to develop and acquire additional parks and open space in underserved areas where needed; and Policy ERC-1.C, which ensures distribution of future developed park and recreational sites to equitably serve neighborhood and community needs while balancing budget constraints; as well as General Plan Policies ERC-1.E, ERC-1.F, ERC-1.G, and ERC-1.H. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with GPU PEIR MM 4.13-1 and MM 4.13-2, which would ensure project applicants demonstrate compliance with City parkland requirements identified in HBZSO § 254.08 (or Ordinance No. 3596), either through the dedication of onsite parkland or through payment of applicable fees and that project applicants pay the Park Land/Open Space and Facilities Development Impact Fees in effect at the time of permit. Payment of fees would help offset the costs associated with the physical deterioration of existing facilities and construction or construction or expansion of facilities.

The Project does not include recreational facilities, but may require the construction or expansion of recreational facilities to meet the Project's demand for parkland, as concluded above. Construction or expansion of recreational facilities could have an adverse physical effect on the environment. Any future expansion of existing facilities or construction of new facilities, if required, would be subject to environmental review under CEQA.

Following compliance with General Plan Policies, and **GPU PEIR MM 4.13-1** (HBZSO §254.08) and **4.13-2**, the Project's potential impacts associated with recreational facilities would be reduced to less than significant.

Based on 2.51 persons per household (California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark, available at https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/.

^{2.} Demand Factor of 5.55 acres per 1,000 residents per City of Huntington Beach GPU PEIR Section 4.13.3.3, page 4.13-2.

GENERAL PLAN POLICIES

See **Section 5.12.2: Existing Regulatory Setting** for complete policy text.

- Policy ERC-1.A
- Policy ERC-1.B
- Policy ERC-1.C
- Policy ERC-1.D

- Policy ERC-1.E
- Policy ERC-1.F
- Policy ERC-1.G
- Policy ERC-1.H

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.13-1 For future projects that require a subdivision map, prior to the issuance of building permits within the city, project applicants shall demonstrate compliance with city parkland requirements identified in City of Huntington Beach Zoning and Subdivision Ordinance, §254.08 (or Ordinance No. 3596), either through the dedication of on-site parkland or through payment of applicable fees. Any on-site park provided in compliance with this section shall be improved prior to final inspection (occupancy) of the first residential unit (other than model homes). Current fees per unit for projects with a subdivision map are \$13,385 for any new attached dwelling unit, \$17,857 for any new detached dwelling unit, and \$11,169 for any new mobile home unit.

GPU PEIR MM 4.13-2

Prior to the issuance of building permits within the city, project applicants shall pay the Park Land/Open Space and Facilities Development Impact Fees in effect at the time of permit. These fees are currently \$12,732.84 for any new attached dwelling unit, \$16,554.73 for any new detached dwelling unit, \$10,222.88 for each mobile home dwelling unit, \$0.234 per square foot of hotel/motel unit, \$0.897 per square foot of commercial/office uses, and \$0.730 per square foot of industrial uses.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

5.12.7 **Cumulative Impacts**

For purposes of this recreational facilities analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see Section 4.0: Basis for Cumulative Analysis.

The Project would result in a parkland demand of approximately 147 acres. As concluded above, this would be a less than significant impact following compliance with the City's General Plan, HBZSO, and GPU PEIR MM 4.13-1 and 4.13-2. Cumulative development combined with the Project would generate a demand for 1,202 acres of parkland. There are 975 acres of parkland in the City, including 767 acres of parks and 208 acres of public beach. When accounting for existing facilities, the remaining unmet parkland demand associated with cumulative development would be 227 acres. Additionally, the cumulative

population forecast combined with the Project's forecast population growth would total 240,523 persons, which would increase the use of existing recreational facilities such that substantial physical deterioration of a facility could occur or be accelerated. However, cumulative development would occur incrementally, based on market conditions and other factors, such that recreational facilities are not overburdened by substantially increased demands at any single point in time. All cumulative development would also undergo environmental review on a project-by-project basis pursuant to CEQA to evaluate potential impacts concerning recreational facilities. All cumulative projects would be subject to compliance with General Plan Policies ERC-1. A through ERC-1. H. Future cumulative development would also be subject to compliance with GPU PEIR MM 4.13-1 and 4.13-2, which would ensure project applicants demonstrate compliance with City parkland requirements identified in HBZSO §254.08, either through dedication of on-site parkland or payment of applicable fees and that project applicants pay the Park Land/Open Space and Facilities Development Impact Fees in effect at the time of permit. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Consequently, the Project combined with cumulative development would not result in significant cumulative environmental impacts concerning recreational facilities and no mitigation is required.

5.12.8 Significant Unavoidable Impact

No significant unavoidable impacts concerning recreation have been identified.

5.12.9 References

- California Department of Finance. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark.
 - https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/.
- City of Huntington Beach. Certified. City of Huntington Beach General Plan Update.
 - https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-Certified.pdf.
- City of Huntington Beach. Certified. City of Huntington Beach General Plan Update Program Environmental Impact Report SCH No. 2015101032.
 - <u>https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08_04_17.pdf</u>. Atkins: San Diego, CA.
- City of Huntington Beach. 2021. City of Huntington Beach Municipal Code.
 - http://www.qcode.us/codes/huntingtonbeach/view.php?topic=municipal_code&frames=on.
- City of Huntington Beach. City Parks. 2022.
 - https://www.huntingtonbeachca.gov/residents/parks facilities/parks/.
- City of Huntington Beach. 2017. City of Huntington Beach General Plan Update Public Services and Infrastructure. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU Adopted-October-2017.pdf.

5.13 TRANSPORTATION

5.13.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to conflict with a program, plan, ordinance, or policy addressing the circulation system; conflict or be inconsistent with State California Environmental Quality Act (CEQA) Guidelines §15064.3, subdivision (b); increase hazards due to geometric design; or result in inadequate emergency access. Mitigation to avoid/reduce impacts is identified, as needed.

The candidate housing sites were evaluated in this Subsequent Environmental Impact Report (SEIR) based on information available to the City of Huntington Beach (City) where reasonably foreseeable, direct, and indirect physical changes in the environment could be considered. Transportation impacts were evaluated against the 2017 City General Plan Update Program Final EIR (GPU PEIR) and based on the *Vehicle Miles Traveled Assessment* prepared by Kimley-Horn and Associates, Inc. (2022; **Appendix F: Vehicle Miles Traveled Assessment).**

5.13.2 Existing Regulatory Setting

State

Statewide Transportation Improvement Program

The California 2010 Statewide Transportation Improvement Program (STIP), approved by the U.S. Department of Transportation in October 2009, is a multi-year, statewide, intermodal program of transportation projects that is consistent with the statewide transportation plan and planning processes, metropolitan plans, and Code of Federal Regulations (CFR) Title 23. The STIP is prepared by the California Department of Transportation (Caltrans) in cooperation with the metropolitan planning organizations and the regional transportation planning agencies. The STIP contains all capital and non-capital transportation projects or identified phases of transportation projects for funding under the Federal Transit Act and CFR Title 23, including federally funded projects.

Congestion Management Program

State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and regularly update a Congestion Management Program (CMP). The purpose of a CMP is to monitor the performance of the region's transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. A CMP has been prepared for Orange County.

California Department of Transportation

Caltrans oversees the state's highway system. Caltrans is the public agency responsible for designing, building, operating, and maintaining the state's highway system, which consists of freeways, highways, expressways, toll roads, and the area between the roadways and property lines. Caltrans is also responsible for permitting and regulating the use of State roadways. Caltrans' construction practices

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require temporary traffic control planning during activities that interfere with the normal function of a roadway. As noted above, Pacific Coast Highway and Beach Boulevard are under Caltrans' jurisdiction.

Assembly Bill 1358 – California Complete Streets Act

Assembly Bill (AB) 1358 or California Complete Streets Act, signed by Governor Arnold Schwarzenegger on September 30, 2008 requires that the circulation elements of local general plans accommodate a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways in a manner that is suitable to the rural, suburban, or urban context of the jurisdiction. Users are defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and riders of public transportation.

Senate Bill 375 and Climate Protection Act

Senate Bill (SB) 375 (2008) is intended to reduce greenhouse gas (GHG) emissions from passenger vehicles through an integrated approach to regional transportation and land use planning. There is a strong link between land use, housing location decisions, and strategies to reduce emissions from the transportation sector. Within urbanized areas, residential development accounts for the largest share of land area, constituting a major influence on regional development footprints and travel patterns. As such, integrating transportation and residential land use is one of the most impactful strategies for reducing GHG emissions, as well as other forms of air pollution, for the transportation system. Governmental actions supporting the location, variety and availability of housing are critical to implementing GHG emissions reduction policies. This can support the integration of transportation and housing development, offering more varied and efficient consumer choices. Infill development patterns that emphasize proximity and connectivity to public transit, walkable areas, employment and service centers and amenities can increase the effectiveness of these relationships. The City's Housing Element is required to be consistent with the Sustainable Communities Strategy (SCS) of the regional transportation plan prepared by Southern California Association of Governments (SCAG).

Senate Bill 325 - California Transportation Development Act1

The Mills-Alquist-Deddeh Act (SB 325) was enacted by the California Legislature to improve existing public transportation services and encourage regional transportation coordination. Known as the Transportation Development Act (TDA) of 1971, this law provides funding to be allocated to transit and non-transit related purposes that comply with regional transportation plans.

TDA established two funding sources: the Local Transportation Fund (LTF) and the State Transit Assistance (STA) fund. Providing certain conditions are met, counties with a population under 500,000 (according to the 1970 federal census) may also use the LTF for local streets and roads, construction, and maintenance. The STA funding can only be used for transportation planning and mass transportation purposes.

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¹ Caltrans. (2021) Transportation Development Act. Retrieved from: <a href="https://dot.ca.gov/programs/rail-and-mass-transportation/transportation-development-act#:~:text=The%20Mills-Alquist-Deddeh%20Act%20%28SB%20325%29%20was%20enacted%20by,related%20purposes%20that%20comply%20with%20regional%20transportation%20plans" (Accessed May 2022).

California Environmental Quality Act and State Senate Bill 743

SB 743, also known as the Environmental Act, was enacted in 2013 is to shift from level of service (LOS) to vehicle miles traveled (VMT) for assessing transportation impacts under CEQA. As a result, the Governor's Office of Planning and Research (OPR) amended the State CEQA Guidelines in December 2018 to clarify that reduced LOS can no longer be considered an environmental impact under CEQA. LOS was replaced with VMT as an alternative metric for transportation impact evaluations to encourage GHG emission reductions, support the development of multi-modal transportation networks, and promote a diversity of land uses. The OPR's 2018 December Technical Advisory (OPR TA)² contains recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures.

The City is in the process of developing their own VMT guidelines. The City currently uses OPR's TA to assess a development's transportation impacts pursuant to SB 743 requirements.

Regional

SCAG Regional Comprehensive Plan

SCAG is responsible for most regional planning in southern California. SCAG represents a six-county region that includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties and 189 cities. The City is part of the Orange County Council of Governments (OCCOG), which is a sub-region of the SCAG planning area. SCAG prepared the 2008 Regional Comprehensive Plan (RCP) to address regional issues, goals, objectives, and policies related to growth and infrastructure challenges in the Southern California region. The RCP is a plan to address issues such as housing, traffic/transportation, air quality, and water and serves as an advisory document to local agencies for their use in preparing local plans that deal with issues of regional significance. The RCP is based on the growth management framework of the Compass Blueprint, but further promotes environmental policies to support the RTP and SCS.³

SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies

The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS) or Connect SoCal Plan, is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The 2020-2045 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards. This long-range plan, required by the state of California and the federal government, is updated by SCAG every four years as demographic, economic, and policy circumstances change. The RTP/SCS is a living, evolving blueprint for the region's future.⁴

Orange County Transportation Authority Long Range Transportation Plan

The Long-Range Transportation Plan (LRTP) was adopted in 2010 as a blueprint for Orange County's transportation future through 2035 for all transportation modes, including freeways, roadways, buses, and rail transit. The LRTP is the vehicle by which the Orange County Transportation Authority (OCTA) plans

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² OPR. (2018). Technical Advisory. Retrieved from: https://opr.ca.gov/docs/20190122-743 Technical Advisory. Pdf (accessed May 2022).

³ SCAG. (2008). 2008 *Regional Comprehensive Plan*. Retrieved from:

http://libraryarchives.metro.net/DPGTL/scaq/2008 regional comprehensive plan Complete.pdf (Accessed May 2022)

SCAG. (2020). 2020-2045 RTP/SCS – Connect SoCal. Retrieved from: https://scag.ca.gov/read-plan-adopted-final-plan (Accessed May 2022).

for the county's transportation, in response to changing trends in population and workforce, where residents live, how they commute, the dollars available to carry out transportation solutions, environmental priorities, and the policies and programs that foster mobility. The LRTP incorporates Measure M, the Orange County Master Plan of Arterial Highways (MPAH), Orange County CMP, and the Orange County Commuter Bikeways Strategic Plan.

Local

City of Huntington Beach General Plan

Circulation Element⁵

Following are the goals and policies relevant to the proposed Project:

Goal CIRC-1a: The circulation system supports existing, approved, and planned land uses while

maintaining a desired level of service and capacity on streets and at critical

intersections.

Goal CIRC-1b: The implementation of citywide systems and driver applications, such as vehicle

detection, traffic signal coordination, collision avoidance systems, traffic calming measures, and emergency or traffic notification systems, creates a quality circulation

system.

Goal CIRC-1c: Through ongoing evaluation of jurisdiction, efficient transportation management

provides the highest level of safety, service, and resources.

Policy CIRC-1.B: Maintain the following adopted performance standards for citywide level of service

for traffic-signal-controlled intersections during peak hours.

a. Locations with specific characteristics identified as critical intersections: LOS E (ICU

to not exceed 1.00)

b. Principal Intersections: LOS D (0.81–0.90 ICU)

c. Secondary Intersections: LOSC (0.71–0.80 ICU)

Policy CIRC-1.F: Require development projects to provide circulation improvements to achieve stated

 $City\,goals\,and\,to\,mitigate\,to\,the\,\,maximum\,\,extent\,feasible\,\,traffic\,impacts\,to\,\,adjacent$

land uses and neighborhoods as well as vehicular conflicts related to the project.

Goal CIRC-3a: Convenient and efficient connections between regional transit and areas of

employment, shopping, recreation, and housing will increase ridership and active

mobility, with a focus on first/last mile solutions.

Goal CIRC-3b: The City is positioned to expand transit, through a long-range strategy that allows

the City to carry out transportation goals as funding and infrastructure are feasible.

Policy CIRC-3.D: Require new projects to contribute to the transit and/or active transportation network

in proportion to their expected traffic generation.

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⁵ City of Huntington Beach. 2017. City of Huntington Beach General Plan - Circulation Element. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf (accessed December 2021).

Goal CIRC-5: The City's active transportation system integrates seamlessly with transit and vehicle

circulation as part of a Complete Streets system.

Policy CIRC-5.A: Maximize use of transportation demand management strategies to reduce total

vehicle miles traveled and improve regional air quality.

Goal CIRC-6: Connected, well-maintained, and well-designed sidewalks, bike lanes, equestrian

paths, and waterways allow for both leisurely use and day-to-day required activities

in a safe and efficient manner for all ages and abilities.

Policy CIRC-6.C: Require new commercial and residential projects to integrate with pedestrian and

bicycle networks, and that necessary land area is provided for the infrastructure.

Goal CIRC-9: The circulation system is prepared for emergency vehicle response by reducing

congestion or other roadway- and traffic-related impediments which can slow

response times.

Policy CIRC-9.B: Complete transportation improvements that assist in meeting the response goals for

emergency services.

Huntington Beach Five-Year Capital Improvement Program

The City Capital Improvement Plan (CIP) is the main planning tool used to coordinate financing and scheduling for major projects, including transportation improvements undertaken by the city. The CIP is developed to address elements contained in the city General Plan, as well as City Council-adopted planning documents and master plans. Projects within the CIP correspond to the goals of the city Strategic Plan in the areas of Public Safety, Infrastructure and Transportation, Community Livability, and Environment and Natural Resources. The CIP is prepared in conjunction with the budget process and is revised annually to meet changing needs, priorities, and financial conditions.

City of Huntington Municipal Code⁶

Chapter 17.65 Fair Share Traffic Impact Fee

Huntington Beach Municipal Code (HBMC) Chapter 17.65 requires all applicants that seek to develop land, or modify the use of land within the City by applying for a building permit or other entitlement for use, or an extension of a building permit or other entitlement for use previously granted, for a development project that will generate net additional vehicle trips on City streets, is hereby required to pay a Fair Share Traffic Impact Mitigation Fee in the manner and amount specified in the current City of Huntington Beach Fee Resolution separately adopted.

Section 230.36, Transportation Demand Management

HBMC Section 230.36 is intended to implement Government Code §65089.3(a)(2) requirements, to mitigate the impacts that development projects may have on transportation mobility, congestion and air quality, and to promote transportation demand management strategies. Transportation Demand Management (TDM) is the implementation of programs, plans or policies designed to encourage changes in individual travel behavior. TDM can include an emphasis on alternative travel modes to the single

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⁶ City of Huntington Beach. 2021. City of Huntington Beach Municipal Code. http://www.gcode.us/codes/huntingtonbeach/view.php?topic=municipal_code&frames=on.

occupant vehicle (SOV) such as carpools, vanpools and transit; and reduction of VMT and the number of vehicle trips.

Huntington Beach Bicycle Master Plan

The City's Bicycle Master Plan (2013) and General Plan Circulation Element Figure CIRC-5, Bikeway Plan detail the existing bicycle network and also offers many future improvements intended to enhance the City's bicycle network, while simultaneously supporting the City's general goals. The Bicycle Master Plan contains recommendations for future projects intended to enhance the existing bicycle network. Many of the improvements aim to close gaps in the current network, while others would improve upon current facilities to increase safety for cyclists. There are currently recommendations for nine Multi-use Pathways, 21 Bike Lanes, nine Bicycle Routes, and four Bicycle Boulevards. The Bicycle Master Plan also contains elements that support alternative transportation programs, including increased ridership on public transit, developing mass transit as an alternative to automobile travel, the development of rail transit or exclusive bus lanes in high demand corridors, and research and development of new transportation technologies.⁷

5.13.3 Existing Environmental Setting

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, this a SEIR to the GPU PEIR. The 6th Cycle Housing Element Update (HEU) Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. The existing average daily trip (ADT) volumes, performance criteria, and public transportation/transit are described in detail in GPU PEIR Section 4.14.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf).

Candidate Housing Sites

The Project includes an update to the City's Housing Element map of candidate housing sites to reflect properties that could accommodate future housing development. In total, the HEU identifies 378 candidate housing sites, which are detailed in **Appendix B: Candidate Housing Sites Inventory** and illustrated on **Exhibit 1-1: Candidate Housing Sites**. In addition to the identified candidate housing sites, future development of accessory dwelling units (ADUs) could occur on residential sites throughout the City and would not be limited to the candidate housing sites.

Of the 378 candidate housing sites identified in the HEU, only two sites (Sites 83 and 129) are vacant. Also, only two sites are developed with residential uses (Site 6 with 311 dwelling units and Site 86 with 1 dwelling unit); see also **Table 5.10-5: Existing Housing - Candidate Housing Sites**. The remaining 374 developed sites include various non-residential land uses (i.e., commercial, office, research/technology,

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City of Huntington Beach. (2013). Bicycle Master Plan. Retrieved from: https://issuu.com/ktua/docs/hb bmp final lores (accessed May 2022).

industrial, and public and semipublic). All of these existing land uses currently generate trips and result in VMT to varying degrees.

Candidate Housing Sites - Surrounding Circulation System

The following information is based on GPU PEIR Figure 4.14-1, the HBMC, and the locations of the candidate housing sites along identified arterials. Information on the existing roadways not contained in the aforementioned sources is based on aerial photography.

Existing Transportation Network

Beach Boulevard (State Route 39) is six- to eight-lane State highway facility (by City) or smart street arterial roadway by Orange County Transportation Authority (OCTA) and provides interregional roadway access to the City and extends from Pacific Coast Highway (PCH) to the City of Westminster in a southnorth bound direction. The posted speed limits are 50 mph, 45 mph, and 40 mph along segments of the facility Parking is allowed along certain segments south of Ellis Avenue. Beach Boulevard is under Caltrans' jurisdiction. There are 104 candidate housing sites located along Beach Boulevard.

Goldenwest Street is a north-south six-lane divided major arterial from PCH to Garfield Avenue and an augmented primary roadway with added capacity from Garfield Avenue to Bolsa Avenue. The posted speed limit from the PCH to Slater Avenue is 50 mph and 45 mph from Slater Avenue to Bolsa Avenue. Bicycle facilities are provided from the PCH to Slater Avenue; bicycle facilities are proposed from Betty Drive to the existing channel traversing Goldenwest street near Warner Avenue. There are five candidate housing sites located along Goldenwest Street.

Adams Avenue is an east-west six-lane divided arterial. The posted speed limit ranges from 25 to 45 mph from 17th Street to the City's Eastern Boundary. Bicycle facilities are provided from Magnolia Street to Newland Street and from Beach Boulevard to Lake Street. Bicycle facilities are proposed from Brookhurst Street to Magnolia Street and Newland Street to Beach Boulevard. Parking is permitted on adjacent streets near residential uses through the roadway. There is one candidate housing site located along Adams Avenue.

Yorktown Avenue is an east-west four-lane undivided secondary arterial. The posted speed limit is 35 to 45 mph from Goldenwest Street to Ward Street. Bicycle facilities are provided throughout Yorktown Avenue in both eastbound and westbound directions. Parking is permitted near residential uses near Beach Boulevard to the west. There are two candidate housing sites located along Yorktown Avenue.

Talbert Avenue is an east-west four-lane divided primary arterial that extends from Gothard Street towards Newland Street within the City. The posted speed limit ranges from 35 to 45 mph and bicycle lanes are located on both sides of the street. Parking is not permitted on either side. There are 10 candidate housing sites located along Talbert Avenue.

Redondo Circle is a north-south unstriped two-lane local roadway that transitions into Kovacs Lane, off Talbert Avenue. Redondo Circle does not have a posted speed limit or bicycle facilities on either side of

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the road. Parking is permitted on both sides. Redondo Circle provides access to one candidate housing site.

Burke Lane is north to south two-lane local roadway that is located between Heil Avenue and Gothard Street. Burke Lane does not have a posted speed limit or bicycle facilities on either side of the road. Parking is permitted on both sides. Two candidate housing sites are located along Burke Lane.

Prince Drive is an east-west local roadway that transitions into Burke Lane. This road does not have a posted speed limit or bicycle facilities on either side of the road. Four candidate housing sites are located along Prince Drive.

Mars Drive is an east-west two-lane local roadway that is located off of Gothard Street. Mars Drive does not have a posted speed limit or bicycle facilities on either side of the road. Parking is permitted on both sides. Mars Drive transitions into **Gemini Lane**, which is a north-south and east-west two-lane roadway with no posted speed limit or bicycle facilities. Gemini Lane transitions into **Saturn Drive**, which is an east-west roadway with no posted speed limit or bicycle facilities. There are 15 candidate housing sites located along Mars Drive, Gemini Lane, and Saturn Drive.

Lorge Circle is located off of Gothard Street and is an unstriped two-lane local roadway that ends at a cul-de-sac towards the east. Lorge Circle does not have a posted speed limit or bicycle facilities. Parking is permitted on certain spots along Lorge Circle. Lorge Circle provides access to six candidate housing sites.

Enterprise Lane is a north-south unstriped two-lane local road. Enterprise Lane does not have a posted speed limit or bicycle facilities. Parking is permitted throughout the road. Enterprise Lane transitions into **Mountjoy Drive**, which is an east-west unstriped two-lane local roadway that continues towards Gothard Street. Mountjoy Drive does not have a posted speed-limit or bicycle facilities. Parking is permitted on both sides. There are 11 candidate housing sites located along Enterprise Lane and Mountjoy Drive.

Vincent Circle is located off of Gothard Street and is primarily unstriped two-lane local roadway that ends at a cul-de-sac towards the east. Vincent Circle does not have a posted speed limit or bicycle facilities. Parking is permitted throughout the road. Vincent Circle provides access to eight candidate housing sites.

Metzler Lane is a north-south unstriped two-lane local road located off of Slater Avenue. Metzler Lane doesn't have a posted speed limit or bicycle facilities. Parking is permitted throughout the road. Metzler Lane provides access to 28 candidate housing sites.

Aldrich Drive is an east-west unstriped two-lane local road located between Parkside Lane and Beach Boulevard. Aldrich Drive does not contain a posted speed limit or bicycles facilities. Parking is permitted on both sides of the road. Four candidate housing sites are located along Aldrich Drive.

Harriman Circle is located off of Gothard Street and is an unstriped two-lane local roadway that ends at a cul-de-sac towards the east. Harriman Circle does not have a posted speed limit or bicycle facilities. Parking is permitted throughout Harriman Circle. Harriman Circle provides access to nine candidate housing sites.

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Stewart Lane is a north-south unstriped two-lane local road located off of Garfield Avenue. Stewart Lane does not have posted speed limit or bicycle facilities. Parking is permitted throughout the west side of the road and partially on the west side. There are 14 candidate housing sites located along Stewart Lane.

Center Avenue is an east-westfour-lane secondary arterial roadway located between Gothard Street and Beach Boulevard, near Interstate 405 (I-405). The posted speed limit is 35 mph and does not contain any bicycle lanes. Parking is not permitted throughout Center Avenue. One candidate housing site is located along Center Avenue.

Speer Drive is an east-west unstriped local roadway located off of Beach Boulevard. The posted speed limit is 25 mph and does not contain bicycle facilities. Parking is permitted throughout Speer Drive. Two candidate housing sites are located along Speer Drive.

Newman Avenue is an east-west unstriped local roadway that ends at a cul-de-sac located off of Beach Boulevard towards the east. The posted speed limit is 25 mph and does not contain any bicycle lanes. Parking is permitted partially throughout the road. Newman Avenue provides access to six candidate housing sites.

Ernest Drive is an east-west unstriped local roadway that extends between Goldenwest Street and Gothard Street. There is no posted speed limit or bicycle facilities on Ernest Drive. Parking is partially throughout the road. Ernest Drive provides access to two candidate housing sites.

5.13.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning transportation-related impacts. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.
- Conflict or be inconsistent with [State] CEQA Guidelines Section 15064.3, subdivision (b).
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.
- Result in inadequate emergency access.

5.13.5 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds, as described above, and the City's adopted State CEQA Guidelines, as described above, in determining whether Project implementation would create a significant impact concerning transportation. The evaluation was based on a review of regulations and determining their applicability to future housing development facilitated by the Project.

The baseline conditions and impact analyses rely on review of the Project's VMT Assessment and other documentation available in public records, including local planning documents. The determination that

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the Project would or would not result in "substantial" temporary or permanent impacts concerning transportation considers the relevant federal, State, and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

Approach to Analysis

As stated in **Section 5.13.2: Existing Regulatory Framework** above, SB 743 was approved by the California legislature in September 2013. SB 743 involved changes to CEQA, specifically directing the OPR to develop alternative metrics to the use of vehicular LOS for evaluating transportation projects. As previously mentioned, the OPR TA (last updated in December 2018) was used to evaluate transportation impacts concerning VMT for the purposes of determining a significant transportation impact under CEQA.

To quickly identify when a project should be expected to cause a less than significant impact without conducting a detailed study, the OPR TA suggests that a lead agency may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing. The OPR TA specifies that land development projects that have one or more of the following attributes may be presumed to have a less than significant impact on transportation and circulation:

- Small Projects
- Low VMT Area Projects
- Proximity to Transit (Projects in Transit Priority Areas (TPAs)/High-Quality Transit Area (HQTA))
- Affordable Residential Development Projects

A land use project needs to meet only one of the above screening criteria to be presumed to have a less than significant impact on transportation and circulation, under CEQA and pursuant to SB 743. These criteria are further described below.

Small Projects

A project that generates 500 or fewer ADT (i.e., a "Small Project") is presumed to have a less than significant impact on transportation and circulation. The OPR TA recommends a volume of 110 ADT as the volume that would allow a project to be screened out. To determine the future housing developments that could be screened out of a VMT analysis based on the Small Project criteria/ADT, the trip generation of each respective candidate housing site was estimated based on the proposed zoning/overlay, density, development capacity, and Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) trip rates.

Low VMT Area Projects

The OPR TA states that projects that are located in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT. Maps created with VMT data from a travel demand model can illustrate areas that are currently below threshold VMT. Because new development in such locations would likely result in a similar level of VMT, such maps can be used to screen out residential and office projects from needing to prepare a detailed VMT analysis. To determine the future housing developments that could be screened out of a VMT analysis based on

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low VMT, the Orange County Transportation Authority Model (OCTAM) was used. Specifically, the OCTAM model was used to determine the Project generated home-based VMT per capita and compared to the appropriate significance threshold. If the project VMT per capita is at or less than the significance threshold, the project is presumed to result in a less than significant transportation impact. If the project's VMT per capita exceeds significance thresholds, mitigation would be required/identified.

Proximity To Transit (Projects In Transit Priority Areas/High-Quality Transit Area)

A project within 0.5 mile of a TPA or an HQTA is presumed to have a less than significant impact on transportation and circulation, unless the project: conflicts with the RTP/SCS; has a floor to-area ratio (FAR) less than 0.75; provides an excessive amount of parking; is inconsistent with the applicable SCS; and/or replaces the number of affordable residential units with a smaller number of moderate- or high-income residential units. To determine the future housing developments that could be screened out of a VMT analysis based on TPA/HQTA, the locations of the candidate housing sites were analyzed for their proximity to a TPA/HQTA.

Afforable Housing Projects

According to the OPR TA, a project consisting of a high percentage of affordable housing may be a basis for a lead agency to find a less-than-significant impact on VMT. Evidence supports a presumption of less than significant impact for a 100 percent affordable residential development (or the residential component of a mixed-use development) in infill locations. Furthermore, a project that includes any affordable residential units may factor the effect of the affordability on VMT into the assessment of VMT generated by those units.

5.13.6 Project Impacts and Mitigation

Impact TRAN-1: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.14-9 & page 4.14-22)

The GPU PEIR concluded that implementation of the GPU would not conflict with a program, plan, ordinance addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities.

The OCTA's County MPAH requires that local jurisdictions have consistency between their General Plan Circulation Element and the MPAH. The Circulation Element Update included the adoption of the Arterial Highway Plan and six MPAH amendments. The GPU PEIR concluded that as amendments are approved by OCTA, administrative amendments to the Arterial Highway Plan would be made consistent with the changes.

As concluded in the GPU PEIR, under the Buildout of the MPAH scenario, growth was expected to exceed the City's standard LOS for principal intersections (LOS D) and secondary intersections (LOS C) at three intersections. Under the Amended MPAH scenario, growth was determined to exceed the City's standard LOS for principal intersections (LOS D) and secondary (LOS C) at three intersections. The GPU PEIR

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concluded that with implementation of **GPU PEIR MM 4.14-1** through **4.14-3**, the aforementioned intersections would perform above standard under both the Buildout and Amended MPAH scenarios.

The GPU PEIR concluded that with implementation of the **GPU PEIR MMs 4.14-1** through **4.14-3**, all CMP intersections would operate at LOS E or better and a significant impact would not occur concerning conflicts with the CMP.

The updated Circulation Element, and the overarching GPU, focused on making alternative modes of transportation accessible for residents, business patrons and tourists. This included links to the Golder West Transportation Center, bus services across the City and into adjacent cities, as well as continued development of pedestrian spaces and transit routes. As such, conflicts with other adopted policies for public transit, bicycle and pedestrian facilities were not anticipated.

The GPU PEIR concluded that implementation of **GPU PEIR MMs 4.14-1** through **4.14-3** and applicable General Plan policies would reduce impacts to a less than significant level.

The addition/changes necessary to make the GPU PEIR applicable to the Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons.

Although the Project area encompasses the entire area within the City limits, the areas affected by the rezoning program, housing overlays, and hotel/motel conversions are limited to the 378 candidate housing sites shown in Exhibit 1-1: Candidate Housing Sites. Future development of the 378 candidate sites could potentially worsen the LOS for various intersections within the City. While additional delay to an intersection or roadway segment is no longer required by or considered a significant impact under CEQA, a project could result in a significant impact if it conflicted with a policy addressing the circulation system. It is City policy (Policy CIRC-1.B) to maintain specified performance standards for citywide LOS for traffic-signal-controlled intersections during peak hours. Therefore, to avoid conflicts with GPU Policy CIRC-1.B, all future housing development facilitated by the Project and subject to rezoning and within overlay zones would also be subject to compliance with GPU PEIR MMs 4.14-1 through 4.14-3, which require future projects that occur near specified intersections to make fair share contributions toward specified intersection improvements. Additionally, all future housing development facilitated by the Project and subject to rezoning and/or within overlay zones would also be subject to compliance with GPU Policy CIRC-1.Fto avoid/lessen potential conflicts with GPU Policy CIRC-1.B. In addition, GPU Policy CIRC-1. Frequires all development projects to provide circulation improvements to achieve City goals and to mitigate to the maximum extent feasible traffic impacts to adjacent land uses and neighborhoods. GPU Policy CIRC-3. D requires new projects to contribute to the transit and/or active transportation network in proportion to their expected traffic generation. Thus, compliance with applicable GPU Policies would ensure that future housing development projects facilitated by the Project would not conflict with OCTA's MPAH and CMP, or GPU Policies CIRC-1.B, 1.F and 3.D.

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All future housing development facilitated by the Project and subject to rezoning and within overlay zones would also be subject to compliance with GPU Policy CIRC-6.C, which requires new residential projects to integrate with pedestrian and bicycle networks, and Policy CIRC-3.C, which requires new projects to contribute to the transit system. All future housing development facilitated by the Project and subject to rezoning and within overlay zones would also be subject to proposed HEU Policy 6.4, Transportation Alternatives and Walkability, which requires that transit and other transportation alternatives including walking and bicycling be incorporated into the design of new development, including affordable housing, particularly in areas within a half mile of designated transit stops. Finally, all future housing development facilitated by the Project and subject to rezoning and within overlay zones would also be subject to HBMC Chapter 17.65 Fair Share Traffic Impact Fee, which requires payment of traffic impact fees to help the City construct the required capital improvements, accommodate projected growth, and fulfill General Plan goals and policies, which include maintenance of bicycle, pedestrian, and transit facilities.

Following compliance with the above GPU policies, proposed HEU Policy 6.4, and payment of traffic impact fees pursuant to HBMC Chapter 17.65, the Project's potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities would be less than significant.

GENERAL PLAN POLICIES

See **Section 5.13.2: Existing Regulatory Setting** for complete policy text.

- Policy CIRC-1.B
- Policy CIRC-1.F
- Policy CIRC-3.D
- Policy CIRC-6.C

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.14-1 For future projects that occur within proximity of the Gothard Street/Center Avenue intersection, the project applicant(s), as required by the Transportation Administrative Report at the time of application, shall make a fair share contribution for the addition of

- 1) a second westbound left-turn lane (Buildout of the County Master Plan of Arterial Highways (MPAH) scenario, MPAH Amendment scenario)
- 2) a second southbound left-turn lane (Buildout of the MPAH scenario, MPAH Amendment scenario)
- 3) an additional westbound left-turn lane (MPAH Amendment scenario only)

GPU PEIR MM 4.14-2

For future projects that occur within proximity of the Brookhurst Street/Adams Avenue intersection, the project applicant(s), as required by the Transportation Administrative Report at the time of application, shall make a fair share contribution for the addition of

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- 1) conversion of the eastbound right-turn lane to a fourth eastbound through lane (Buildout of the County Master Plan of Arterial Highways (MPAH) scenario, MPAH Amendment scenario)
- 2) an additional (fourth) westbound through lane (Buildout of the MPAH scenario, MPAH Amendment scenario)

GPU PEIR MM 4.14-3

For future projects that occur within proximity of the Beach Boulevard/Heil Avenue intersection, a project applicant(s), as required by the Transportation Administrative Report at the time of application, shall make a fair share contribution for the addition of

1) conversion of one eastbound through lane to a second eastbound left-turn lane (County Master Plan of Arterial Highways Amendment scenario)

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact TRAN-2:

Would the Project conflict or be inconsistent with [State] CEQA Guidelines Section 15064.3, subdivision (b)?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.14-10)

Although this impact threshold/VMT was not specifically evaluated in the GPU PEIR, the GPU PEIR did provide the "2040 Projections" for the GPU land uses and associated trip generation. GPU PEIR Table 4.14-1 indicates that the City's average daily traffic was projected to grow by approximately 9.0 percent (an increase of 146,860 ADT between 2014 and 2040). At buildout, the City is forecast to generate approximately 1,765,680 ADT by 2040. The GPU PEIR concluded that growth allowed under the GPU would result in an estimated increase of 105,000 ADT by the year 2040, as compared to the growth allowed under the 1996 General Plan.

The addition/changes necessary to make the GPU PEIR applicable to the Project are presented below.

IMPACT ANALYSIS

Project Trip Generation

The Project's VMT Assessment conducted a trip generation analysis to determine the ADTs that are forecast to be generated by the future housing development facilitated by the Project. The Project's forecast trip generation was estimated based on the proposed zoning/overlay, density, development capacity, and ITE Trip Generation Manual (11th Edition) trip rates provided in **Table 5.13-1: Trip Generation Rates**.

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Table 5.13-1: Trip Generation Rates

ITE Land Use Category ¹	Unit	ADT ²	
Category 220 Multifamily Housing (Low-Rise)	Dwelling	6.74	
Category 221 Multifamily Housing (Mid-Rise)	Unit	4.54	
Source: Kimley-Horn. 2022. VMT Assessment. Table 2. Notes: 1. Institute of Transportation Engineers Trip Generation Manual, 11 th Edition. 2. ADT = Average Daily Trips.			

Since ITE Trip Generation Manual does not have a category for Accessory Dwelling Units, the Multifamily Housing (Low-Rise) rate was used to provide a conservative estimate.

Table 5.13-2: Project Trip Generation provides the Project's forecast trip generation. As indicated in **Table 5.13-2**, the Project is forecast to generate approximately 56,277 daily trips based on 11,743 dwelling units. VMT Assessment Attachment A: Forecast Trip Generation by Candidate Housing Site, provides the forecast trip generation for each candidate housing site.

Table 5.13-2: Project Forecast Trip Generation

Description	Dwelling Units ¹		Daily Trips	
Sites Identified for Rezone, Overlay and Hotel/Motel Conversion	19,173	97%	89,987	
Accessory Dwelling Units	565	3%	3,808	
Sum of Total Sites	19,738	100%	93,795	
Buffer	-7,995	-60%	-37,518	
Sites Excluding 60% Buffer	11,743	40%	56,277	

Source: Kimley-Horn. 2022. VMT Assessment. Table 3.

Notes: See Section 3.4: Project Characteristics, and Table 3-6: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units).

To provide forecast ADT for representative residential developments, the ADT for the maximum, mean, and 90th percentile development capacities were estimated; see **Table 5.13-3**: **Trip Generation** – **Representative Development Capacities**. As shown **Table 5.13-3**, Site 217, which provides the greatest/maximum development capacity with 601 dwelling units (i.e., the most dwelling units) of all 378 candidate housing sites, would generate approximately 2,729 ADT. Site 53 with 51 dwelling units, which is representative of an average-sized residential development site, or what is reasonably expected for typical candidate housing site development, would generate approximately 232 ADT. The 90th percentile site (Site 16 with 143 dwelling units), would generate approximately 649 ADT. The 90th percentile site was provided to communicate that 90 percent of the sites would have development capacities with corresponding ADT less than this site.

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Description	ITE Land Use Category	DU	Trip Generation Rate	Trip Generation (Daily)
Maximum Development Size (Site 217)	221 Multifamily Housing (Mid-rise)	601	4.54	2,729
Mean Development Size (Site 53)		51	4.54	232
90 th Percentile Development Size (Site 16)		143	4.54	649
Source: Kimley-Horn. 2022. VMT Assessment. Table 4.				

Table 5.13-3: Project Trip Generation – Representative Development Capacities

VMT Analysis for Screened Projects

As discussed in detail above in **Section 5.13.5**, the OPR TA specifies that land development projects that have one or more of the following attributes may be presumed to have a less than significant impact on transportation and circulation: Small Projects; projects in low VMT areas; projects in TPAs/ HQTA; and affordable housing projects. The results of the VMT Assessment for screened projects are summarized below.

Small Projects

A project that generates 110 or fewer ADT (i.e., a "Small Project") is presumed to have a less than significant impact on transportation and circulation. The OPR TA recommends a volume of 110 ADT as the volume that would allow a project to be screened out. To determine the future housing developments that could be screened out of a VMT analysis based on the Small Project criteria/ADT, the trip generation of each respective candidate housing site was estimated based on the proposed zoning/overlay, density, development capacity, and ITE Trip Generation Manual (11th Edition) trip rates.

VMT Assessment Attachment A provides the forecast trip generation for each candidate housing site, indicating the 179 candidate housing sites that would generate fewer than 110 daily trips. Also, VMT Assessment Attachment C: Small Project Screening Map, depicts the locations of the 179 candidate housing sites that would generate fewer than 110 daily trips. Future housing developments facilitated by the Project at these 179 candidate housing sites were screened out of a VMT analysis under the Small Project screening criteria. Therefore, future housing developments at these sites would not conflict with State CEQA Guidelines §15064.3(b) and are presumed to have a less than significant impact on transportation and circulation. The remaining 199 candidate housing sites were not screened out of a VMT analysis under the Small Project screening criteria; see *VMT Analysis for Non-Screened Projects* Section below.

Low VMT Area Projects

Residential projects that would generate VMT that is 15 percent or more below existing average VMT per capita for the City are presumed to have a less than significant impact on transportation and circulation. Based on VMT estimates for the City of Huntington Beach from OCTAM 5.0, the average home-based VMT per capita for the City is 20.3. The low VMT threshold of 15 percent below the average home-based VMT

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is estimated to be 17.26. As shown in VMT Assessment Attachment E: Low VMT Area Screening Map, 114 candidate housing sites would generate VMT that is 15 percent or more below the average home-based VMT per capita for the City (i.e., 17.26 or lower). Future housing developments facilitated by the Project at these 114 candidate housing sites were screened out of a VMT analysis under the low VMT screening criteria. Therefore, future housing developments at these sites would not conflict with State CEQA Guidelines §15064.3(b) and are presumed to have a less than significant impact on transportation and circulation. The remaining 264 candidate housing sites were not screened out of a VMT analysis under the low VMT screening criteria; see *VMT Analysis for Non-Screened Projects* Section below.

Proximity to Transit (Projects in TPA/HQTA)

A project within 0.5 mile of a TPA or an HQTA is presumed to have a less than significant impact on transportation and circulation, unless the project: conflicts with the RTP/SCS; has a floor to-area ratio (FAR) less than 0.75; provides an excessive amount of parking; is inconsistent with the applicable SCS; and/or replaces the number of affordable residential units with a smaller number of moderate- or high-income residential units). VMT Assessment Attachment F: Transit Proximity Screening Map, illustrates the 188 candidate housing sites within a TPA/HQTA. Future housing developments facilitated by the Project at these 188 candidate housing sites were screened out of a VMT analysis under the proximity to transit screening criteria. Therefore, future housing developments at these sites would not conflict with State CEQA Guidelines §15064.3(b) and are presumed to have a less than significant impact on transportation and circulation. The remaining 190 candidate housing sites were not screened out of a VMT analysis under the proximity to transit screening criteria; see *VMT Analysis for Non-Screened Projects* Section below.

Affordable Housing Projects

A project that is comprised of 100 percent affordable-housing units is presumed to have a less than significant impact on transportation and circulation. Because the number of affordable housing units included in future housing developments facilitated by the Project is presently unknown and cannot be verified until a project application is submitted, it is presumed that none of the candidate housing sites would be screened out of a VMT analysis based on providing 100 percent affordable housing units.

A summary of the VMT screening analysis results is provided in **Table 5.13-4: VMT Screening Summary Results**.

Table 5.13-4: VMT Screening Summary Results

	Number of Sites
Total Candidate Housing Sites	378
Sites Screened out from VMT ¹	325
Sites not Screened from VMT	53

Source: Kimley-Horn. 2022. VMT Assessment. Table 5.

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^{1.} A site can be screened out from VMT if it meets at least one of the following VMT screening criteria: Small Project; Low VMT Area Projects; Proximity to Transit (Projects in Transit Priority Areas (TPAs)/High-Quality Transit Area (HQTA)); and Affordable Residential Development Projects.

VMT Analysis for Non-Screened Projects

Future housing developments facilitated by the Project at the candidate housing sites that were not screened out of a VMT analysis based on any one of the VMT screening criteria discussed above, additional VMT analysis would be required based on the City's adopted VMT analysis methodology and thresholds at the time of development application to determine their potential to conflict with State CEQA Guidelines §15064.3(b) and are presumed to have a less than significant impact on transportation and circulation. The results of the VMT Assessment for non-screened projects are summarized below. A total of 53 candidate housing sites would require additional VMT analysis at the time of development application submittal, as depicted on VMT Assessment Attachment G: Non-Screened Sites Map.

Conclusion

A total of 325 candidate housing sites would be screened out and would not require preparation of a VMT analysis based on Small Project screening (<110 daily trips), low VMT area screening; or proximity to transit screening. A total of 53 candidate housing sites would not be screened out, thereby requiring additional VMT analysis at the time of development application. Candidate housing sites that identify significant VMT impacts would require feasible mitigation measures to reduce the project's VMT impacts. Therefore, future housing developments at these sites could potentially conflict with State CEQA Guidelines §15064.3(b) and are presumed to have a potentially significant impact on transportation concerning VMT unless mitigated. Consequently, future housing development on these 53 candidate housing sites would be required to reduce their average home-based VMT per capita to below the 15 percent threshold (17.26) to mitigate VMT-related impacts through implementation of MM TRANS-1. MM TRANS-1 includes feasible mitigation strategies that could help projects avoid or substantially reduce VMT-related impacts to a less than significant level. Furthermore, future housing development within these 53 candidate housing sites would be subject to all State and local requirements for minimizing VMT-related impacts. Therefore, future housing developments on the 53 candidate housing sites that were not screened out are presumed to result in a less than significant with mitigation incorporated.

Additionally, all future housing development facilitated by the Project and subject to rezoning and within overlay zones would also be subject to compliance with General Plan Policy CIRC-3.D, which requires new projects to contribute to the transit and/or active transportation network in portion to their expected traffic generation, and Policy CIRC-5.A, which requires the maximum use of transportation demand management strategies to reduce total vehicle miles traveled and improve regional air quality to further minimize VMT. Furthermore, the Project would comply with GPU Policy CIRC-1.B, which requires intersection to maintain adopted performance standards concerning LOS.

GENERAL PLAN POLICIES

See Section 5.13.2: Existing Regulatory Setting for complete policy text.

- Policy CIRC-1.B
- Policy CIRC-3.D
- Policy CIRC-5.A

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GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

- MM TRANS-1 Vehicle Miles Traveled (VMT). Prior to issuance of a building permit, one or more of the following measures shall be implemented to reduce VMT-related impacts associated with future projects that are not able to be screened out of the VMT analysis process such that the development's VMT is below the low VMT thresholds recommended by the Office of Planning and Research or adopted by the City of Huntington Beach at the time of the development application:
 - Modify the project's-built environment characteristics to reduce VMT generated by a project.
 - Implement Transportation Demand Management strategies pursuant to General Plan Policy CIRC-5. A to reduce VMT generated by a project.
 - Participate in a Fair Share Traffic Impact Fee program or VMT mitigation banking program, if available.

Examples of potential measures to reduce VMT include, but are not limited to, the following:

- Improve or increase access to transit.
- Increase access to common goods and services, such as groceries, schools, and daycare.
- Incorporate affordable housing into the project.
- Orient the project toward transit, bicycle, and pedestrian facilities.
- Improve pedestrian or bicycle networks, or transit service.
- Provide traffic calming.
- Provide bicycle parking.
- Limit or eliminate parking supply.
- Unbundle parking costs.
- Implement or provide access to a commute reduction program.
- Provide car-sharing, bike sharing, and ride-sharing programs.
- Provide transit passes.

Level of Significance After Mitigation: Less Than Significant With Mitigation Incorporated

Impact TRAN-3: Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

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Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.14-19)

As noted in the GPU PEIR, future projects under the GPU would not substantially increase hazards due to design features or incompatible uses and would not introduce design features incompatible with current circulation patterns.

The GPU Circulation Element contains examples of street sections that would be implemented, providing safe street design as well as an aesthetic streetscape. The updated Circulation Element of the General Plan promotes that roadways are built to specific standards that have been set by the City. These include appropriate roadway widths, medians, bicycle lanes and other improvements under the Arterial Highway Plan. Hazards due to roadway design features will be evaluated on a project-by-project basis as the buildout of the development identified by the Huntington Beach GPU. All new highways and upgrades would be planned, designed, and built to City standards.

Furthermore, the City periodically monitors levels of service, traffic accident patterns, and physical conditions of the existing street system, and makes improvements to roadways as needed. Additionally, the City requires development projects to provide circulation improvements to achieve stated City goals and to mitigate to the maximum extent feasible traffic impacts to adjacent land uses and neighborhoods as well as vehicular conflicts related to a project.

The addition/changes necessary to make the GPU PEIR applicable to the Project are presented below.

IMPACT ANALYSIS

Pursuant to the GPU PEIR, hazards due to roadway design features would be evaluated on a project-by-project basis as development occurs within the Project's candidate housing sites. Thus, all future housing development projects facilitated by the Project would be required to coordinate with the City to calculate traffic impact fees and ensure that roadways are built in accordance with applicable federal, State, and local standards, which include but are not limited to, the City's specific design standards. The City's design standards include appropriate roadway widths, medians, bicycle lanes and other improvements under the City's Arterial Highway Plan. Consistent with the GPU PEIR analysis, future housing development projects would be required to provide circulation improvements if needed to achieve stated City goals and mitigate to the maximum extent feasible traffic impacts. Following payment of traffic impact fees, and adherence with applicable federal, State, and local regulations and design standards, the Project would not substantially increase hazards due to design features or incompatible uses and would not introduce design features incompatible with current circulation patterns.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

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MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

Impact TRAN-4: Would the Project result in inadequate emergency access?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.14-20)

As noted in the GPU PEIR, emergency access will be evaluated on a project-by-project basis as the General Plan buildout occurs. Buildout of the Huntington Beach GPU will enhance the capacity of the roadway system by upgrading roadways and intersections or other improvements when necessary to assist in meeting the response goals for emergency services. As part of standard development procedures, plans for future development under the GPU would be submitted to the city for review and approval to ensure that all new development has adequate emergency access, including turning radius, in compliance with existing regulations.

Additionally, the development under the Huntington Beach GPU will facilitate the consideration of the needs for emergency access in transportation planning. The City will maintain a current evacuation plan, ensure that new development is provided with adequate emergency and/or secondary access, including points of ingress and egress for when emergency response units are needed.

The addition/changes necessary to make the GPU PEIR applicable to the Project are presented below.

IMPACT ANALYSIS

Consistent with the GPU PEIR analysis, emergency access to the candidate housing sites would be evaluated on a project-by-project basis as future housing development facilitated by the Project occurs. As part of the City's standard development review process, all future housing development projects would be required to submit all plans to the City for review and approval to ensure that each project has adequate emergency access including points of ingress and egress for when emergency response units are needed. In addition, all future housing development facilitated by the Project would be required to comply with GPU Policy CIRC-9.B, which promotes the City's need to complete transportation improvements that assist in meeting the response goals for emergency services. Therefore, future housing development facilitated by the Project would not result in inadequate emergency access and a less than significant impact would occur in this regard.

GENERAL PLAN POLICIES

See Section 5.13.2: Existing Regulatory Setting for complete policy text.

Policy CIRC-9.B

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GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

5.13.7 Cumulative Impacts

For purposes of the transportation impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0**: **Basis for Cumulative Analysis**.

Future housing development facilitated by the Project, in conjunction with cumulative development in the City, would increase housing development in previously developed areas and could result in transportation impacts.

As concluded above, future housing development facilitated by the Project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities. Following compliance with GPU Policies CIRC-1.B, 1.F, 3.D, and 5.A, and 9.B, the Project's potential impacts to an applicable transportation-related program, plan, ordinance, or policy would be less than significant. Cumulative projects would also be subject to applicable transportation-related program, plan, ordinance, or policy (including GPU policies) to ensure that impacts are reduced to a less than significant level. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, the Project's impact concerning compliance with applicable transportation-related program, plan, ordinance, or policy would not be cumulative considerable.

As concluded above, future housing development facilitated by the Project could conflict or be inconsistent with CEQA Guidelines §15064.3(b) related to VMT. Following compliance with GPU Policies CIRC 3.D and 5.A and implementation of **MM TRANS-1**, the Project's potential VMT-related impacts would be reduced to a less than significant level. Cumulative projects that are not screened out of the OPR TA VMT screening thresholds would be required to adhere to similar GPU policies and implement mitigation similar to MM-TRANS-1 to reduce impacts to a less than significant level. Therefore, the Project's impact to VMT would not be cumulatively considerable.

As concluded above, future housing development facilitated by the Project would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses or impede emergency access. All future housing development and cumulative development would be subject to GPU Policy CIRC 9.B and to the City's discretionary review and approval process to ensure that all roadways are built in accordance with applicable federal, state, and local regulations, which includes but not limited to, the City's specific design standards. Furthermore, all development projects

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are required to pay a Fair Share Traffic Impact fee pursuant to the HBMC to further reduce impacts. Similar to the Project, all cumulative projects would be subject to City discretionary review and approval process on a project-by-project basis and similar GPU policies to ensure that impacts are less than significant. Therefore, the Project's impacts concerning design features (e.g., sharp curves or dangerous intersections) or incompatible uses or impediment emergency access would not be cumulative considerable.

5.13.8 Significant Unavoidable Impacts

No significant unavoidable impacts concerning transportation have been identified.

5.13.9 References

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5.14 TRIBAL CULTURAL RESOURCES

5.14.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to cause a substantial adverse change in the significance of a tribal cultural resource (TCR). Mitigation to avoid/reduce impacts is identified, as necessary.

Tribal cultural resources, as defined in Public Resources Code (PRC) §21074, include sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources (CRHR) or included in a local register of historical resources, or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant. A cultural landscape that meets these criteria is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. Historical resources, unique archaeological resources, or non-unique archaeological resources may also be TCRs if they meet these criteria.

The potential impacts to other cultural resources (i.e., prehistoric, historic, and disturbance of human remains) are evaluated in **Section 5.2: Cultural Resources** and impacts to paleontological resources are addressed in **Section 5.4: Geology and Soils**.

The tribal cultural resources information in this section is based primarily on cultural and tribal cultural resources data provided in the following sources:

- Appendix G: Tribal Cultural Resource Data and Tribal Consultation Correspondence
- City of Huntington Beach General Plan (General Plan)
- Huntington Beach General Plan Update Program Environmental Impact Report (GPU PEIR)

Additionally, the Native American Heritage Commission (NAHC) letter in response to the Project's Notice of Preparation (NOP) (see **Appendix A: Notice of Preparation and Scoping Meeting Materials**) provides guidance on Assembly Bill (AB) 52 and Senate Bill (SB) 18 compliance, and recommendations for consultation with California Native American tribes as well as recommended requirements for consultation during the environmental review process.

This Subsequent Environmental Impact Report (SEIR) evaluates the candidate housing sites based on information available to the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect impacts to TCRs could be considered.

5.14.2 Existing Regulatory Setting

Federal

National Historic Preservation Act of 1966

Enacted in 1966 and amended in 2000, the National Historic Preservation Act (NHPA) declared a national policy of historic preservation and instituted a multifaceted program, administered by the Secretary of

the Interior, to encourage the achievement of preservation goals at the federal, State, and local levels. The NHPA authorized the expansion and maintenance of the National Register of Historic Places (NRHP), established the position of State Historic Preservation Officer (SHPO) and provided for the designation of State Review Boards, set up a mechanism to certify local governments to carry out the purposes of the NHPA, assisted Native American tribes to preserve their cultural heritage and created the Advisory Council on Historic Preservation (ACHP).

American Indian Religious Freedom Act, Title 42, United States Code, §1996

The American Indian Religious Freedom Act protects Native American religious practices, ethnic heritage sites, and land uses.

Native American Graves Protection and Repatriation Act (NAGPRA) (1990), Title 25, United States Code

Native American Graves Protection and Repatriation Act (NAGPRA) defines "cultural items," "sacred objects," and "objects of cultural patrimony;" establishes an ownership hierarchy; provides for review; allows excavation of remains under certain conditions, but stipulates return of the remains according to ownership; sets penalties for violations; calls for inventories; and provides for return of specified cultural items.

State

California Environmental Quality Act (CEQA)

California public agencies must consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to PRC §21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Section 21083.2 additionally requires agencies to determine whether proposed projects would have effects on "unique archaeological resources."

"Historical resource" is a term with a defined statutory meaning. Under the State CEQA Guidelines § 15064.5 (a) "historical resource" includes the following:

- A resource listed in or determined to be eligible by the State Historical Resources Commission (SHRC), for listing in the CRHR (PRC §5024.1, Title 14 CCR, §4850 et seq.).
- A resource included in a local register of historical resources, as defined in §5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements §5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency
 determines to be historically significant or significant in the architectural, engineering, scientific,
 economic, agricultural, educational, social, political, military, or cultural annals of California may
 be considered to be an historical resource, provided the lead agency's determination is supported

by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC, §5024.1, Title 14 CCR, §4852) including the following:

- Criterion 1 Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Criterion 2 Is associated with the lives of persons important in our past;
- Criterion 3 Embodies the distinctive characteristics of a type, period, region, or method of
 construction, or represents the work of an important creative individual, or possesses high
 artistic values; or
- Criterion 4 Has yielded, or may be likely to yield, information important in prehistory or history.

CEQA addresses significant impacts to historical resources. "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines §15064.5(b)(1)).

CEQA also requires agencies to consider whether projects will affect "unique archaeological resources." PRC §21083.2(g), states that "'unique archaeological resources' means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is
 a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized, important prehistoric or historic event or person."

Assembly Bill 52

Assembly Bill 52 requires lead agencies undertaking CEQA review to, upon request of a California Native American tribe, begin consultation prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Where a tribe requests, in writing, that a public agency inform it of proposed projects, the lead agency must notify the tribe within 14 days of determining that a project application is complete or deciding to undertake a project. If the tribe responds by requesting consultation within 30 days of the notification, the lead agency must begin the consultation process within 30 days of receiving the request. In addition, under AB 52, lead agencies must evaluate a project's potential impact to a "tribal cultural resource." A TCR is defined as a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe.

Senate Bill 18 - Traditional Tribe Cultural Places Act

Senate Bill 18 requires that cities and counties contact, and consult with, California Native American tribes before adopting or amending general plans, specific plans, or when designating land as open space. The intent of SB 18 is to establish meaningful consultation between tribal governments and local governments at the earliest possible point in the planning process, to avoid potential conflicts, and to allow tribes to manage and act as caretakers of cultural places. A Native American cultural place is defined in PRC §5097.9 and §5097.995 as "any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine" (PRC §5097.9), or as "a Native American historic, cultural or sacred site, that is listed or may be eligible for listing in the California Register of Historical Resources...including any historic or prehistoric ruins, any burial ground, or any archaeological or historic site" (PRC §5097.995).

Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act (California Repatriation Act), enacted in 2001, requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The California Repatriation Act also provides a process for the identification and repatriation of these items to the appropriate tribes.

Native American Historic Resource Protection Act; Archaeological, Paleontological, and Historical Sites; Native American Historical, Cultural, and Sacred Sites (PRC §§5097-5097.994)

PRC §5097 specifies the procedures to be followed in the event of the unexpected discovery of Native American human remains on non-federal public lands. California PRC §5097.9 states that no public agency or private party on public property shall "interfere with the free expression or exercise of Native American Religion." The Code further states:

"No such agency or party [shall] cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine...except on a clear and convincing showing that the public interest and necessity so require."

California Government Code §6254 and §6254.10

Section 6254(r) explicitly authorizes public agencies to withhold information from the public relating to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports, maintained by, or in the possession of the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a Native American tribe and a state or local agency."

California Health and Safety Code

California law protects Native American burials, skeletal remains, and associated grave goods, of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code §7050.5 requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the county coroner has examined the remains (§7050.5b). If the coroner determines or has reason to believe the remains are those of a Native American, the coroner must contact the NAHC within 24 hours (§7050.5c). The NAHC will notify the Most Likely Descendant. With the permission of the landowner, the Most Likely Descendant may inspect the site of discovery. The inspection must be completed within 24 hours of notification of the Most Likely Descendant by the NAHC. The Most Likely Descendant may recommend means of treating or disposing of, with appropriate dignity, the human remains, and items associated with Native Americans.

Public Resources Code §5097.5

California PRC §5097.5 prohibits excavation or removal of any "vertebrate paleontological site...or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands." Public lands are defined to include lands owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. Section 5097.5 states that any unauthorized disturbance or removal of archaeological, historical, or paleontological materials or sites located on public lands is a misdemeanor.

Local

City of Huntington Beach General Plan

Historic and Cultural Resource Element¹

The General Plan Historic and Cultural Resources Element includes various adopted policies that were intended to protect and preserve historic resources; however, none specifically address archaeological/tribal cultural resources.

5.14.3 Existing Environmental Setting

Prehistoric and Historic Settings

As discussed in detail in Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162, this is a SEIR to the GPU PEIR. The 6th Cycle Housing Element Update (HEU) Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. The

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¹ City of Huntington Beach. 2015. City of Huntington Beach General Plan – Historic and Cultural Resource Element. https://www.huntingtonbeachca.gov/government/departments/planning/gp/index.cfm (accessed January 2022).

major prehistoric and historic settings in and around the City are described in detail in GPU PEIR Section 4.4.1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08 04 17.pdf).

As part of the GPU PEIR, a California Historical Resources Information System (CHRIS) record search was conducted within a one-mile radius of the City. The record search included a review of various inventories such as the NRHP, CRHR, California Historical Landmarks, California Points of Historical Interest, and the California State Historic Resources Inventory. The record search revealed 68 known resources within the one-mile search radius, and eight previously recorded known cultural resources within the City limits. The known prehistoric resources within the PEIR study area are summarized below:

- Three prehistoric sites: These primarily consist of small lithic tools and debitage, manos, metates
 and notably a phallic fetish effigy and bowl made of stone. Notably, one of the prehistoric sites
 contained three burials.
- One multi-component site: This site contains lithic debitage and cores, mano fragments, fire affected rock, and worked glass.

In addition, to determine the potential presence of sacred sites in the City (i.e., Area of Potential Effect (APE)), the Native American Heritage Commission (NAHC) was contacted in May 2021. The result of the NAHC's Sacred Lands File (SLF) database search was positive, indicating known sacred lands are present within the City. Additionally, the NAHC provided a list of tribes that are traditionally and culturally affiliated with the City. Native American groups may have knowledge about the area's cultural resources and may have concerns about a development's adverse effects on TCRs, as defined in PRC §21074. Accordingly, and pursuant to SB 18 and AB 52 requirements, the City provided formal notification on July 9, 2021 to the designated contact/tribal representative for the tribes the NAHC identified as being traditionally and culturally affiliated with the City, as follows:

- Campo Band of Diegueno Mission Indians
- Ewiiaapaayp Band of Kumeyaay Indians
- Gabrieleno Band of Mission Indians Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Gabrielino /Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Juaneño Band of Mission Indians
- Juaneño Band of Mission Indians Acjachemen Nation Belardes
- La Posta Band of Diegueno Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Diegueno Mission Indians
- Pala Band of Mission Indians

- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseno Indians

Refer to **Appendix G** for copies of the correspondence. Pursuant to SB 18 and AB 52, tribes must respond in writing within 30-days and within 90 days, respectively, of receipt of the formal notification from the City and request consultation. The single response received by the City (i.e., from the Gabrieleno Band of Mission Indians - Kizh Nation on July 23, 2021) did not provide TCR data but did request consultation on any and all future projects within the City. The response also did not specify whether the request for consultation was pursuant to SB 18 or AB 52.

Candidate Housing Sites

As previously noted, as part of the GPU PEIR, the CHRIS record search conducted within a one-mile radius of the City revealed eight previously recorded known cultural resources within the City limits, including three prehistoric sites and one multi-component site. Additionally, the NAHC's SFL database search was positive, indicating known sacred lands are present within the City. Therefore, the potential exists for undiscovered subsurface TCRs to be present on the candidate housing sites.

5.14.4 Impact Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning TCRs. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k), or
 - a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

5.14.5 Methodology

This analysis considers the City's Environmental Checklist Form thresholds, as described above, in determining whether Project implementation would create a significant impact concerning TCRs. The TCRs information was obtained through review of relevant planning documents including the General Plan, the GPU PEIR, and NAHC correspondence, as well as consultation with City staff. This evaluation was based on the candidate housing sites' locations in the context of the presence/absence of resources and/or conditions. This evaluation considers relevant regulations and determines their applicability to the proposed Project. The determination that the Project would or would not result in "substantial"

temporary or permanent impacts concerning TCRs considers the relevant federal, state, and local (i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

5.14.6 Project Impacts and Mitigation

Impact TCR-1

Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k)?
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.4-11)

As part of the GPU PEIR process, the City began consultation with local tribes, per AB 52, by submitting a request for a Local Government Tribal Consultation List in October 2015. The City also sent consultation letters to the following tribes: the Gabrielino Band of Mission Indians – Kizh Nation, Gabrielino – Tongva Band of Mission Indians, Juaneño Band of Mission Indians – Acjachemen Nation, and the Soboba Band of Luiseno Indians specifically, with a notice of the opportunity to engage in early consultation with the City regarding the GPU. The City had received one response from the Gabrieleno Band of Mission Indians – Kizh Nation. Their letter recognized the changing requirements of excavation during construction, noting that advances in geotechnical science now require greater depths of excavation to ensure stability of construction. As such, there was the potential for discovery of archaeological resources that had not previously been uncovered and they request that tribal monitors be on site for future projects.

Additionally, as part of the consultation with NAHC, letters were sent to invite the local Gabrielino/Tongva Tribes, and the Juaneño Band of Mission Indians to participate in the GP Update EIR process.

The location and proximity of the City to the coast and wetland areas increased the likelihood that significant TCRs would be located throughout much of the City. Any significant direct effects to unknown TCRs would potentially be significant. However, the GPU PEIR concluded that adherence to existing regulations and programs from the GP Update, as well as implementation of **GPU PEIR MM 4.4-2** and **MM 4.4-3**, would prevent adverse impacts to TCRs and reduce potential impacts to a less than significant level.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons.

Although the Project area encompasses the entire area within the City limits, the areas affected by the rezoning program, housing overlays, and hotel/motel conversions are limited to the 378 candidate housing sites shown in **Exhibit 1-1: Candidate Housing Sites**. Of the 378 candidate housing sites, all are developed/occupied by structures except two sites; thus, almost all candidate housing sites have been historically subject to extensive ground disturbing activities. Notwithstanding and as discussed above, previously recorded known cultural resources have been identified within City limits and the NAHC's SLF database search was positive, indicating known sacred lands are present within the City. Additionally, consultation with the Gabrieleno Band of Mission Indians - Kizh Nation occurred on July 9, 2021 pursuant to SB 18 and AB 52 requirements. The Kizh Nation did not provide to the City any tribal information or identify high cultural sensitivity, or communicate any specific concerns; however, they did request consultation for any and all future projects.

Given these conditions, undiscovered subsurface TCRs could be present on the candidate housing sites. Future housing development on the candidate housing sites would involve ground-disturbing activities such as grading and excavation that could directly or indirectly impact undiscovered subsurface TCRs. Therefore, future housing development facilitated by the Project could cause a substantial adverse change in the significance of a TCR on the candidate housing sites. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with **GPU PEIR MM 4.4-2**, which requires project-specific applicants to retain a qualified professional and, if necessary, appropriate Native American monitors identified by the applicable tribe (e.g., the Gabrielino Tongva Nation) and/or the NAHC, prior to any earth-disturbing activities to determine if the project would cause a substantial adverse change in the significance of a TCR. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with **GPU PEIR MM 4.4-3**, which requires all earth-disturbing activity within 100 feet of a TCR discovery/find to be halted, the City to be notified, and impacts to any significant resources be mitigated to a less than significant level through data recovery or other methods determined adequate by the appropriate Native American monitors.

It is further noted, all future housing development subject to rezoning and within overlay zones would also be subject to all regulatory requirements pertaining to TCRs, including among others compliance with SB 18 and AB 52, as applicable. Following compliance with **GPU PEIR MM 4.4-2** and **MM 4.4-3**, the Project's potential impacts associated with causing a substantial adverse change in the significance of TCRs would be reduced to a less than significant level.

GENERAL PLAN POLICIES

There are no General Plan policies applicable to the Project.

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.4-2

Prior to any earth-disturbing activities (e.g., excavation, trenching, grading) that could encounter undisturbed soils, the project-level applicant for future development shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to determine if site-specific development allowed under the GPU PEIR could result in a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines or disturb human remains. The investigation shall include, as determined appropriate by the archaeologist and the City of Huntington Beach, an updated records search of the South Central Coastal Information Center of the California Historical Resources Information System, updated Native American consultation, and a pedestrian survey of the area proposed for development. The results of the investigation shall be documented in a technical report or memorandum that identifies and evaluates any archaeological resources within the development area and includes recommendations and methods for eliminating or avoiding impacts on archaeological resources or human remains. The measures shall include as appropriate, subsurface testing of archaeological resources and/or construction monitoring by a qualified professional and, if necessary, appropriate Native American monitors identified by the applicable tribe (e.g., the Gabrielino Tongva Nation) and/or the Native American Heritage Commission. The methods shall also include procedures for the unanticipated discovery of human remains, which shall be in accordance with §5097.98 of the State Public Resources Code and §7050.5 of California's Health and Safety Code. The technical report or memorandum shall be submitted to the City of Huntington Beach for approval. As determined necessary by the city, environmental documentation (e.g., CEQA documentation) prepared for future development allowed under the GPU PEIR shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project-level applicant shall be responsible for implementing methods for eliminating or avoiding impacts on archaeological resources identified in the technical report or memorandum. Projects that would not encounter undisturbed soils and would therefore not be required to retain an archaeologist shall demonstrate non-disturbance to the city through the appropriate construction plans or geotechnical studies prior to any earthdisturbing activities. Projects that would include any earth disturbance (disturbed or undisturbed soils) shall comply with GPU PEIR MM 4.4-3.

GPU PEIR MM 4.4-3

If evidence of an archaeological site or other suspected historical resource as defined by CEQA Guidelines §15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials) are discovered during any project-related earth-disturbing activities (including

projects that would not encounter undisturbed soils), all earth-disturbing activity within 100 feet of the find shall be halted and the City of Huntington Beach shall be notified. The project-level applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less than significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 form and filed with the appropriate Information Center.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

5.14.7 Cumulative Impacts

For purposes of the TCR impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0: Basis for Cumulative Analysis**.

As concluded above, future housing development facilitated by the Project could cause a substantial adverse change in the significance of a TCR. Following compliance with GPU PEIR MM 4.4-2 and MM 4.4-3, the Project's potential impacts associated with causing a substantial adverse change in the significance of a TCR would be reduced to a less than significant level. Cumulative projects could involve actions that damage known or as-yet undiscovered TCRs specific to those development sites. However, cumulative development would undergo environmental and design review on a project-by-project basis pursuant to CEQA to evaluate potential impacts to TCRs. All cumulative development projects would be subject to compliance with the established federal, State, and local regulatory framework, including GPU PEIR MM 4.4-2 and MM 4.4-3, concerning the protection of TCRs on a project-by-project basis. Where significant or potentially significant impacts are identified, implementation of all feasible site-specific mitigation would be required to avoid or reduce impacts. The Project's potential impacts to TCRs are not cumulatively considerable given compliance with the established regulatory framework, GPU PEIR MM 4.4-2 and MM 4.4-3, and site-specific mitigation would be required. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures.

5.14.8 Significant Unavoidable Impacts

No significant unavoidable impacts concerning TCRs have been identified.

5.14.9 References

City of Huntington Beach. 2017. *City of Huntington Beach General Plan Update*. https://www.huntingtonbeachca.gov/files/users/planning/HB-GPU_Adopted-October-2017.pdf.

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5.15 UTILITIES AND SERVICE SYSTEMS

5.15.1 Introduction

The section identifies existing conditions in the Project area and evaluates the Project's potential to cause significant environmental effects due to relocation/construction of utilities or service systems; sufficient water supplies; adequate wastewater treatment to serve the Project; solid waste capacity; and compliance with reduction strategies and regulations related to solid waste. Mitigation to avoid/reduce impacts is identified, as needed.

The Subsequent Environmental Impact Report (SEIR) evaluates the candidate housing sites based on information available to the City of Huntington Beach (City), where reasonably foreseeable, direct, and indirect impacts to utilities and service systems could be considered. More specifically, the utilities and service systems information in this section is based on the City of Huntington Beach General Plan (General Plan) and the Huntington Beach General Plan Update Program Environmental Impact Report (GPU PEIR).

5.15.2 Existing Regulatory Setting

Federal

Federal Clean Water Act

The Clean Water Act is the primary federal law that protects the nation's waters, including lakes, rivers, aquifers, and coastal areas. Section 401 of the Clean Water Act requires applicants requesting a federal permit to conduct any activity, including the construction or operation of a facility that may result in the discharge of any pollutant, to obtain State certification.

Section 303 of the Clean Water Act requires states to identify surface waters that have been impaired. Under Section 303(d), states, territories, and authorized tribes are required to develop a list of water quality segments that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology.

National Energy Conservation Policy Act

The National Energy Conservation Policy Act serves as the underlying authority for federal energy management goals and requirements. Signed into law in 1978, it has been regularly updated and amended by subsequent laws and regulations. This act is the foundation of most federal energy requirements.

Energy Policy Act of 2005

The Energy Policy Act of 2005 sets equipment energy efficiency standards and seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can receive federal tax credits for purchasing fuel-efficient appliances and products, including hybrid vehicles; constructing energy-efficient buildings; and improving commercial buildings' energy efficiency. Additionally, tax credits are available for installing qualified fuel cells, stationary micro-turbine power plants, and solar power equipment.

National Pollution Discharge Elimination System

Section 303 of the Clean Water Act establishes the National Pollution Discharge Elimination System (NPDES) which regulates the discharge of pollutants from point sources. The United States Environmental Protection Agency (U.S. EPA) has authorized California to administer its NPDES permitting program. The NPDES permitting program prohibits the unauthorized discharge of pollutants from a point source (e.g., pipe, ditch, well) to waters of the United States. The permitting program addresses municipal, commercial, and industrial wastewater discharges and discharges from municipal separate storm sewer systems (MS4s). Permittees must verify compliance with permit requirements by monitoring their effluent, maintaining records, and filing periodic reports regarding compliance with regional stormwater MS4 permits as issued by the Santa Ana Regional Water Quality Control Board (SARWQCB) which administers this program at the local level.

Safe Drinking Water Act

The U.S. EPA administers the Safe Drinking Water Act (SDWA), the primary federal law that regulates drinking water quality and establishes standards to protect public health and safety. The State Department of Health Services (DHS) implements the SDWA and oversees public water system quality statewide. The DHS establishes legal drinking water standards for contaminants that could threaten public health.

State

State Water Resources Control Board

The State Water Resources Control Board (SWRCB) preserves, enhances, and restores the quality of California's water resources and ensures proper allocation and efficient use for the benefit of present and future generations. Wastewater generators must obtain a permit to discharge their wastewater. Pursuant to the federal Clean Water Act and California's Porter-Cologne Water Quality Control Act, the SWRCB regulates wastewater discharges to surface waters through the NPDES program. Some wastewater discharges are exempt from federal NPDES requirements, but California law may still apply. Under California law, the SWRCB requires waste discharge requirements for some discharges, in addition to those subject to NPDES permits. Permits contain specific requirements that limit the pollutants in discharges. They also require dischargers to monitor their wastewater to ensure that it meets all requirements. Wastewater dischargers must maintain their treatment facilities, and treatment plant operators must be certified. The SWRCB routinely inspects treatment facilities and strictly enforces permit requirements.

Sanitary Sewer Management Plan

On May 2, 2006, the SWRCB adopted Wastewater Discharge Requirements Order 2006-0003-DWQ. This order mandates all federal and state agencies, municipalities, counties, districts, and other public entities ("enrollees") that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated sewer to a publicly owned treatment works facility in California to comply with the terms of the order. Order 2006-0003-DWQ also requires each enrollee to develop and implement a system-specific sewer management plan to facilitate proper funding and

management of sanitary sewer systems. Sewer system management plans must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost/benefit analysis. Additionally, a sewer system management plan must contain a spill response plan that establishes standard procedures for immediate response to a sewer system overflow in a manner designed to minimize water quality impacts and potential nuisance conditions.

Assembly Bill 75

Assembly Bill (AB) 75 was passed in 1999, and the State Agency Model Integrated Waste Management Act (Chapter 764, Statutes of 1999, Strom-Martin) took effect on January 1, 2000. The State Agency Model Integrated Waste Management Act requires state agencies to develop and implement an integrated waste management plan. The Act also mandates community service districts to provide solid waste services report disposal and diversion information to the City, county, or regional agency in which the community service district is located. The Act also requires all state agencies and large state facilities to divert at least 50 percent of solid waste from landfills after 2004, and that each state agency and large facility submit an annual report to CalRecycle summarizing its yearly progress in implementing waste diversion programs.

Assembly Bill 939

California's Integrated Waste Management Act of 1989 (AB 939) requires cities and counties to divert 50 percent of all solid waste from landfills as of January 1, 2000, through source reduction, recycling, and composting. Assembly Bill 939 also establishes a goal for all counties to provide at least 15 years of ongoing landfill capacity. To help achieve this goal, AB 939 requires that each City and county prepare a Source Reduction and Recycling Element to be submitted to CalRecycle, a department within the California Natural Resources Agency, which administers programs formerly managed by the State's Integrated Waste Management Board and Division of Recycling.

As part of CalRecycle's Zero Waste Campaign, regulations affect what common household items can be placed in the trash. Household materials—including fluorescent lamps and tubes, batteries, electronic devices and thermostats— containing mercury are no longer permitted in the trash and must be disposed separately.

In 2007, Senate Bill (SB) 1016 amended AB 939 to establish a per capita disposal measurement system. The per capita disposal measurement system is based on a jurisdiction's reported total disposal of solid waste divided by a jurisdiction's population. CalRecycle sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an annual report to CalRecycle with an update of its progress in implementing diversion programs and its current per capita disposal rate.

Assembly Bill 1668 and Senate Bill 606

Assembly Bill 1668 and SB 606 build on former Governor Brown's efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. Senate Bill 606 and AB 1668 establish guidelines for efficient water use and a framework for implementation and oversight of the new standards, which were required to be in place

by 2022. The two bills strengthen the State's water resiliency in the face of future droughts with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; and indoor residential water use, outdoor residential water use, commercial, industrial and institutional irrigation with dedicated meters, water loss, and other unique local uses.
- Providing incentives for water suppliers to recycle water.
- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning. Requiring both urban and agricultural water suppliers to set annual water budgets and prepare for drought.

Senate Bill 610

Senate Bill 610 (Public Resources Code §21151.9 and Water Code §10910 et seq.) require preparation of "water supply assessments" for large developments. These are defined as projects of 500 or more residential units; 500,000 square feet of retail commercial space; or 250,000 square feet of office commercial space. These assessments, prepared by public water systems responsible for service, address whether adequate existing or projected water supplies are available to serve proposed projects, in addition to urban and agricultural demands and other anticipated development in the service area in which the project is located.

Where a water supply assessment concludes that insufficient supplies are available, it must describe steps that would be required to obtain the necessary supply. The content requirements for the assessment include identification of existing and future water suppliers and quantification of water demand and supply by source in five-year increments over a 20-year projection. This information must be provided for average normal, single-dry, and multiple-dry years. The absence of an adequate current water supply does not preclude project approval but does require a lead agency to address a water supply shortfall in its project approval findings.

Efficiency Standards

California Code of Regulations (CCR) Title 24 contains the California Building Code, including the California Plumbing Code (Part 5), which promotes water conservation. CCR Title 20 addresses Public Utilities and Energy conservation. In addition, the following California regulations require water-efficient plumbing fixtures in structures:

- CCR Title 20 §1604(g) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, sink faucets, and tub spout diverters.
- CCR Title 20 §1606 prohibits the sale of fixtures that do not comply with established efficiency regulations.
- CCR Title 24 §25352(I) and (j) address pipe insulation requirements, which can reduce water used before hot water reaches equipment or fixtures. Insulation of water-heating systems is also required.

Health and Safety Code §17921.3 requires low-flush toilets and urinals in virtually all buildings.

Water Conservation in Landscaping Act 2006

This act required cities, counties, charter cities, and charter counties to adopt landscape water conservation ordinances by January 1, 2010.

California Senate Bill 1087: Sewer and Water Service Priority for Housing Affordable to Lower-Income Households (2006)

This statute requires local governments to provide a copy of the updated Housing Element to water and sewer providers immediately after adoption. Water and sewer providers must grant priority for service allocation to proposed development that includes housing units affordable to lower-income households. Additionally, Urban Water Management Plans (UWMP) are required to include projected water use for future lower-income households.

Recycled Water Policy Resolution No. 2009-0011

The purpose of the Recycled Water Policy is to increase recycled water use from municipal wastewater sources that meets the definition in California Water Code, §13050(n), in a manner that implements state and federal water quality laws. When used in compliance with the policy, Title 22, and all applicable state and federal water quality laws, the SWRCB strongly supports recycled water as a safe alternative to potable water for approved uses.

Assembly Bill 341

Assembly Bill 341, approved in October 2011, is intended to reduce greenhouse gas emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in the state. It was the State's goal that at least 75 percent of solid waste generated is reduced, recycled, or composted by 2020. This law requires commercial businesses and public entities that generate four or more cubic yards (CY) of commercial solid waste per week and multi-unit residential dwelling uses with five or more units to arrange for recycling services. In 2020, California's recycling rate was 42 percent, up from 37 percent in 2019.¹ Despite the increase in the recycling rate, California did not meet the 75 percent recycling goal by 2020 although, California did make strides towards achieving the 75 percent recycling goal. Each local jurisdiction is required to inform businesses about the recycling requirement and to keep track of the level of recycling within the business community. In addition, each jurisdiction is required to report to CalRecycle, the State agency that oversees recycling and solid waste, on progress in the business community. CalRecycle will continue to monitor the State's progress, through a robust mix of research and reporting. As California builds a circular economy, CalRecycle will use the information gained to make necessary course corrections and innovations to protect California's resources, climate, and communities.

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CalRecycle. (2022). State of Disposal and Recycling in California for Calendar Year 2020. Retrieved from: https://www2.calrecycle.ca.gov/Publications/Details/1706.

Assembly Bill 1826

In October 2014, Governor Brown signed AB 1826, Chesbro (Chapter 727, Statutes of 2014), which requires businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multi-unit residential dwellings that consist of five or more units. Mandatory recycling of commercial organics would be phased in over time, and an exemption process is available for rural counties.

Senate Bill 1383

Senate Bill 1383 (Lara, Chapter 395, Statutes of 2016) passed in 2016 as part of California's larger strategy to combat climate change. This law is the largest and most prescriptive waste management legislative update in California since AB 939. As it pertains to municipal solid waste management, SB 1383 establishes targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction by 2025. The law establishes an additional target that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025. The regulations are effective January 1, 2022 and require jurisdictions to provide programs and enforcement necessary to ensure all residents and businesses recycle organics. Under this law, organics includes food and food-soiled paper waste, landscape cuttings, cardboard, paper, and non-treated wood waste. Certain businesses that make, package, prepare and/or sell food must donate edible food that would otherwise be disposed to food banks for redistribution to people in need.

Groundwater Management Act

The Groundwater Management Act, codified in Water Code §§10750–10756, provides a systematic procedure for, but does not require, an existing local agency to develop a groundwater management plan. These Water Code sections provide such an agency with the powers of a water replenishment district to raise revenue to pay for facilities to manage the basin (extraction, recharge, conveyance, and quality). In some basins, groundwater is managed under other statutory or judicial authority (such as adjudicated groundwater basins) and is not subject to the provisions of this act for groundwater management plans. A groundwater management plan covering the City was first developed in 1989 by the OCWD.

Urban Water Management Planning Act

The California Urban Water Management Planning Act of 1983, also known as AB 797, requires that urban water suppliers prepare, update, and adopt an UWMP at least once every five years on or before December 31 in years ending in 5 and 0, to support their long-term resource planning and ensure adequate water supplies are available to meet existing and future water demands. Every urban water supplier that either provides over 3,000 acre-feet of water annually or serves 3,000 or more connections is required to assess the reliability of its water sources over a 20-year planning horizon considering normal, dry, and multiple dry years. This assessment is to be included in its UWMP, which is to be updated every five years and submitted to the California Department of Water Resources (DWR). The department then

reviews the submitted plans to make sure they have completed the requirements identified in the Urban Water Management Planning Act (Division 6 Part 2.6 of the Water Code §§10610–10656).

In compliance with AB 797 requirements, the City prepared the *Huntington Beach 2020 Urban Water Management Plan* (2020 UWMP) (Arcadis U.S., Inc. June 2021); see *Huntington Beach 2020 Urban Water Management Plan* Section below.

Water Conservation Act of 2009 (SB X7-7)

The Water Conservation Act of 2009 (SB X7-7) affects urban water and agricultural water. The 20x2020 Water Conservation Plan sets forth a statewide road map to maximize the state's urban water efficiency and conservation opportunities between 2009 and 2020 and beyond for urban water. It aimed to set in motion a range of activities designed to achieve the 20 percent per capita reduction in urban water demand by 2020, or 154 gallons per capita per day (GPCD).² These activities include improving an understanding of the variation in water use across California, promoting legislative initiatives that incentivize water agencies to promote water conservation, and creating evaluation and enforcement mechanisms to ensure regional and statewide goals are met. Alternative approaches are also specified in the law (Division 6 Part 2.55 of Water Code Sections 10608–10631.5). As of 2020, the City met its 2020 water use target of 88 GPCD, through compliance with SB X7-7.³ The actual 2020 consumption target was 142 GPCD, which the City was well below.

Sustainable Groundwater Management Act

Three bills collectively known as the Sustainable Groundwater Management Act (SGMA) were passed in 2014: AB 1739 (Dickinson), SB 1168 (Pavley), and SB 1319 (Pavley). These bills provided a framework for sustainable, groundwater management which is defined as "management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results."

SGMA requires all high- and medium-priority basins, as designated by DWR, be sustainably managed. DWR designated the non-adjudicated Coastal Plain of the Orange County Groundwater Basin (OCGB) as a medium-priority basin, primarily due to heavy reliance on the OCGB's groundwater as a source of water supply.⁴

SGMA also empowers local agencies to form Groundwater Sustainability Agencies (GSAs) to manage basins sustainably and requires those GSAs to adopt Groundwater Sustainability Plans (GSPs) for crucial groundwater basins in California. The agencies within OCGB, led by OCWD, completed an Alternative (Basin 8-1 Alternative) to a GSP in 2017. In accordance with Water Code Section 10733.6(b)(3), this Basin 8-1 Alternative presents an analysis of basin conditions that demonstrates that the OCGB has operated within its sustainable yield over a period of at least 10 years. In addition, the Basin 8-1

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² California Water Boards. (2010). Water Conservation Final Report. Retrieved from: https://www.waterboards.ca.gov/water issues/hot topics/20x2020/docs/20x2020plan.pdf.

³ City of Huntington Beach. Urban Water Management Plan. (2021). Page ES-2. Retrieved from: https://www.huntingtonbeachca.gov/files/users/public_works/2020-Urban-Water-Management-Plan.pdf.

City of Huntington Beach. Urban Water Management Plan. (2021). Section 6.3.3, page 6-15. Retrieved from: https://www.huntingtonbeachca.gov/files/users/public_works/2020-Urban-Water-Management-Plan.pdf.

Alternative establishes objectives and criteria for management that would be addressed in a GSP and is designed to be "functionally equivalent" to a GSP. As discussed in Appendix G of the City's UWMP, OCGB has been operated within its sustainable yield for more than 10 years without experiencing significant and unreasonable (1) lowering of groundwater levels, (2) reduction in storage, (3) water quality degradation, (4) seawater intrusion, (5) inelastic land subsidence, or (6) depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water. ⁵ Also refer to **Section 5.7: Hydrology and Water Quality.**

Porter-Cologne Water Quality Control Act

In California, the SWRCB is responsible for ensuring the highest reasonable quality of waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses. The 1969 Porter-Cologne Water Quality Control Act, codified in the California Water Code, authorizes the SWRCB to implement programs to control polluted discharges into State waters. This law essentially implements the requirements of the Clean Water Act. Pursuant to this law, the local RWQCB is required to establish the wastewater concentrations of a number of specific hazardous substances in treated wastewater discharge. The Santa Ana RWQCB regulates wastewater discharges and water quality in the northern/coastal portions of Orange County, including the Project site.

On May 2, 2006, the SWRCB adopted Statewide General Waste Discharge Requirements (WDRs) and a Monitoring and Reporting Program (MRP) for sanitary sewer systems. The regulations were in response to growing public concern about the water quality impacts of sanitary sewer overflows, particularly those that cause beach closures, adversely affect other bodies of water, or pose serious health and safety or nuisance problems. The MRP underwent revision in 2013; a summary of revisions incorporated into the final revised MRP.⁶

Sewer System Management Plan

The State Water Resources Control Board requires wastewater collection providers to report sanitary sewer overflows and to prepare and implement Sewer System Management Plans (SSMP). The SSMP policy requires dischargers to provide adequate capacity in the sewer collection system, take feasible steps to stop sewer overflows, identify and prioritize system deficiencies, and develop a plan for disposal of grease, among other requirements. In addition, wastewater providers must report sanitary sewer overflows to the Santa Ana RWQCB, keep internal records of these overflows, and produce an annual report on overflows. The City's wastewater collection provider, Orange County Sanitation District (OCSD), prepared a SSMP in December 2014, in compliance with the State Water Resources Control Board.

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (CIWMA) establishes a waste management hierarchy to guide local agencies in implementation of source reduction, recycling and composting, and environmentally safe transformation and land disposal. CalRecycle, which was established in 2010, has

⁵ City of Huntington, Beach Urban Water Management Plan. (2021). Appendix G. Retrieved from: https://www.huntingtonbeachca.gov/files/users/public_works/2020-Urban-Water-Management-Plan-Appendices.pdf.

State Water Resources Control Board. 2013. Retrieved from: https://www.waterboards.ca.gov/water_issues/programs/sso/docs/fs_wqo20130058.pdf.

numerous responsibilities, such as ensuring and evaluating compliance with recycling laws, and is responsible for approving permits for waste facilities, approving local agencies' diversion rates, and enforcing the law's planning requirements through local enforcement agencies. Local enforcement agencies are responsible for enforcing laws and regulations related to solid waste management, issuing permits to solid waste facilities, ensuring compliance with state-mandated requirements, coordinating with other government agencies on solid waste—related issues, and overseeing corrective actions at solid waste facilities. Local enforcement agencies also inspect facilities, respond to complaints, and conduct investigations into various aspects of solid waste management.

As of July 2012, all businesses in the City are required to reuse, recycle, compost, or otherwise divert refuse from disposal pursuant to Public Resources Code §§42649–42649.7. All cities are required to either create a commercial recycling program or expand an existing program.

In 2008, SB 1016 built on the CIWMA to set "not to exceed" per capita disposal rates as opposed to quantifying yearly waste diversion. For 2020, the most recent reporting year available, the City's per capita limit was 10.4 pounds of waste per person per day.⁷

Regional

Orange County Water District Act

The Orange County Water District was formed by an act of the California state legislature in 1933. The Orange County Water District Act was signed on June 14, 1933, by then-Governor James Rolph Jr. Passage of the act allowed the Orange County Water District to manage the Orange County Groundwater Basin, which is the groundwater basin that serves the coastal areas of Orange County that many water agencies in Orange County rely upon, including Huntington Beach.

Local

City of Huntington Beach General Plan

Public Services and Infrastructure Element⁸

The General Plan Public Services and Infrastructure Element includes a number of adopted goals and policies related to utilities and service systems that were designed to examine current and desired future characteristics of water, wastewater, solid waste, storm drainage, electricity, natural gas, telephone, and data services infrastructure. The following Public Services and Infrastructure Element goals and policies are relevant to the proposed Project:

Goal PSI-6: The costs of water and sewer infrastructure improvements are addressed by benefitting development projects.

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Cal Recycle. (2019). Disposal Rate Calculator. Retrieved from: https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator.

Eity of Huntington Beach. 2017. City of Huntington Beach General Plan Update – Public Services and Infrastructure Element. https://www.huntingtonbeachca.gov/government/departments/planning/major/general-plan-update.cfm.

Policy PSI-6.A: Provide and maintain wastewater collection and treatment facilities which adequately convey wastewater generated by existing land uses and future projects while maximizing cost efficiency.

Goal PSI-7: The flood control system supports permitted land uses while preserving public safety.

Policy PSI-7.C: Monitor demands and manage future development and reuse projects and existing land uses to mitigate impacts and/or facilitate improvements to the storm drainage system.

Policy PSI-7.E: Control surface runoff water discharge into the stormwater conveyance system to comply with the City's National Pollutant Discharge Elimination System Permit and other regional permits issued by the Santa Ana Regional Water Quality Control Board.

Goal PSI-8: Coordinated infrastructure improvements are identified and funded.

Policy PSI-8.C: Assess, and, if necessary, adjust development impact fees to ensure they are coordinated with infrastructure management plans and provide for ongoing and future infrastructure needs in an equitable manner.

Goal PSI-9: An adequate and orderly system for solid waste collection and disposal meets the demands of new development and reuse projects, existing land uses, and special events.

Policy PSI-9.A: Ensure that new development and reuse projects provide adequate space for recycling and organics collection activities to support state waste reduction goals.

Goal PSI-10: Superior electricity, natural gas, telephone, and data services improve quality of life and support economic development.

Policy PSI-10.B: Continue to require utilities to be placed underground as part of new development projects.

Policy PSI-10.D: Promote provision of high-capacity data systems to support new development and reuse projects, particularly within the Research and Technology land use designation.

Policy PSI-10.E: Encourage integrated and cost-effective design and technology features within new development and reuse projects to minimize demands on dry utility networks.

Goal PSI-11: The City's financial resources are managed and expanded to support infrastructure maintenance and expansion.

Policy PSI-11.B: Ensure that development impact fees keep pace with the cost of new infrastructure, and that new development pays its fair share.

Environmental Resources and Conservation Element⁹

The General Plan Environmental Resources and Conservation Element includes various policies related to utilities and service systems that designed to examine the current and desired future characteristics of

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⁹ City of Huntington Beach. 2017. City of Huntington Beach General Plan Update – Environmental Resources and Conservation Element. https://www.huntingtonbeachca.gov/government/departments/planning/major/general-plan-update.cfm. (accessed December 2021)

energy and water conservation. The following Environmental Resources and Conservation Element goals and policies are relevant to the proposed Project:

Goal ERC-15: Adequate water supply is available to the community through facilities,

infrastructure, and appropriate allocation.

Policy ERC-15.A: Maintain a system of water supply and distribution facilities capable of meeting

existing and future daily and peak demands, including fire flow requirements, in a

timely and cost-efficient manner.

Policy ERC-15.B: Monitor demands on the water system, manage new development and reuse projects

and existing land uses to mitigate impacts and/or facilitate improvements to the

system, and maintain and expand water supply and distribution facilities.

Huntington Beach Municipal Code¹⁰

Huntington Beach Municipal Code (HBMC) Chapter 14.18, Water Shortage Contingency Response, establishes baseline water conservation requirements and a program to reduce water usage during times of water shortage to enable effective water supply planning, ensure reasonable and beneficial use of water, prevent waste of water, and maximize water use efficiency. Three tiers of water conservation requirements are established depending on the severity of a water shortage. Level one is the least severe, while level three is used during emergency conditions. The level of severity is determined by the City Public Works Department and declared by a City Council resolution.

HBMC Chapter 14.52, Water Efficient Landscape Requirements, includes water-efficient landscape requirements and addresses state requirements for enhancing water-efficient landscaping and reducing potable water demand.

Huntington Beach Urban Water Management Plan

The City is a retail water supplier that provides water to its residents and customers using a combination of local groundwater from the Orange County Groundwater Basin and supplemental imported potable water supply obtained from its regional wholesaler, Municipal Water District of Orange County. The 2020 UWMP, which was prepared in compliance with the UWMP Act of 1983 and subsequent California Water Code requirements, was adopted by the City Council on June 30, 2021. This 2020 UWMP assesses present and future water supply sources and demands within the City's service area. It updates various 2015 UWMP items related to: water resource needs, water use efficiency, assessment of water reliability, and strategies to mitigate water shortage conditions. The 2020 UWMP adds a 2020 Water Shortage Contingency Plan (WSCP) to help the City effectively respond to potential water shortages. The 2020 UWMP contains all elements needed to comply with the UWMP Act's new requirements, as amended since 2015.

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¹⁰ City of Huntington Beach 2020. Huntington Beach Municipal Code. Retrieved from: http://www.qcode.us/codes/huntingtonbeach/ (Accessed June 10, 2021)

Huntington Beach Master Facilities Plan

The 2011 Master Facilities Plan compiles water infrastructure projects needed to meet the General Plan's theoretical buildout. The Master Facilities Plan provides for three types of projects: maintenance, repair, and rehabilitation of existing infrastructure; future development; and enhancements to quality of life for residents.

5.15.3 Existing Environmental Setting

As discussed in detail in **Section 5.1: Subsequent Environmental Impact Report and State CEQA Guidelines §15162**, this is a SEIR to the GPU PEIR. The 6th Cycle Housing Element Update (HEU) Regional Housing Needs Assessment (RHNA) of 13,368 could not have been known at the time of GPU PEIR certification, and the RHNA is in excess of the number of dwelling units analyzed in the GPU PEIR. This SEIR contains only the information necessary to make the previous PEIR adequate for the Project. The major utilities infrastructure and service systems settings in and around the City are described in detail in GPU PEIR Section 4.15-1 (https://www.huntingtonbeachca.gov/files/users/planning/Final-EIR-08-04-17.pdf).

Water

Water Supply

The City's two main water sources are local well water within the Lower Santa Ana River Groundwater Basin, also known as the Orange County Groundwater Basin (OCGB), and imported water from the Municipal Water District of Orange County (MWDOC).

The Orange County Water District (OCWD) manages the OCGB and establishes a yearly groundwater production allocation, also known as basin production percentage, which is the percentage of each retail water agency's total water supply that comes from groundwater, pumped from the basin. This percentage has become the basis for the imported water deliveries within the City. For FY 2013-2014, the OCWD Board of Directors set the basin production percentage at 70 percent (320,000 acre-feet).

Table 5.15-1: Water Supplies – **Actual and Projected** presents the City's actual (2020) and projected (2025-2045) water supplies. As shown in **Table 5.15-1**, for FY 2019-20, the City relied on approximately 70 percent (18,296 AF) groundwater and 30 percent (7,670 AF) imported water. It is projected that by 2030, which is proximate to the Project's horizon year of 2029, the water supply mix will be approximately 85 percent groundwater and 15 percent imported water. Note that the representations of supply shown in **Table 5.15-1** match the projected demand. However, the City can purchase more MWDOC imported water, should the need arise.

		2020	Projected Water Supply					
	Water Supplier	2020	2025	2030	2035	2040	2045	
Water Supply		Actual Volume (AF)	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	Reasonably Available Volume	
Groundwater ^{1,} 2, 3	Orange County Groundwater Basin	18,296 (70%)	22,439	22,545	22,388	22,179	22,146	
Purchased or Imported Water ²	MWDOC	7,670 (30%)	3,960	3,979	3,951	3,914	3,908	
_	Total	25,966	26,399	26,524	26,339	26,093	26,054	

Table 5.15-1: Water Supplies – Actual and Projected

Source: UWMP, 2020 Table 6-1 Retail: Water Supplies – Actual and Table 6-2 Retail: Water Supplies Projected. Pages 6-1 through 6-2.

- 1. Groundwater volumes assume OCWD's basin production percentage (BPP) to be 85% for all years.
- 2. Groundwater and imported water volumes may vary depending on OCWD's actual BPP projections, which are established annually.
- 3. Additionally, Groundwater Replenishment System (GWRS) supplies are included as part of groundwater pumping numbers.

Recycled Water

The City benefits from the recycled water produced by the joint OCWD/OCSD Groundwater Replenishment System (GWRS). The recycled water program has enabled the OCWD to increase the basin production percentage even through persistent drought conditions, enabling the City to increase the percentage of sourced water from groundwater.

Water Demand

Water use within the City's service area has been relatively stable in the past decade with an annual average of 27,753 AF for potable use. ¹¹ In FY 2019-20, the City's potable water use (groundwater and imported) was 25,966 AF. There is currently no recycled water use within the City's service area; see also *Recycled Water* Section above.

As discussed in the 2020 UWMP, the City is mostly developed and is a predominantly single- and multifamily residential community, with a small projected population increase of 2.3 percent over the next 25 years. A 1.0 percent increase in water demand is anticipated over the next five years; however, an estimated 1.3 percent decrease in water demand is expected from 2025 through 2045. The potable water use projected for 2045 is forecasted to be 26,054 AF. Passive savings are anticipated to continue for the next 25 years and are included in the water use projections. Overall, total water demand is projected to increase 0.34 percent between 2020 and 2045; see **Table 5.15-1**, above.

Water Conservation

The City's actual 2020 water use was lower than its 2020 water use target. In its 2015 UWMP, the City revised its baseline per capita water use calculations using 2010 U.S. Census data. Changes in the baseline calculations resulted in updated per capita water use targets. As stated previously, the City's actual 2020

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Huntington Beach 2020 Urban Water Management Plan. (2021). Retrieved from: https://www.huntingtonbeachca.gov/files/users/public_works/2020-Urban-Water-Management-Plan.pdf.

use/consumption was 88 GPCD, which is below its 2020 target of 142 GPCD. The City did not make any adjustments in its actual 2020 consumption using weather normalization, economic adjustment, or extraordinary events. Therefore, the City met its 2020 water use target and is in compliance with SBx7-7.

Water Treatment

The City's potable water provided by MWDOC, is treated at two filtration plants: the Robert B. Diemer Filtration Plant in Yorba Linda; and the Joseph Jensen Filtration Plant in Granada Hills. The water is treated and tested for microbial, organic, inorganic, and radioactive contaminants as well as pesticides and herbicides. The Robert B. Diemer Water Treatment Plant distributes water via gravity-flow to coastal Los Angeles and Orange County. The Robert B. Diemer Water Treatment Plant treats water from both the Colorado River Aqueduct and the State Water Project and has a treatment capacity of 520 million gallons a day. The Joseph Jensen Water Treatment Plant distributes water to the San Fernando Valley, Ventura County and central Los Angeles and has capacity of 750 million gallons a day. ¹²

Groundwater Supply and Quality

The City is served by the OCGB, which is the only major non-adjudicated groundwater basin in Southern California. The OCWD has developed a groundwater management plan that incentivizes sustainable groundwater production and recharge practices, to manage potential basin overdraft.

The City contracts with a State-approved laboratory to collect and analyze 40 bacteriological samples per week, as required by the State Health Department. The State Health Department licenses each water system that serves a municipality, and requires records of the amount of water pumped; any chemicals that are added to the system; bacteriological samples; and any new additions to the system such as new water mains, new water wells and reservoirs.

The City also maintains a water quality-monitoring program that analyzes 40 special samples per month. These samples are taken at various locations throughout the system and are checked for color, odor, temperature and turbidity. Annually, a Drinking Water Quality Report is prepared for the City. ¹³ Currently, there have been no water quality concerns that have prevented the City from meeting water quality standards set by the U.S. EPA and the California Department of Public Health. ¹⁴

Water Distribution Facilities

The UWMP reports the City's Public Works Department operates four storage and distribution reservoirs (i.e., Overmeyer, Peck, Springdale, and Edwards Hill) with a combined capacity of 55 million gallons (MG), four booster stations, eight active groundwater wells and an approximately 607-mile water mains system with 55,028 service connections.

June 2022

Metropolitan's Water Treatment Plants. 2018. Retrieved from: https://www.mwdh2o.com/media/4360/water-treatment-plants-fact-sheet-final-web.pdf.

¹³ City of Huntington Beach Drinking Water Quality. 2022. Retrieved from: https://www.huntingtonbeachca.gov/government/departments/public works/utilities/quality/.

¹⁴ City of Huntington Beach. Annual Drinking Water Quality Report. (2021). Retrieved from: https://www.huntingtonbeachca.gov/2021DWQR/2021-Water-Quality-Report.pdf.

Wastewater

The City owns and operates a wastewater collection system within its service area, which serves approximately 200,000 customers. The City's sewer system includes a total of 360 miles of sewer lines ranging from 6 inches to 30 inches in diameter, 10,000 manholes, and 27 lift stations.¹⁵

OCSD is a public agency that provides wastewater collection, treatment, and disposal services in central and northwest Orange County. OCSD has two operating facilities that treat wastewater from residential, commercial and industrial sources. ¹⁶ The City's wastewater is treated at OCSD's Treatment Plant No. 2, which is located at 22212 Brookhurst Street in Huntington Beach. The average daily flow of wastewater at Treatment Plant No. 2 for 2020-2021 was approximately 19 million gallons daily (mgd), ¹⁷ as compared to its total capacity of 312 mgd. ¹⁸

Solid Waste and Landfills

Solid waste produced within the City is collected by Republic Services and is taken to a transfer station/materials recovery facility. This facility has a permitted capacity of 4,000 tons of solid waste per day and currently receives approximately 1,800-2,000 tons of solid waste per day. Waste that is not recycled is then transported to the Frank Bowerman Landfill in Bee Canyon, in the City of Irvine, which is expected to remain open until 2053. In addition to the Frank Bowerman Landfill, solid waste hauled from the City can be transported to 13 other landfills, with a small amount sent to two waste-to-energy facilities for incineration. Solid waste generated in Huntington Beach is transmitted to various Class III landfills operated by the Orange County Integrated Waste Management Department (IWMD). Class III landfills accept non-hazardous municipal waste. As noted above, the City's per capita limit for the City was 10.4 pounds of waste per person per day for 2020. Actual waste flows were approximately 8.3 pounds per person per day, under the limit imposed by CalRecycle. ¹⁹ In addition to waste disposal and recycling offered by Republic Services, the City also offers used oil recycling services (either curbside or via a collection center) and household hazardous waste disposal services through the Orange County Household Hazardous Waste Collection Center.

The Orange County Integrated Waste Management Agency (IWMA) operates the County's three landfills. These landfills accept municipal solid waste (trash) and are managed by the IWMD.²⁰ The IWMD is responsible for ensuring that County waste is disposed of in a way that protects public health, safety and the environment.

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¹⁵ City of Huntington Beach. (2021). 2020 Urban Water Management Plan. Retrieved from: https://www.huntingtonbeachca.gov/files/users/public_works/2020-Urban-Water-Management-Plan.pdf

¹⁶ Orange County Sanitation District. (2022). General Information. Retrieved from: https://www.ocsan.gov/about-us/general-information.

¹⁷ City of Huntington Beach. Sewer System Management Plan. (2021). Retrieved from: https://www.huntingtonbeachca.gov/files/users/public_works/Sewer-System-Management-Plan-2021.pdf.

¹⁸ City of Huntington Beach. (2021). 2020 Urban Water Management Plan. Retrieved

 $from: \underline{https://www.huntingtonbeachca.gov/files/users/public \underline{works/2020-Urban-Water-Management-Plan.pdf}. \\$

¹⁹ Cal Recycle. (2019). Disposal Rate Calculator. Retrieved from:

https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/DisposalRateCalculator.

²⁰ County of Orange – Integrated Waste Management Department. (2022). Retrieved from: http://www.oclandfills.com.

Energy

Energy use is typically quantified using the British Thermal Unit (BTU). Total energy use in California was 7,802 trillion BTU in 2019²¹ (the most recent year for which this specific data is available), which equates to an average of approximately 198 million BTU per capita. Of California's total energy use, the breakdown by sector is approximately 10.8 percent transportation, 5.5 percent industrial, 8.2 percent commercial, and 6.9 percent residential. Electricity and natural gas in California are generally used by stationary sources such as residences, commercial sites, and industrial facilities, whereas petroleum use is generally accounted for by transportation-related energy use. In 2021, taxable gasoline sales (including aviation gasoline) in California accounted for 13,060,407,775 gallons of gasoline.²²

Electricity

Electrical services are provided to the City by Southern California Edison (SCE). SCE provides electricity to approximately 15 million people, 180 incorporated cities, 15 counties, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area.²³ SCE produces and purchases their energy from a mix of conventional and renewable generating sources. Major SCE facilities located in the City include a generating station, six substations, and switching yards.²⁴

In 2002, Community Choice Energy (CCE), also known as Community Choice Aggregation, was introduced to the City. CCE permits California cities and counties to purchase electricity on behalf of their communities; see also *Orange County Power Authority (OCPA)* Section below. For many decades, SCE had been the sole entity that acquired power for the City. However, the CCE's purchasing power introduced competition into the energy market, providing customers with a choice, where none had existed. CCE's role is limited to the purchasing of power, not its delivery. SCE remains in control of remaining steps in the energy cycle: transmission, distribution, metering, and billing. ²⁵ In 2020, electricity use attributable to the County was approximately 19,733 GWh from residential and non-residential sectors. ²⁶

Orange County Power Authority (OCPA)

The City of Irvine has been spearheading an effort to create a regional CCE program known as OCPA and has invited all Orange County cities to join. On December 10, 2020, the Huntington Beach City Council voted to join OCPA as a founding member.

Natural Gas

The City is served by Southern California Gas Company (SoCalGas). SoCalGas services approximately 21.8 million people in a 24,000-square mile service territory. ²⁷ SoCalGas has four storage fields; Aliso Canyon,

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²¹ US Energy Information Administration (2022). *California Energy Consumption Estimates*. Retrieved from EIA Website: https://www.eia.gov/state/print.php?sid=CA.

²² California Department of Tax and Fee Administration (CDTFA). (2022). Net Taxable Gasoline Gallons. Retrieved from CDTFA Website: https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm.

SCE. (2020). By the Numbers: Who We Serve. Retrieved from SEC Website: https://www.sce.com/about-us/who-we-are.

²⁴ City of Huntington Beach. (2017). Final EIR, Section 4.15 Utilities and Service Systems, Section 4.15.1.4, Page 4.15-6. Retrieved from: https://www.huntingtonbeachca.gov/government/departments/planning/major/general-plan-update.cfm.

²⁵ City of Huntington Beach. (2022). Community Choice Energy and Orange County Power Authority. Retrieved from: https://www.huntingtonbeachca.gov/residents/sustainable-hb/cce-faqs/index.cfm#faq1.

²⁶ California Energy Commission. (2016). Electricity Consumption by County. Retrieved from: http://ecdms.energy.ca.gov/elecbycounty.aspx.

²⁷ SoCalGas. (2022). Company Profile. Retrieved from: https://www.socalgas.com/about-us/company-profile.

Honor Rancho, La Goleta, and Playa del Rey, as well as a combined storage capacity of approximately 134 billion cubic feet. ²⁸ According to the California Energy Commission (CEC), natural gas demand in the SoCalGas service area was 594 million therms in 2020 (most recent data). ²⁹

SoCalGas projects that total demand for natural gas will decline at an annual rate of 1.2 percent from 2020 to 2035. ³⁰ The decline in demand is due to modest economic growth, California Public Utilities Commission mandated energy efficiency standards and programs, tighter standards created by revised Title 24 Codes and Standards, renewable electricity goals, the decline in commercial and industrial demand, and conservation savings linked to Advanced Metering Infrastructure.

5.15.4 Impacts Thresholds and Significance Criteria

The City's *Environmental Checklist Form* (2019) includes questions concerning utilities and service systems. The issues presented in the Environmental Checklist have been used as significance criteria in this section. Accordingly, the Project would have a significant effect on the environment if it would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.
- Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.
- Result in a determination by the wastewater treatment provider which serves or may serve the
 project that it has inadequate capacity to serve the project's projected demand in addition to the
 provider's existing commitments.
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.
- Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

5.15.5 Methodology

This analysis considers the City's *Environmental Checklist Form* thresholds, as described above, in determining whether Project implementation would create a significant impact concerning utilities and service systems. The evaluation was based on reviewing the regulations and determining their applicability to the HEU. Utilities information was acquired through review of relevant planning documents including the General Plan, the GPU PEIR, and HBMC, and consultation with City staff. The determination that the Project would or would not result in "substantial" temporary or permanent impacts concerning utilities and service systems considers the relevant federal, state, and local

²⁸ SoCalGas. (2022). Storage Facility Safety. Retrieved from: https://www.socalgas.com/stay-safe/pipeline-and-storage-safety/storage-facility-safety

²⁹ California Energy Commission. (2020). Gas Consumption by Southern California Gas. Retrieved from CEC Website: http://ecdms.energy.ca.gov/gasbycounty.aspx.

³⁰ California Gas and Electric Utilities (2021). California Gas Report 2020. Page 5. https://www.socalgas.com/sites/default/files/2020-10/2020 California Gas Report Joint Utility Biennial Comprehensive Filing.pdf.

(i.e., General Plan and HBMC) laws, ordinances, and regulations and the future housing development's compliance with such laws, ordinances, and regulations.

5.15.6 Project Impacts and Mitigation

Impact UTL-1

Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction of which could cause significant environmental effects?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, pages 4.15-11 and 4.15-16)

The potential impacts to utilities and service systems/stormwater systems resulting from implementation of the GPU are summarized below.

<u>Water and Wastewater Treatment</u>. Development of land uses allowable under the GPU would increase wastewater generation by approximately 1,321,788 gallons per day (gpd), or 1.32 million gallons per day (mgd) and would increase water demand by approximately 1,820,304 gpd, or 1,134 acre-feet per year (AFY). However, the GPU PEIR concluded that implementation of GPU policies and programs, as well as standard conditions of approval requiring that adequate capacity in the water distribution and wastewater conveyance and treatment systems is demonstrated for specific developments, would reduce use of water and wastewater treatment facilities and infrastructure. Therefore, the GPU PEIR concluded that impacts to water and wastewater treatment facilities from the GPU would be less than significant.

Stormwater Drainage. Development of land uses allowable under the GPU would result in the construction of new and/or improved stormwater drainage facilities. The City anticipates that the overall City stormwater drainage infrastructure would be improved over the next 25 years, particularly as development occurs and the system is required to service additional residences and businesses. However, the GPU PEIR concluded that construction of stormwater drainage facilities would be subject to implementation of GPU policies and programs, and existing regulatory requirements, including but not limited to preparation and implementation of project specific SWPPPs, City precise grading permit, the De Minimus Threat General Permit, and design and construction of stormwater BMPs. Therefore, existing regulatory requirements would ensure that construction of new or expanded stormwater drainage would result in a less than significant impact.

<u>Dry Utilities</u>. Development of land uses allowable under the GPU would increase electricity consumption by approximately 113,634,008 kWh per year (a 9.5 percent increase in electricity for the City) and increase natural gas consumption by approximately 791,337,405 therms per year (65,944,856 therms per month) or a 38 percent increase, under a worst-case scenario. Although the GPU PEIR determined that implementation of the GPU would result in an increased demand for dry utilities, no proposals for energy production facilities or transmission facilities were included as part of the GPU PEIR. The GPU PEIR noted that improvements to dry utility systems would occur on an as-needed basis and would be conducted by SCE or SoCal Gas. Such projects would be required to undergo separate CEQA review, and their impacts

would be assessed at that time. Therefore, the GPU PEIR concluded that impacts related to dry utilities would be less than significant.

The GPU PEIR concluded that potential growth allowed by the GPU would not affect water and wastewater treatment facilities, prohibit the design or installation of BMP, or affect energy or transmission facilities, and would therefore result in a less than significant impact.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons. Future housing development facilitated by the Project would incrementally increase the demand for utility and service system infrastructure, resulting in the relocation or construction of new or expanded facilities. However, because all except two of the candidate housing sites are currently developed, infrastructure is already in place to serve the existing land uses. Additionally, utility and service system infrastructure exist throughout the Project area, since the City is mostly urbanized. Therefore, it is anticipated that future housing development facilitated by the Project would connect to existing nearby utility and service systems with a nominal need for relocation or construction of new or expanded infrastructure. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with General Plan policies, which address relocation/ construction of utilities and service systems. Policy PSI-6. A requires the provision of wastewater collection facilities which adequately convey wastewater generated by future projects while maximizing cost efficiency, and Policy PSI-7.C requires that the City monitor demands and manage future development and reuse projects to mitigate impacts and/or facilitate improvements to the storm drainage system. Policy PSI-8.C requires that the City assess, and, if necessary, adjust development impact fees to ensure they are coordinated with infrastructure management plans and provide for ongoing and future infrastructure needs in an equitable manner. Policy PSI-10.B specifies that the City continue to require utilities to be placed underground as part of new development projects. Policy PSI-11.B is intended to ensure that development impact fees keep pace with the cost of new infrastructure, and that new development pays its fair share contribution towards funding infrastructure improvements. Policy ERC-15.A requires that the City maintain a system of water supply and distribution facilities capable of meeting existing and future daily and peak demands, including fire flow requirements, in a timely and cost-efficient manner. Finally, Policy ERC-15.B requires the City to monitor demands on the water system, manage new development and reuse projects to mitigate impacts and/or facilitate improvements to the system, and maintain and expand water supply and distribution facilities. Future housing development subject to rezoning and within overlay zones would also be required to comply with GPU PEIR MM 4.15-1, which require future projects to demonstrate that there is adequate capacity in the wastewater collection system to accommodate discharges from specific development projects. Following compliance with the GPU policies listed above and GPU PEIR MM 4.15-1, the Project would result in a less than significant impact concerning its potential to cause environmental effects from the relocation or construction of new

or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities.

GENERAL PLAN POLICIES

See **Section 5.15.2: Existing Regulatory Setting** for complete policy text.

- Policy PSI-6.A
- Policy PSI-7.C
- Policy PSI-8.C
- Policy PSI-10.B

- Policy PSI-11.B
- Policy ERC-15.A
- Policy ERC-15.B

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.15-1 The City of Huntington Beach shall require that adequate capacity in the wastewater collection system is demonstrated from the specific development site discharge location to the nearest Orange County Sanitary District main or trunk line to accommodate discharges from the specific development project. If capacity and/or conditions are demonstrated to be adequate, upgrades may not be required. If capacity and/or condition is not adequate, the City of Huntington Beach shall identify corrective action(s) required by the specific development applicant to ensure adequate capacity. Corrective action could include, but is not limited to:

- 1) Upsize/replace new sewer pipes, as identified in sewer analysis
- 2) Discharge assessment fees/districts to upsize/replace sewer lines at downstream locations or where contributing areas are large
- 3) In-lieu fees to implement system-wide wastewater collection infrastructure improvements
- 4) Other mechanisms as determined by the City Department of Public Works.

Because some wastewater collection system constraints may be located far down gradient from the actual development site, several properties may serve to contribute to system capacity constraints. Therefore, the City Department of Public Works shall assess each development and system characteristics to identify the best method for achieving adequate capacity in the wastewater collection system.

The City of Huntington Beach Department of Public Works shall review the sewer analysis and determine required corrective action(s) or if a waiver of corrective action is applicable. The site-specific development applicant shall incorporate required corrective actions into their project design and/or plan. Prior to Final Inspection, the City Department of Public Works shall ensure that required corrective action has been implemented.

MITIGATION MEASURES

No mitigation beyond GPU PEIR mitigation required.

Level of Significance After Mitigation: Less Than Significant with Mitigation Incorporated

Impact UTL-2

Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Level of Significance Before Mitigation: Potentially Significant

GPU PEIR (Volume II, page 4.15-19)

As discussed in the GPU PEIR, implementation of the GPU would increase water demand by approximately 2,039 AFY. However, the GPU PEIR concluded that with continued conservation efforts, the City would be able to sustain low water use in accordance with California Water Conservation Bill of 2010 (SBx7-7) requirements. The City adopted the Water Conservation and Water Supply Shortage Program Ordinance No. 4022 (HBMC 14.18.050. Ordinance No. 4022), which established permanent water conservation requirements and prohibits wasteful use of water that are effective at all times and are not dependent upon a water shortage for implementation. Additionally, the City Water Efficient Landscape Ordinance (HBMC 14.52) requires new public and private development projects to reduce water usage. The ordinance guides new development projects through the process of designing, installing, and maintaining water efficient landscaping. Lastly, implementation of GPU PEIR MM 4.15-2, which requires future projects to incorporate water efficient measures and practices, and compliance with General Plan policies would further reduce future project water demands. Notwithstanding, the GPU PEIR concluded that given the uncertainty of water supply across the western United States and throughout the state of California, a supply deficit could extend into the next decade resulting in a significant and unavoidable impact. Although the City had demonstrated significant water conservation over the previous 10 years, and the 2016 UWMP indicated sufficient water supply, the GPU PEIR concluded that until such time as greater confidence in and commitment from water suppliers can be made, or the water supply situation improves, the GPU would result in a significant and unavoidable impact.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Future housing development facilitated by the Project would incrementally increase the demand for potable water. **Table 5.15-2: Projected HEU Water Demand**, shows the projected water demand associated with Project implementation. At buildout, future housing development would increase water demand in the City by approximately 2,905 AFY, or approximately 11 percent over existing 2022 and projected 2030 City demands. However, this forecasted water demand does not account for the water demand credit/offset associated with the displaced land uses, as discussed below.

Table 5.15-2: Projected HEU Water Demand (AFY)¹

Description	2022	2030
City Demand ²	26,183	26,524
HEU Demand at Buildout, 2029 Horizon ^{3, 4}	2,905	2,905
Total With Project Demand	29,088	29,429
Projected % Change from City Demand ^{5,6}	+11%	+11%

Notes:

- 1. AFY = acre feet per year
- 2. UWMP Table 4-2, Use for Potable and Non-Potable Water Projected.
- 3. Assumes 11,743 dwelling units; see Table 3-6: Summary of RHNA Status and Candidate Housing Sites Inventory (Dwelling Units).
- 4. Project water demand is based on a forecast Project population of 29,475 persons (see **Table 5.10-8: Existing Plus Project Growth Projections**) and a demand factor of 88 gallons per capita per day (GPCPD), which is the actual 2020 consumption of 88 GPCD, per the City of Huntington Beach UWMP.

Because all except two of the candidate housing sites are currently developed, the Project's water demand at each candidate housing site would be offset to varying degrees by the current water demand from existing uses that would be displaced. The 2020 UWMP did not account for future RHNA housing development, thus, the following analysis considers the representative candidate housing sites for potential water supply impacts.

Because water demand must account for credits from displaced land uses, it is not feasible to calculate water demand for each of the 368 candidate housing sites, as this would require assessing each sites' existing uses and proposed demand. However, to provide representative developments, this analysis includes calculated water demand for the candidate housing sites, with the mean, maximum, and 90th percentile development capacities. The maximum site (Site #217 with 601 dwelling units) provides the site with the maximum development (i.e., the most DU), and therefore the greatest water demand. The 90th percentile site (Site #16 with 143 dwelling units) was provided to communicate that 90 percent of the sites would have development capacities and thus water demands less than this site. Additionally, the mean (or average) site (Site #53 with 51 dwelling units) provides a site with average development (i.e., the average dwelling unit), and therefore the average water demand that is reasonably expected for typical candidate housing site development. Table 5.15-3: Projected Water Demand – Representative Development Capacities, shows the projected water demand and the offset/credited values for a representative sample of the candidate housing sites, with the mean, maximum, and 90th percentile development capacities based on the various development capacities at the 368 candidate housing sites; see Appendix B: Candidate Housing Sites Inventory for details concerning each site. Table 5.15-3 shows the projected water demands associated with the candidate housing sites maximum and mean/average are 148.7 AFY and 12.6 AFY, respectively.

Table 5.15-3: Projected Water Demand – Representative Development Capacities

Scenario	Size (Acres)	Zoning	FAR	Development Capacity ¹	Projected Water Demand (GPD) ^{2, 3, 4}	Projected Water Demand (AFY) ⁵	
	Mean/Average (Site No. 53)						
Existing	0.67	Research and Technology	1.0	29,185 SF	4,378	4.9	
Proposed	0.67	Overlay	NA	51 DU	11,265	12.6	
Change Existing Plus Project					+6,887	+7.7	
% Change Existing Plus Project				+15	57%		
% Credit to Project from Existing				-39	9%		

Scenario	Size (Acres)	Zoning	FAR	Development Capacity ¹	Projected Water Demand (GPD) ^{2, 3, 4}	Projected Water Demand (AFY)⁵
		Maximu	m (Site N	No. 217)		
Existing	7.55	Beach and Edinger Corridors Specific Plan	1.5	493,317SF	73,998	82.9
Proposed		Overlay	NA	601 DU	132,749	148.7
		+58,751	+65.8			
% Change Existing Plus Project					+7:	9%
% Credit to Project from Existing				-50	6%	
90 th Percentile (Site No. 16)						
Existing	2.57	Research and Technology	1.0	111,949 SF	16,792	18.8
Proposed	2.57	Overlay	NA	143 DU	31,586	35.4
Change Existing Plus Project					+14,793	+16.6
% Change Existing Plus Project					+88	8%
	% Credit to Project from Existing				-53	3%

Notes:

- 1. Development capacity assumes 80 percent of maximum density assumed to be consistent with existing development trends, per HEU Appendix B, Table B-11: Adequate Sites to Accommodate the RHNA.
- 2. Population per DU is 2.51 persons per household (California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark,* available at https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/).
- 3. Demand factor used for residential is the actual 2020 consumption of 88 gallons per capita per day (GPCD), per the City of Huntington Beach LIWMP.
- 4. Demand factor used for non-residential uses is 0.15 gallons per day per square feet (gpd/sf), per the GPU PEIRTable 4.15-4, Increased Water Demand for the General Plan Update.
- 5. Sums may not total due to rounding.
- 6. DU = dwelling unit

As also shown in Table 5.15-3, the water demand associated with each development scenario would be offset by between 39 and 56 percent, while the water demand associated with the average-sized development scenario would be offset by approximately 39 percent, when considering the existing water demand associated with the displaced land uses that would be removed. It is noted that the offset/ credited values shown in Table 5.15-3 are based on existing zoning and forecast development capacities. The actual offset/credited values would vary by development site based on the existing on the ground land uses that would be displaced at the time of each respective development application. As indicated in Table 5.15-2, the Project's water demand is approximately 2,905 AFY. However, the Project's water demand is anticipated to be reduced when considering the existing water demand associated with the displaced land uses that would be removed. For the representative development samples presented in Table 5.15-3, the Projects water demand would be reduced on average by approximately 39 percent. Thus, when considering the water demand associated with the displaced land uses and assuming an approximate credit of 39 percent for the average site, the Project's net water demand would be approximately 1,772 AFY (1.58 million gpd), which would be equivalent to a population of approximately 17,977 persons. While the UWMP did not specifically account for the population growth associated with the HEU/Project, it did project that the City would serve a population of 206,499 persons by 2030³¹, which is an additional 9,625 persons over the City's existing population of 196,874 persons.³² Therefore, it can be inferred that at least a portion (approximately 54 percent, 33 or approximately 949 AFY) of the water

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³¹ UWMP Table 3-2: Retail: Population - Current and Projected.

³² State of California Department of Finance. 2021. *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark*. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/ (accessed June 2021).

³³ Based on 25,020 persons/9,625 persons.

demand associated with the Project's population growth was accounted for in the UWMP's anticipated 2030 future water demand. Thus, after considering the existing water demand associated with the displaced land uses that would be removed, and the approximately 949 AFY assumed to be already accounted for in the UWMP's anticipated population growth, an unaccounted-for net Project water demand of approximately 823 AFY would remain. Therefore, based on the UWMP's projected supplies, there may not be sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years. As similarly concluded in the GPU PEIR, until the water supply situation improves, the water demands from future development pursuant to the HEU would result in a significant and unavoidable impact concerning water supplies. Notwithstanding, it is important to note, as indicated in UWMP Tables 7-2 and 7-3, the City is capable of meeting all customers' demands for single dry-year and multiple dry-years from 2025 through 2045, with significant reserves held by the Metropolitan Water District of Southern California (MET) coupled with conservation efforts.³⁴ It is also important to note the following factors concerning the Project's water demand:

- Future housing development would replace existing less water-efficient land uses with new residential uses, which would be required to comply with the then current regulatory framework for water conservation;
- The Project-related increase in water demand may not be directly correlated with the additional housing, since most of the anticipated new housing is needed to alleviate current overcrowding of existing housing with existing water demands.
- Future housing development would occur incrementally through 2029, based on market conditions and other factors, such that water supplies are not overburdened by substantially increased demands at any single point in time.

Additionally, all future housing development subject to rezoning and within overlay zones would also be subject to compliance with General Plan Policy ERC-15.A and Policy ERC-15.B, which are intended to ensure maintenance of water supply systems and that distribution facilities are capable of meeting existing and future daily and peak demands; and that demands on the water system will be monitored, new development will be managed and maintained, and water supply and distribution facilities will be expanded. Future housing development would be subject to HBMC 14.18.050 and Section 14.52, which establish permanent water conservation measures, prohibit wasteful watering, and require new projects to reduce water usage through site design. Further, future housing development subject to rezoning and within overlay zones would be required to comply with GPU PEIR MM 4.15-2, which requires project-specific applicants to incorporate conservation and efficient water use practices as part of future projects. Despite compliance with GPU PEIR MM 4.15-2, and as similarly concluded in the GPU PEIR, until the water supply situation improves, the water demands from future development pursuant to the Project would result in a significant and unavoidable impact concerning water supplies.

GENERAL PLAN POLICIES

See **Section 5.15.2: Existing Regulatory Setting** for complete policy text.

Policy ERC-15.A
 Policy ERC-15.B

2.4

³⁴ UWMP, page 7-10.

GPU PEIR MITIGATION MEASURES

GPU PEIR MM 4.15-2 Future projects under the General Plan Update shall incorporate the following measures to ensure that conservation and efficient water use practices are implemented. Project proponents, as applicable, shall:

- 1) Require employees to report leaks and water losses immediately and shall provide information and training as required to allow for efficient reporting and follow up.
- 2) Educate employees about the importance and benefits of water conservation.
- 3) Create water conservation suggestion boxes, and place them in prominent areas.
- 4) Install signs in restrooms and cafeterias that encourage water conservation.
- 5) Assign an employee to evaluate water conservation opportunities and effectiveness.
- 6) Develop and implement a water management plan for its facilities that includes methods for reducing overall water use.
- 7) Conduct a water use survey to update current water use needs. (Processes and equipment are constantly upgrading, thus changing the need for water in some areas.)
- 8) Repair leaks. Check the water supply system for leaks and turn off unnecessary flows.
- 9) Utilize water-efficient irrigation systems and drought tolerant plant palette and ensure that sprinklers are directing water to landscape areas, and not to parking lots, sidewalks or other paved areas.
- 10) Adjust the irrigation schedule for seasonal changes.
- 11) Install low-flow or waterless fixtures in public and employee restrooms.
- 12) Instruct cleaning crews to use water efficiently for mopping.
- 13) Use brooms, squeegees, and wet/dry vacuums to clean surfaces before washing with water; do not use hoses as brooms. Sweep or blow paved areas to clean, rather than hosing off (applies outside, not inside).
- 14) Avoid washing building exteriors or other outside structures.
- 15) Sweep and vacuum parking lots/sidewalks/window surfaces rather than washing with water.
- 16) Switch from "wet" carpet cleaning methods, such as steam, to "dry," powder methods. Change window-cleaning schedule from "periodic" to "as required."

- 17) Set automatic optic sensors on icemakers to minimum fill levels to provide lowest possible daily requirement. Ensure units are air-cooled and not water-cooled.
- 18) Control the flow of water to the garbage disposal
- 19) Install and maintain spray rinsers for pot washing and reduce flow of spray rinsers for prewash
- 20) Turn off dishwashers when not in use wash only full loads
- 21) Scrape rather than rinse dishes before washing
- 22) Operate steam tables to minimize excess water use
- 23) Discontinue use of water softening systems where possible
- 24) Ensure water pressure and flows to dishwashers are set a minimum required setting. 25) Install electric eye sensors for conveyer dishwashers
- 25) Retrofit existing flushometer (tankless) toilets with water-saving diaphragms and coordinate automatic systems with work hours so that they don't run continuously
- 26) Use a shut-off nozzle on all hoses that can be adjusted down to a fine spray so that water flows only when needed.
- 27) Install automatic rain shutoff device on sprinkler systems
- 28) Launder hotel linens per room by request or after vacancy

MITIGATION MEASURES

No feasible mitigation beyond GPU PEIR mitigation is available to reduce impacts to less than significant.

Level of Significance After Mitigation: Significant and Unavoidable

Impact UTL-3

Would the Project 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?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.15-9)

As previously stated, development of land uses allowable under the GPU would increase wastewater generation by approximately 1,321,788 gpd, or 1.32 mgd. All sewage generated within the City is treated at OCSD Treatment Plant No. 2, which provides a mix of advanced primary and secondary treatment. The OCSD Treatment Plant No. 2 is located in the City and has a capacity of 312 mgd. Wastewater generation is expected to increase slightly with the GPU but would not exceed existing capacities. As such, the GPU PEIR concluded the GPU would result in a less than significant impact to wastewater treatment

requirements. The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Future housing development facilitated by the Project would generate additional wastewater flows that would be treated by OCSD treatment plants. **Table 5.15-4: Project Wastewater Generation** shows the estimated increase in wastewater associated with future housing development. At buildout, future housing development facilitated by the Project would generate approximately 2,181,150 gpd (2.18 mgd) of wastewater. However, it is important to note that this forecast wastewater generation does not account for the wastewater generation credit/offset associated with the displaced land uses.

Table 5.15-4: Increase Wastewater Generation

Estimated Population Increase for Project (persons)	Generation Factor (gpd) ¹	Total Generation (gpd)	Total Generation (mgd) ¹	
29,475²	74 gpd per person ³	2,181,150	2.18	

Notes:

- 1. Gpd = gallons per day; mgd = million gallons per day
- 2. Based on a forecast Project population of 29,475 persons; see Table 5.10-6: Total Population Growth with Project Conditions.
- 3. GPU PEIR Table 4.15-3, Increase Wastewater Generation for the General Plan Update.

OCSD currently owns and operates two treatment plant facilities, Treatment Plant No. 2 and Reclamation Plant No. 1. No wastewater is treated or disposed of within the City as OCSD treats and disposes of all wastewater on behalf of the City.

Wastewater treatment facilities are sized in accordance with adopted General Plan projections. When compared to General Plan projections (see GPU PEIR Table 4.15-3, *Increase Wastewater Generation for the General Plan Update*), future housing development facilitated by the Project is anticipated to result in an approximately 14 percent increase in DU over adopted General Plan projections (through horizon year 2029). Thus, the Project would exceed the land use projections assumed in sizing the wastewater treatment facilities. However, it is important to note that future housing development would occur incrementally through 2029, based on market conditions and other factors, such that wastewater treatment services are not overburdened by substantially increased demands at any single point in time. Further, OCSD Treatment Plant No. 2 has a design capacity of 312 mgd and currently processes an average flow of 64 mgd (or 21 percent capacity). Therefore, excess capacity (approximately 248 mgd) exists at Plant No. 2. As previously noted, future housing development facilitated by the Project would generate approximately 2.18 mgd of wastewater, which would account for less than one percent of Plant No. 2's excess capacity of approximately 248 mgd.

All future housing development subject to rezoning and within overlay zones would also be subject to compliance with General Plan Policies PSI-6.A and Policy PSI-8.C, intended to ensure the provision and maintenance of wastewater collection and treatment facilities which adequately convey and treat wastewater of future development and assess development impact fees to ensure they are coordinated

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³⁵ City of Huntington Beach. (2021). 2020 Urban Water Management Plan. Retrieved from: https://www.huntingtonbeachca.gov/files/users/public_works/2020-Urban-Water-Management-Plan.pdf.

with infrastructure management plans and provide for ongoing and future infrastructure needs in an equitable manner. Additionally, the City would require future housing development to pay sewer connection fees, as well as ongoing user fees, which would be used in part to defray the costs of any necessary facility upgrades. As previously noted, the Project's estimated wastewater generation would account for less than one percent of Plant No. 2's excess capacity. Further, future development would be subject to compliance with General Plan Policies PSI-6.A and Policy PSI-8.C, and payment of fees, which would ensure the Project's potential to impact the wastewater treatment provider's capacity to serve the projected increased demands of future development is reduced to a less than significant level.

GENERAL PLAN POLICIES

See **Section 5.15.2: Existing Regulatory Setting** for complete policy text.

- Policy PSI-6.A
- Policy PSI-8.C

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

Impact UTL-4

Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Level of Significance Before Mitigation: Less Than Significant

GPU PEIR (Volume II, page 4.15-13)

Potential impacts concerning solid waste disposal are discussed in GPU PEIR Section 4.15.3 (page 4.15-15). The GPU PEIR concluded that new development pursuant to the GPU would generate up to 11,173 tons of solid waste per year and would be required to comply with all applicable federal, state and local statutes and regulations related to solid waste. The GPU PEIR concluded that because all future developments proposed would be subject to the appropriate planning and permitting processes ensuring compliance with laws and regulations pertaining to solid waste, potential impacts related to solid waste disposal associated with new development resulting from the GPU would be less than significant.

The addition/changes necessary to make the GPU PEIR applicable to the revised Project are presented below.

IMPACT ANALYSIS

Future housing development facilitated by the Project would generate additional solid waste flows that would be transmitted to various Class III landfills. **Table 5.15-5: Project Solid Waste Generation** shows the estimated increase in solid waste generation associated with the future housing development. At buildout, future housing development would generate approximately 244,643 pounds per day (ppd) or 44,647 tons per year (TPY) of solid waste. However, it is important to note that this forecast solid waste generation does not account for the solid waste generation credit/offset associated with the displaced land uses.

Table 5.15-5: Project Solid Waste Generation

Estimated Population	Solid Waste	Solid Waste	Solid Waste
Increase for Project	Generation Rate (ppd)	Total Generation (ppd)	Total Generation (TPY)
29,475	8.3 pounds per person per day	244,643	44,647

Notes:

- 1. ppd = pounds per day; TPY = tons per year
- 2. Based on a forecast Project population of 29,475 persons; see Table 5.10-6: Total Population Growth with Project Conditions.
- 3. Generation factor used 8.3 pounds per day, per CalRecycle Disposal Rate Calculator Factor year 2020 (most recent year available).
- 4. Sums may not total due to rounding.

All future construction activities would be required to demonstrate compliance with federal, State, and local statutes and regulations for solid waste. Construction activities would be subject to compliance with diversion of solid waste pursuant to AB 939. In addition, construction activities would be required to comply with the most recent Green Building Code, which implements design and construction measures that act to reduce construction-related waste through material conservation measures and other construction-related efficiency measures. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with General Plan Policy PSI-9.A, which is intended to provide for an adequate and orderly system for solid waste collection and disposal meets the demands of new development and ensure that new development provides adequate space for recycling and organics collection activities to support state waste reduction goals. Finally, the City will continue working toward reducing the amount of solid waste disposed of through recycling and composting, source reduction, and public education. In addition, the City will require recycling as a condition of approval of all new development projects. Following compliance with the established regulatory framework, including Policy PSI-9.A, the potential direct effects on solid waste generation and impact to local infrastructure would be less than significant.

GENERAL PLAN POLICIES

See **Section 5.15.2: Existing Regulatory Setting** for complete policy text.

Policy PSI-9.A

GPU PEIR MITIGATION MEASURES

No relevant mitigation measures were identified in the GPU PEIR.

MITIGATION MEASURES

No mitigation required.

Level of Significance After Mitigation: Less Than Significant

5.15.7 Cumulative Impacts

For purposes of the utilities and service systems impact analysis, cumulative impacts are considered for cumulative development throughout the City pursuant to General Plan buildout; see **Section 4.0: Basis for Cumulative Analysis**.

As concluded above, future housing development facilitated by the Project could result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction of which could cause significant environmental effects. However, it is anticipated that future housing development facilitated by the Project would connect to existing nearby utility and service systems with a nominal need for relocation or construction of new or expanded infrastructure. Following compliance with General Plan Policies PSI-6.A, PSI-7.C, PSI-7.E, PSI-8.C, PSI-9.A, PSI-10.B, PSI-10.D, PSI-10.E, PSI-11.B, ERC-11.C, ERC-12.C, ERC-15.A, and ERC-15.B, and GPU PEIR MM 4.15-2, the Project would result in a less than significant impact concerning its potential to cause environmental effects from the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities. Similarly, since the City is since the City is mostly urbanized, cumulative development is anticipated to result in nominal need for relocation or construction of new or expanded infrastructure. Cumulative projects impacting utilities and service systems are also required to adhere to General Plan Policies and GPU PEIR MM 4.15-2. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, when combined with cumulative development, the Project's potential impacts from relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities would not be cumulatively considerable.

As concluded above, future housing development facilitated by the Project would not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. Future housing development would be subject to HBMC 14.18.050 and Section 14.52, which establish permanent water conservation measures, prohibit wasteful watering, and require new projects to reduce water usage through site design. Cumulative projects impacting utilities and service systems are required to adhere to similar General Plan Policies and GPU PEIR MM 4.15-2, which requires project-specific applicants to incorporate conservation and efficient water use practices as part of future projects. Despite compliance with GPU PEIR MM 4.15-2, until the water supply situation improves, the water demands from future development would result in a significant and unavoidable impact concerning water supplies. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Also, the GPU PEIR concluded that until such time as greater confidence in and commitment from water suppliers can be made, or the water supply situation improves, the GPU would result in a significant and unavoidable impact. Therefore, the Project's impacts concerning water supplies to serve future development would be cumulatively considerable.

As concluded above, the wastewater generated by future housing development facilitated by the Project would account for less than one percent of Plant No. 2's excess capacity of approximately 248 mgd. Additionally, General Plan Policies PSI-6.A and PSI-8.C require future development to pay sewer connection fees, as well as ongoing user fees, which would be used in part to defray the costs of any necessary facility upgrades. Further, future development would be subject to compliance with General Plan Policies PSI-6.A and Policy PSI-8.C, and payment of fees, which would ensure impacts to the wastewater treatment provider's capacity to serve the projected increased demands of future development is reduced to a less than significant level. Therefore, the Project's impact to wastewater treatment provider's capacity to serve the project's projected demand in addition to the provider's existing commitments would not be cumulatively considerable.

As concluded above, future housing development facilitated by the Project could generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. However, following compliance with General Plan Policy PSI-9.A, adequate and orderly system for solid waste collection and disposal will meet the demands of new development and ensure that new development provides adequate space for recycling and organics collection activities to support state waste reduction goals. Cumulative projects impacting solid waste generation would also be subject to General Plan Policy PSI-9.A. Therefore, the Project's impact to generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals would not be cumulatively considerable. Lastly, all future construction activities would be required to demonstrate compliance with federal, State, and local statutes and regulations for solid waste. Construction activities would be required to comply with the most recent Green Building Code, which implements design and construction measures that act to reduce construction-related waste through material conservation measures and other construction-related efficiency measures. The City would continue working toward reducing the amount of solid waste disposed of through recycling and composting, source reduction, and public education. Additionally, cumulative development would be subject to compliance with the established State regulatory framework concerning solid waste generation and infrastructure capacity on a project-by-project basis. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Therefore, the Project's impacts concerning solid waste generation would not be cumulatively considerable.

5.15.8 Significant Unavoidable Impacts

Despite compliance with GPU PEIR mitigation, and as similarly concluded in the GPU PEIR, until the water supply situation improves, the water demands from future development pursuant to the Project would result in a significant and unavoidable impact concerning water supplies. Additionally, because the GPU PEIR concluded that until such time as greater confidence in and commitment from water suppliers can be made, or the water supply situation improves, the GPU would result in a significant and unavoidable impact, the Project's impacts concerning water supplies to serve future development would be cumulatively considerable.

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6.0 OTHER CEQA CONSIDERATIONS

This section discusses the following additional California Environmental Quality Act (CEQA) considerations:

- Significant and Irreversible Environmental Changes
- Growth Inducing Impacts
- Mandatory Findings of Significance

Refer to **Section 8.0: Effects Found Not to be Significant**, for a discussion of the Project's effects found to have no impact or a less than significant impact based on the analysis conducted during this Draft Subsequent Environmental Impact Report (SEIR) preparation process.

6.1 **CEQA Requirements**

State CEQA Guidelines §§ 15126.2(c) and (d), and § 15128 outline the requirements for additional analysis of potentially significant environmental impacts due to the implementation of a project. The State CEQA Guidelines §§15126.2(a) and (b) requirements are met in **Section 1.0: Executive Summary**, and **Section 5.3: Energy**. These requirements include a discussion of any identified significant effects stemming from a project including which resources would be affected and in what way. Growth inducing impacts should also be analyzed in order to assess the ways that a project could potentially lead to growth both in the economy and the population. State CEQA Guidelines Appendix G provides a framework for the analysis of mandatory findings of significance for a project. These State CEQA Guidelines would be applied to the Housing Element Update (HEU) to consider the potential impacts of future housing development on the candidate housing sites and impacts of potential HEU action programs in order to create a comprehensive analysis of potential effects to the surrounding environment and jurisdiction.

6.2 Significant and Irreversible Environmental Changes

State CEQA Guidelines §15126.2(d) requires a discussion of any significant irreversible environmental changes that would be caused by a proposed project. Generally, the section notes that a project would result in significant irreversible environmental changes if the following occurs:

- The project would involve a large commitment of nonrenewable resources in a way that would make their nonuse or removal unlikely;
- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; and
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use
 of energy).

Following is a more in-depth discussion of how the Project relates to each factor in the required analysis of irreversible environmental damages.

Would the project involve a large commitment of nonrenewable resources in a way that would make their nonuse or removal unlikely?

This SEIR evaluates future housing development on the candidate housing sites pursuant to the HEU and the impacts of potential HEU action programs. Future housing development facilitated by the Project (except for Accessory Dwelling Units and by right developments) would be subject to discretionary permits and would undergo an environmental review process to identify any potential environmental impacts and determine mitigation measures that would best avoid or reduce those potential environmental impacts as required by the State CEQA Guidelines. For future residential development subject to discretionary review, compliance with the applicable GPU PEIR mitigation measures would be confirmed through the discretionary review process. For future residential development subject to a ministerial "by right" site plan review process, projects would be required to submit a GPU PEIR Mitigation Checklist identifying how they would comply with the GPU PEIR mitigation measures. Additionally, all future housing development subject to rezoning and within overlay zones would also be subject to compliance with General Plan policies that address conservation of nonrenewable resources. Future development would consume resources which are limited, renewable and/or non-renewable. This consumption would occur during each individual project's construction phase and would continue throughout its operational lifetime. Future development would require a commitment of resources that would include: (1) building materials; (2) fuel and operational materials/resources; and (3) the transportation of goods and persons to/from individual development sites. Construction would require the consumption of the following resources (e.g., construction supplies), which are non-renewable, or which may renew so slowly as to be considered non-renewable: lumber and other forest products; aggregate materials used in concrete and asphalt; metals; and water. Fossil fuels such as gasoline and oil would also be consumed to power construction vehicles and equipment.

The resources that would be committed during future development operations would be like those currently consumed within the City. These would include energy resources such as electricity and natural gas, petroleum-based fuels (e.g., gasoline and diesel for vehicle trips), fossil fuels (i.e., oil and natural gas), and water. Fossil fuels would represent the primary energy source associated with both short-term construction and long-term operations, and the existing, finite supplies of these natural resources would be incrementally reduced. Future development operations would occur in accordance with California Code of Regulations (CCR) Title 24, Part 6, which sets forth conservation practices that would limit energy consumption. However, energy requirements would, nonetheless, represent a long-term commitment of essentially non-renewable resources.

Future housing development facilitated by the Project could use and store limited amounts of potentially hazardous materials typical of residential uses. However, these materials would be used in small quantities and would be used, handled, stored, and disposed of in accordance with the manufacturer's instructions and/or established regulatory framework. Compliance with these regulations and standards would protect against significant and irreversible environmental changes resulting from the accidental release of hazardous materials.

The candidate housing sites are developed to varying degrees except two sites, which are vacant. Thus, the Project would require demolition activities to accommodate future housing development. All

potential future demolition activities must comply with the established regulatory framework including Air Quality Control Board regulations to ensure that asbestos and lead-based paints are not released into the environment. Compliance with the established regulatory framework, General Plan Update Program Environmental Impact Report (GPU PEIR), and mitigation measures would protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

In summary, future development, construction, and operations facilitated by the Project would result in the irretrievable commitment of limited, slowly renewable, and non-renewable resources, which would limit the availability of these resource quantities for future generations or for other uses during the life of the individual developments. However, continued use of such resources would be on a relatively small scale in a regional context. Although future housing development facilitated by the Project would result in environmental changes, and such changes would not be considered significant with implementation of the applicable mitigation measures noted in **Sections 5.1** through **5.15**.

Would the primary and secondary impacts generally commit future generations to similar uses?

The HEU involves a long-range planning document, and the Project implements future action programs including amendments to the City's General Plan and Zoning Code. The Project would inform approval decisions related to future development in the City. The Project identifies strategies to provide capacity for future housing development consistent with State Housing law requirements to meet Regional Housing Needs Assessment requirements. The Project does not directly commit future generations to similar uses since the intention of the HEU is to provide an update to the City's Housing Element with associated policies for the planning period of 2021-2029. Also, implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons for the 2021-2029 planning period. As the City's housing needs may change over the course of the planning period, future generations would be able to reassess their housing needs and make necessary adjustments during the anticipated next housing cycle planning period (2029-2037).

Would the project involve uses in which irreversible damage could result from any potential environmental accidents associated with the project?

The Project is the HEU, which would facilitate future housing development on the candidate housing sites if selected in the Final HEU and would implement housing action programs included in the Final HEU. Exposure of the public or the environment to hazardous materials can occur through transportation accidents; environmentally unsound disposal methods; improper handling of hazardous materials or hazardous wastes (particularly by untrained personnel); and/or emergencies, such as explosions or fires; see **Section 5.6: Hazards and Hazardous Materials**. The severity of these potential effects varies by type of activity, concentration and/or type of hazardous materials or wastes, and proximity to sensitive receptors. However, residential (and non-residential) development must comply with State and local health and safety requirements designed to preclude significant impacts.

Construction and material use associated with future housing development facilitated by the Project could include cleaners, paints, solvents, and fertilizers and herbicides for site landscaping. The types and

quantities of materials to be used and stored would not be of a significant quantity to create a reasonably foreseeable or significant accident.

The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Public Resources Code (PRC) §21100(b)(3) and State CEQA Guidelines §15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. AB 1575 also amended PRC §21100(b)(3) to require EIRs to consider the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the State Resources Agency created State CEQA Guidelines Appendix F (Energy Conservation). **Section 5.3: Energy**, evaluates the potential energy use associated with future housing. The analysis concludes that future housing development facilitated by the Project would not result in a wasteful or inefficient use of energy resources during construction due to construction practice requirements, which would increase fuel-energy conservation above typical standards. Additionally, no wasteful or inefficient fuel-energy from operations, or from operational vehicle fuel consumption.

6.3 Growth Inducing Impacts

State CEQA Guidelines §15126.2(d) requires that EIRs include a discussion of ways in which a project could induce growth. The State CEQA Guidelines identify a project as "growth-inducing" if it fosters economic or population growth or if it encourages the construction of additional housing either directly or indirectly in the surrounding environment. New employees from commercial or industrial development and new population from residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area. The project would therefore have a growth-inducing impact if it would:

- Directly or indirectly foster economic or population growth, or the construction of additional housing;
- Remove obstacles to population growth;
- Require the construction of new or expanded facilities that could cause significant environmental effects; or
- Encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

A project's potential to induce growth does not automatically result in growth. The State CEQA Guidelines require an EIR to "discuss the ways" a project could be growth-inducing and to "discuss the characteristics of some projects that may encourage activities that could significantly affect the environment." However, the State CEQA Guidelines do not require that an EIR predict (or speculate) specifically where such growth would occur, in what form it would occur, or when it would occur. According to State CEQA Guidelines §15145, Speculation, the answers to such questions require speculation, which CEQA discourages. Under CEQA, the potential for growth inducement is not considered necessarily detrimental nor necessarily beneficial, and neither is it automatically considered to be of little significance to the environment. This issue is presented to provide additional information on ways in which the proposed Project could

contribute to significant changes in the environment, beyond the direct consequences of implementing the proposed project examined in the preceding sections of this Draft SEIR.

The following analyzes the Project's potential growth-inducing impacts for the criteria outlined above, in accordance with State CEQA Guidelines §15126.2(d). Potential growth-inducing effects are examined through analysis of the following questions:

Would the project directly or indirectly foster economic or population growth, or the construction of additional housing?

Population and Employment

The HEU is a State mandate to generate increased housing availability. A discussion of population and housing effects associated with Project implementation is provided in **Section 5.10**: **Population and Housing**. As concluded in **Section 5.10**, the Project would not induce unplanned population growth in the City, either directly by proposing new businesses, or indirectly through extension of roads or other infrastructure. As the City is built-out, it is anticipated that future housing development facilitated by the Project would be adequately served by fire, police, and other services, and located near established infrastructure (e.g., roads and utilities), with only minor modifications required; see also **Section 5.11**: **Public Services**, and **Section 5.15**: **Utilities and Service Systems**. Further, implementation of the HEU would not, in and of itself, construct new housing in the City but would facilitate the development of residential units by providing programs and policies that would promote housing for all persons. However, because the Project would facilitate development of up to 11,743 dwelling units to meet the City's unmet Regional Housing Needs Allocation (RHNA), the Project would induce population growth in the City indirectly, as discussed below; see also **Section 3.0**: **Project Description** for a detailed discussion of the Project's characteristics.

As indicated in **Table 5.10-8**, future residential development facilitated by the Project is anticipated to increase the City's existing 2021 housing stock by approximately 14 percent (11,743 additional dwelling units). This estimated housing growth is anticipated to increase the City's existing 2021 population by approximately 15 percent (29,475 additional persons).

As indicated in **Table 5.10-9**, without Project implementation, the City anticipates housing and population to grow by 1,296 and 6,714, by 2030, respectively. With Project implementation, housing and population would grow by 11,743 housing units and 29,475 residents in the same time frame. With Project implementation, the City's forecast 2030 housing and population would total approximately 95,659 dwelling units and 233,063 persons.

As indicated in **Table 5.10-10**, the City's population and households are forecast to 200,034 persons and 78,891 households in 2030, respectively. As also indicated in **Table 5.10-10**, the City's population and households in 2030 would total approximately 229,679 persons and 90,634 households, respectively, with Project implementation. Comparatively, future housing facilitated by the Project would result in population and household growth of approximately 15 percent, over extrapolated Southern California Association of Governments (SCAG) 2030 forecasts. Project implementation would facilitate future

housing development, thus, inducing indirect population growth in the City, beyond the extrapolated SCAG 2030 forecast population of 200,034 persons.

Overall, Project implementation would facilitate future housing development, inducing indirect population growth in the City, beyond 2021 existing conditions, and extrapolated 2030 General Plan and SCAG forecast conditions. However, State law requires that the City accommodate their RHNA "fair share" of the region's housing needs, which cannot be achieved without the Project's proposed rezoning/land use amendments. Thus, while the Project would facilitate the development of additional housing throughout the City, resulting in a forecast population growth of approximately 29,475 persons, this forecast population growth would be attributed to accommodating the City's remaining RHNA allocation of 11,743 dwelling units, as required by State law. Thus, although the Project would indirectly induce substantial population growth in the City, it is not considered unplanned given State law requires the City to prepare a HEU and receive plan certification from State HCD.

Future housing development would be subject to the City's entitlement process and be assessed on a case-by-case basis for potential effects concerning population growth. Additionally, future housing development would be subject to compliance with all federal, State, and local requirements for minimizing growth-related impacts. Upon approval of the proposed discretionary actions (e.g., the proposed zoning and overlays), future housing development facilitated by the Project would be considered planned development and help the City meet its RHNA allocation. Therefore, impacts would be less than significant.

Would the project remove obstacles to population growth?

The City is largely developed and maintains a vacancy rate of 5.5 percent with approximately 4,574 units left unoccupied.¹ As part of the HEU, the creation of deed-restricted affordable housing would allow for the expansion of lower-income households and remove the obstacles of available housing opportunities. The HEU will create policies and goals to afford more inclusive of households that have lower annual incomes. This is required by State law as a measure intended to address the growing housing crisis in California. The HEU's impacts to the City's housing and population is further explained in **Section 5.10**.

Would the project require the construction of new or expanded facilities that could cause significant environmental effects?

Future development and action programs for implementation of the Project are anticipated to occur mostly on developed sites. However, the future development accommodated by the Project is not anticipated to require any new essential public service or utility/service system that would have significant environmental effects; see **Section 5.11: Public Services**, and **Section 5.15 Utilities and Service Systems**. The City's communities are already served by essential public services (i.e., fire and police protection, parks and recreational facilities, schools, and solid waste disposal), an extensive network of utility/service systems (i.e., water, wastewater, electricity, and natural gas), and other infrastructure necessary to accommodate/allow the existing conditions and planned growth. As concluded in **Section 5.11**, existing and planned public services facilities are anticipated to meet the demands of the potential population

State of California, Department of Finance, E-5 Population Estimates for Cities, Counties, and the State, 2011-2021, with 2010 Census Benchmark. Sacramento, California, May 2021. https://dof.ca.gov/forecasting/Demographics/estimates-e5-2010-2021/.

growth associated with Project implementation. According to **Section 5.15**, proposed housing development would connect to the existing utility service systems/infrastructure present throughout the City and would not require expansion/construction of water or wastewater treatment facilities, storm water infrastructure, or dry utilities, except for local minor connections. Given that the candidate housing sites are developed with land uses currently generating demands for public services and utilities, the increased demands would not reduce or impair any existing or future levels of services, within the respective service areas; see **Section 5.11** and **Section 5.15**. Project implementation would not require development of unplanned/unforeseen public services or utility service systems. Therefore, Project implementation would not require the construction of new or expanded facilities that could cause significant environmental effects.

Regional access to the City/Project area is generally provided from State Highway 1, State Route 39 (Beach Boulevard), and Interstate 405, and local access is provided from existing roadways. The HEU does not require new access to an area not already accessible. Therefore, implementation of the project would not induce economic or population growth by providing new access to an area not already accessible.

Would the project encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively?

As previously stated, the Project would not directly result in the development of housing. The HEU would identify a series of future action programs to increase the City's housing capacity pursuant to State Housing law. These additional housing units have been distributed to the City based on SCAG's region-wide analysis and RHNA determination. The potential impacts associated with the Project have been analyzed in this PEIR in **Section 5.1** through **Section 5.15**. The potential cumulative effects of future development of the additional housing units were evaluated; and the PEIR concludes that the HEU would not result in cumulatively considerable environmental impacts, except concerning Air Quality, Greenhouse Gas Emissions, Hydrology and Water Quality, Noise, and Utilities and Service Systems.

6.4 Mandatory Significance of Findings.

State CEQA Guidelines §15065(a)(1) through (4) requires preparation of an EIR when certain specified impacts may result from construction or implementation of a project. State CEQA Guidelines Appendix G also provides methodology for identifying findings of significance. The EIR concludes a finding of significance if the project:

Has the potential to: substantially 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; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory?

State CEQA Guidelines state that a finding of significance is determined if a project "has the potential to substantially degrade the quality of the environment." In practice, this is the same standard as a significant effect on the environment, which is defined in State CEQA Guidelines §15382 as "a substantial or potentially adverse change in any of the physical conditions within the area affected by the project

including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."

This SEIR has been prepared for the Project, which fully addresses all of the Mandatory Findings of Significance. This SEIR in its entirety addresses and discloses all known potential environmental effects associated with Project implementation, including direct, indirect, and cumulative impacts in the following resource areas:

- Air Quality
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning

- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

A summary of all potential environmental impacts, level of significance, and mitigation measures is provided in **Section 1.0**: **Executive Summary**.

The Project does not directly involve physical activities that would directly affect endemic and endangered animals within the City. The Project's potential effect on those species are fully discussed in **Section 8.0**: **Effect Found Not to be Significant, Subsection 8.3**: **Biological Resources**. Because of the developed nature of the City as a whole and also the specific candidate housing sites, development would not impact special status plants and animals and as such, no mitigation is required.

Section 5.2: Cultural Resources, and **Section 5.14: Tribal Cultural Resources** analyze the potential impacts to historic, prehistoric, and tribal cultural resources that could occur due to the Project implementation. The historical significance of specific buildings would be further analyzed during future development of the housing units. Undeveloped candidate housing sites, or sites with substantial portions undeveloped, also have potential to contain archeological resources.

Although the Project area encompasses the entire area within the City limits, the areas affected by the rezoning program, housing overlays, and hotel/motel conversions are limited to the 378 candidate housing sites shown in **Exhibit 1-1: Candidate Housing Sites**. Of the 378 candidate housing sites, all are developed/occupied by structures except two sites; thus, the developed candidate housing sites could be occupied by historic period (>50 years) buildings. Therefore, future housing development facilitated by the Project could cause a substantial adverse change in the significance of a historical resource on the candidate housing sites. Consistent with the GPU PEIR analysis, all future housing development facilitated by the Project would be subject to compliance with applicable General Plan policies. All future housing development subject to rezoning and within overlay zones would also be subject to compliance with GPU Policies HCR 1.2.1, 1.2.2, and 1.3-8, and GPU PEIR MM 4.4-1; therefore, the Project's potential to cause a

substantial adverse change in the significance of a historical resource would be reduced to a less than significant level.

Similarly, Future housing development on the candidate housing sites would involve ground-disturbing activities such as grading or excavation that could directly or indirectly impact undiscovered subsurface archaeological resources. Therefore, all future housing development subject to rezoning and within overlay zones would be subject to compliance with GPU PEIR MM 4.4-2 and GPU PEIR MM 4.4-3. Compliance with General Plan policies and these mitigation measures would reduce potential impacts to less than significant levels.

The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.

The HEU is a component of the City's long term planning efforts to analyze adequate housing needs for the 6th Cycle Housing Element, which has an associated planning period of 2021-2029. The short-term goal of the HEU would be to increase opportunities for future expansion of housing units in accordance with the HEU goals. This does not conflict with long-term environmental goals since the proposed HEU aims to establish programs to facilitate a variety of housing strategies to meet Housing Element production targets consistent with the HEU goal to ensure a sustainable approach to new housing opportunities that protects the quality of life and future of the City. Although this HEU contains action programs that must be completed in the short-term, the HEU is intended to serve long-term community development goals by establishing new housing to locate people and desired destinations for homes, jobs, and activities within closer proximity to minimize the need for vehicle trips and maintain quality of life in the community. Therefore, the Project would not lead to the disadvantage of long-term environmental goals.

The project has possible environmental effects that are individually limited but cumulatively considerable.

State CEQA Guidelines §15065(a)(3) defines "cumulatively considerable as times when "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." This PEIR provides a programmatic analysis of the effects of the proposed project. Each impact analysis section also discussed cumulative impacts associated with the implementation of the proposed project regardless of the direct impacts creating significant, potentially significant unless mitigated, or a significant and unavoidable impact. Cumulative impacts are addressed for each of the environmental topics and are provided in **Section 5.1** through **Section 5.15**. The potential cumulative effects of future development of the additional housing units were evaluated and it was concluded the Project would result in cumulatively considerable environmental impacts concerning the following resource areas: Air Quality, Greenhouse Gas Emissions, Hydrology and Water Quality, Noise, and Utilities and Service Systems.

The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.

A change to the physical environment that might otherwise be minor must be treated as significant if people would be significantly affected. This standard relates to adverse changes to the environment of human beings generally, and not to effects on particular individuals. While changes to the environment that could directly or indirectly affect human beings would be possible in all of the CEQA issue areas, those that could directly affect human beings include Air Quality, Greenhouse Gas Emissions, Hydrology and Water Quality, Noise, and Utilities and Service Systems. Mitigation measures specified for the Project's potential impacts are summarized in **Table 1-1: Summary of Significant Impacts and Proposed Mitigation Measures**. The remaining resource areas were all addressed in their respective sections of this SEIR and were found to result in a less than significant impact, or a less than significant impact with mitigation incorporated.

The HEU provides capacity for future housing development consistent with State Housing law. The candidate housing sites inventory includes 378 parcels that are dispersed throughout the community to minimize the potential for adverse changes in neighborhood character and aesthetics and reduce the potential for adverse impacts to the environment. The provision of additional housing in the City is intended to create adequate housing availability at all income levels. The creation of more economically and socially diversified housing choices is a goal of the HEU and is intended to provide new housing opportunities for low-income households. Implementation of the Project would provide additional housing options for a variety of income levels, as allocated by RHNA.

6.5 References

State of California, Employment Development Department. (August 2021). Labor Force and Unemployment Rate for Cities and Census Designated Places. Retrieved from https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html#CCD. Accessed April 2022.

7.0 ALTERNATIVES

7.1 CEQA Requirements for Alternatives Identification and Analysis

Under the California Environmental Quality Act (CEQA), the identification and analysis of alternatives to a project is a fundamental part of the environmental review process. Public Resources Code (PRC) §21002.1(a) establishes the need to address alternatives in an environmental impact report (EIR) by stating that in addition to determining a project's significant environmental impacts and indicating potential means of mitigating or avoiding those impacts, "the purpose of an environmental impact report is to identify alternatives to the project."

Direction regarding the definition of project alternatives is provided in State CEQA Guidelines §15126.6(a), as follows:

An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.

The State CEQA Guidelines emphasize that the selection of project alternatives be based primarily on the ability to reduce impacts relative to the proposed project, "even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly." The State CEQA Guidelines further direct that the range of alternatives be guided by a "rule of reason," such that only those alternatives necessary to permit a reasoned choice are addressed.²

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site.

Beyond these factors, the State CEQA Guidelines require the analysis of a "no project" alternative and an evaluation of alternative location(s) for the project, if feasible. Based on the alternatives analysis, the City of Huntington Beach (City) must identify an environmentally superior alternative. If the environmentally superior alternative is the no project alternative, then the EIR must identify an environmentally superior alternative among the other alternatives.³ In addition, State CEQA Guidelines §15126.6(c) requires that an EIR identify any alternatives that were considered for analysis but rejected as infeasible and discuss the reasons for their rejection.

The range of feasible alternatives must be selected and discussed in a manner to foster meaningful public participation and informed decision making. The range of potential alternatives also includes those that could feasibly accomplish most of a project's basic objectives and avoid or substantially lessen one or

¹ State CEQA Guidelines §15126.6(b).

² State CEQA Guidelines §15126.6(f).

³ State CEQA Guidelines §15126.6(e)(2).

more of the significant effects. An alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative need not be considered.

The CEQA Guidelines do not require an EIR to consider every plausible alternative to a project, but rather must examine in detail only the ones which the lead agency determines could feasibly attain most of the basic project objectives. An EIR also does not need to consider alternatives whose effects cannot be reasonably ascertained and whose implementation is remote and speculative. Feasibility factors include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether project proponents can reasonably acquire, control, or otherwise have access to an alternative site. If the Lead Agency determines no alternative projects or locations are feasible, it must disclose the reasons for this conclusion in the EIR (CEQA Guidelines §15126.6).

Project alternatives were developed based on CEQA Guidelines §15126.6 requirements. Therefore, alternatives are developed based on the Project objectives, which are described in **Section 3.0**.

7.2 Project Objectives

In accordance with State CEQA Guidelines §15124, the following primary objectives support the Housing Element Update's (HEU) purpose, assist the City, as the lead agency, in developing a reasonable range of alternatives to be evaluated in this Subsequent EIR (SEIR), and ultimately aid decision-makers in preparing findings and overriding considerations, if necessary. The HEU's purpose is to address the housing needs and objectives of the City and to meet the State Housing law requirements. The HEU has the following goals:

- Adopt State-mandated and locally desired programs to implement the City's Housing Element.
- Maintain and enhance the quality and affordability of existing housing in Huntington Beach.
- Provide adequate sites to accommodate projected housing unit needs at all income levels identified by the 2021-2029 RHNA.
- Provide for safe and decent housing for all economic segments of the community.
- Reduce governmental constraints to housing production, with an emphasis on improving processes for projects that provide on-site affordable units.
- Promote equal housing opportunities for all residents, including Huntington Beach's special needs populations.
- Promote a healthy and sustainable Huntington Beach through support of housing at all income levels that minimizes reliance on natural resources and automobile use.
- Maximize solutions for those experiencing or at risk of homelessness.
- Improve quality of life and promote placemaking.
- Affirmatively further fair housing.

7.3 Housing Element Update – CEQA Project Summary

The State CEQA Guidelines (§15378[a]) defines a "project" as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." The proposed HEU (i.e., the Project) does not propose new residential or other development on the 378 candidate housing sites evaluated in this SEIR; rather, it provides capacity for future development of approximately 19,738 housing units to meet the City's remaining unmet Regional Housing Needs Assessment (RHNA) allocation of 11,743 housing units (when accounting for 1,625 in the pipeline housing units), consistent with State law.

Only three candidate housing sites (Sites 3, 4, and 5) are proposed for rezoning - all other sites would retain their existing underlying zoning. The development capacity of these three sites based on existing zoning is approximately 643,272 square feet of industrial uses and approximately 122,186 square feet of commercial uses. Because the HEU proposes to rezone Sites 3, 4, and 5, the Project would result in the following development capacity changes on these three sites:

- Approximately 643,272 square feet less of industrial uses;
- Approximately 122,186 square feet less of commercial uses; and
- Approximately 428 additional housing units.

However, to provide a conservative analysis, the CEQA Project analyzed in this SEIR does not take credit for the reduced industrial and commercial use development capacities. That is, the Project's impacts are not offset/decreased by the impacts that would otherwise be associated with the industrial and commercial uses being replaced by the HEU's anticipated residential uses.

Additionally, while the candidate housing sites' development capacity totals 19,738 housing units, this includes a 60 percent buffer, which is intended to serve as a sites contingency. Therefore, the CEQA Project analyzed in this SEIR assumes 11,743 additional housing units over existing conditions, which excludes the 60 percent buffer and the pipeline projects because they previously received CEQA clearance. The precise distribution of housing units on the candidate housing sites is not known. Therefore, for analysis purposes, the CEQA Project assumes the 11,743 additional housing units are comprised of the following:

- Rezones: Approximately 255 additional housing units;
- Housing Overlay Zones: Approximately 10,905 additional housing units;
- Hotel/Motel Conversions: Approximately 247 additional housing units; and
- Accessory Dwelling Units: Approximately 336 additional housing units.

These additional housing units are anticipated to result in a population growth of approximately 29,475 persons, assuming 2.51 persons per household.⁴

State of California. May 2021. Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State — January 1, 2011-2021.

7.4 Significant and Unavoidable Project Impacts

Impacts found significant and unavoidable are relevant in making the final determination of whether an alternative is environmentally superior or inferior to a proposed project; see State CEQA Guidelines §15126.6. As concluded in **Section 5.1** through **Section 5.15** of this SEIR, the Project would result in significant and unavoidable impacts associated with air quality, greenhouse gas (GHG) emissions, hydrology and water quality, noise, and utilities and services systems, as summarized below:

Air Quality

Despite compliance with General Plan Update (GPU) policies, PEIR mitigation, and MM AQ-1 and AQ-2, the Project would result in significant and unavoidable impacts concerning construction-related ROG emissions and operational ozone, PM_{2.5}, and PM₁₀ emissions. In addition, sites over two acres could expose sensitive receptors to significant impacts by exceeding construction LST thresholds. The Project-related contribution of daily construction and operational emissions from considered cumulatively significant and unavoidable.

Greenhouse Gas Emissions

Despite the recommendation of GGRP GHG reduction strategies, the Project would generate GHG emissions that may have a significant impact on the environment and could conflict with applicable plans for reducing GHG emissions. Therefore, impacts on GHG are considered significant and unavoidable, both for the Project and cumulative conditions.

Hydrology and Water Quality

The Project could substantially decrease groundwater supplies resulting in a significant and unavoidable impact concerning sustainable management of the Basin. The Project's impact concerning groundwater supplies would be cumulatively considerable and a significant unavoidable impact would occur.

Noise

Despite compliance with GPU PEIR mitigation, the Project would result in significant and unavoidable impacts concerning construction-related noise and vibration levels and operational noise levels associated with traffic. The Project's impact concerning the substantial temporary and permanent increase of ambient noise levels would be cumulatively considerable. The Project's impact concerning construction-related noise and groundborne vibration would also be cumulatively considerable.

Utilities and Service Systems

Despite compliance with GPU PEIR mitigation, and as similarly concluded in the GPU PEIR, until the water supply situation improves, the water demands from future development pursuant to the HEU would result in a significant and unavoidable impact concerning water supplies. Additionally, until such time as greater confidence in and commitment from water suppliers can be made, or the water supply situation improves, the Project's impacts concerning water supplies to serve future development would be cumulatively considerable.

7.5 Alternatives Considered but Rejected

State CEQA Guidelines §15126.6(c) states that an EIR should identify any alternatives that were considered by the lead agency but rejected because the alternative would be infeasible, fail to meet most of the basic project objectives, or unable to avoid significant environmental impacts. Further, an EIR may consider an alternative location for the proposed project but is only required to do so if significant project effects would be avoided or substantially lessened by moving the project to another site and if the project proponent can reasonably acquire, control, or otherwise have access to the alternative site.

State CEQA Guidelines §15126.6(f)(2)(A) notes the following concerning alternative locations:

The key question and first step in (alternative location) analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR.

Reduced Dwelling Units Alternative

A Reduced Dwelling Units Alternative was considered but rejected from further consideration. This alternative was considered to assess if it would help mitigate the significant and unavoidable impact to potable water resources from the proposed Project, as future housing development facilitated by the Project would incrementally increase the demand for potable water. As shown in Table 5.15-2: Projected HEU Water Demand, the projected water demand associated with Project implementation at buildout, would increase water demand in the City by approximately 2,905 acre-feet per year (AFY), or approximately 11 percent over existing 2022 and projected 2030 City demands. While the Urban Water Management Plan (UWMP) did not specifically account for the population growth associated with the Project, it did project that the City would serve a population of 206,499 persons by 2030⁵, which is an additional 9,625 persons over the City's existing population of 196,874 persons.⁶ Therefore, it can be inferred that at least a portion (approximately 54 percent⁷, or 949 AFY) of the water demand associated with the Project population growth was accounted for in the UWMP's anticipated 2030 future water demand. Thus, after considering the existing water demand associated with the displaced land uses that would be removed, the approximately 54 percent assumed to be already accounted for in the UWMP's anticipated population growth, and unaccounted for net Project water demand of approximately 46 percent or 823 AFY which would remain unmet. In order to not exceed the projected water resources for the City, the Reduced Dwelling Units Alternative would have to reduce the number of housing units to a number that would fail to meet the basic RHNA requirements.

Alternate Housing Sites Alternative

The Alternate Housing Sites Alternative was considered but rejected from further consideration. This alternative was determined to be infeasible during the scoping process because alternative housing sites not included in the scope of the Project were found to be infeasible due to regulations, site constraints,

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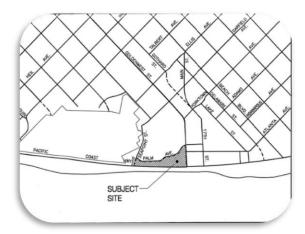
⁵ UWMP Table 3-2: Retail: Population - Current and Projected.

State of California Department of Finance. 2021. E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011-2021 with 2010 Census Benchmark. https://www.dof.ca.gov/Forecasting/Demographics/Estimates/e-5/ (accessed June 2021).

⁷ Based on 25,020 persons/9,625 persons.

property owner interest in developing housing, community input, and existing uses. Additionally, some candidate housing sites were considered but rejected because potentially significant effects of future housing development would be avoided or substantially lessened by rejecting those sites. Examples of alternative sites initially considered are discussed below.

Palm/Goldenwest Specific Plan (SP12) Alternative. This is a 96-acre area bordered by Pacific Coast Highway, Goldenwest Street, and Seapoint Street and is located entirely within the Coastal Zone. The property is designated for visitor serving commercial uses within the Palm/Goldenwest Specific Plan. At the time the specific plan was adopted in 2000, the property was an active oil field. Aera Energy owned the property and indicated that the property would remain in oil production for the next 15 to 20 years. As such, the specific plan was adopted to plan for reuse of the site after oil production activities ceased.



Palm/Goldenwest Specific Plan 12

This site was originally identified as a candidate housing site in the 6thCycle Housing Element because of its large size and its potential availability for residential development within the planning period (based on the information in SP12). Housing capacity on the site, when applying the proposed Affordable Housing Overlay, would accommodate 40 to 50 percent of the City's total RHNA (96 acres x 55 dwelling units/acre up to 96 acres x 70 dwelling units/acre). Although this site could accommodate residential uses, the site is located within higher resource areas that could result in greater environmental impacts than other sites included in the scope of the Project. The following are reasons why this alternative was rejected:

- The location of the site within the Coastal Zone would require the California Coastal Commission to approve the Affordable Housing Overlay designation; timing of the "rezoning" effort could be lengthy with no guarantee of approval from the Coastal Commission.
- The potential for costly remediation of the site due to its historic use as oil field.
- The property owner no longer anticipates oil production activities to cease as described in SP12. Therefore, the property is not expected to be available for development prior to 2030.
- The concentration of almost 50 percent of RHNA allocation on one site may lead to overconcentration of affordable housing in one area.

Huntington Harbour Area Sites Alternative. There are two commercial areas in the Huntington Harbour area with a combined acreage of 21.5 acres. One area is the Huntington Harbour mall, which is an older mall developed in the 1960s. This 10.8-acre site was identified as a potential candidate housing site because it is underutilized with one and two-story buildings developed at a relatively low floor-area-ratio (FAR) considering that the maximum allowed FAR is 1.5. The site has potential to be redeveloped as a mixed-use project with the inclusion of residential units at 30 dwelling units/acre. The site has close access to Warner Avenue, a major arterial. The second area is Peter's Landing. This site includes the Peter's Landing commercial center and adjacent properties along Pacific Coast Highway, and has been studied for mixed use (residential/commercial) in prior General Plan planning efforts. In addition, the property owners previously showed interest in adding residential uses in existing or new development projects on the sites. Previous site analyses on this site indicate that residential could be accommodated at higher densities.





Peter's Landing Area

Huntington Harbour Mall

The following are reasons why this alternative was rejected:

- The location of these sites within the Coastal Zone would require the California Coastal Commission to approve any changes to the zoning/land use designation including an Affordable Housing Overlay designation. As such, the timing of the "rezoning" effort could be length with no guarantee that the Coastal Commission would approve the amendments, particularly because residential is a lower priority use in the Coastal Zone.
- These sites, in conjunction with the general Huntington Harbour area, are shown in the City's Sea
 Level Rise Vulnerability Assessment as one of the most vulnerable areas in the City with
 development in this area having the highest exposure to sea level rise hazards (e.g., storm and
 non-storm flood projections becoming widespread with 1.6-foot and 3.3-foot sea level rise,
 respectively).

McDonnell Centre Business Park Specific Plan (SP11) Alternative. The McDonnell Centre Business Park Specific Plan encompasses 307 gross acres located in the northwestern portion of the City. It has access from Bolsa Chica Street and Bolsa Avenue, both major arterials, with close access to the 405 freeway. The area was first developed for the aerospace industry in the 1960s and a specific plan was adopted in 1997 with amendments in 2002 and 2006 that allowed for approximately eight million square feet of industrial,

office, and ancillary uses (including the existing development). Boeing has been the primary landowner in the area, although other major business tenants have moved into the specific plan area. In 2018, Boeing began marketing some of its properties in the specific plan area. As such, the City evaluated housing potential within portions of the specific plan area for the 6th Cycle, particularly workforce housing and lower income worker housing. The specific plan could accommodate a large capacity of housing units at higher densities due to its size as well as existing and planned infrastructure.





McDonnell Centre Business Park Specific Plan (SP11)

The following are reasons why this alternative was rejected:

- There is a strong market for industrial land in this area of the City. The site was even more attractive to potential developers due to its proximity to the freeway and because zoning and environmental approvals were already in place.
- Potential conflicts between industrial uses and residential uses.
- Potential costs to remediate site to residential standards.
- Properties have already started redeveloping with new industrial buildings recently completed and future phases approved.

7.6 Project Alternatives Considered

State CEQA Guidelines §15126.6 (d) of the CEQA Guidelines requires an EIR to provide sufficient information about each alternative to allow for meaningful evaluation, analysis, and comparison with the project. Pursuant to State CEQA Guidelines §15126.6, an analysis of alternatives is presented in this SEIR to provide decision-makers with alternatives to be considered. The State CEQA Guidelines specify that an EIR shall describe a reasonable range of alternatives that would avoid or substantially lessen a project's significant effects but need not consider every conceivable alternative. The following alternatives were selected for analysis: No Project Alternative and Beach and Edinger Corridors Alternative. The two analyzed alternatives present a reasonable range of alternatives to the Project.

"No Project" Alternative (Alternative 1)

Description of the Alternative

According to State CEQA Guidelines §15126.6(e), the specific alternative of "No Project" shall also be evaluated along with its impact. The purpose of describing and analyzing a No Project Alternative is to allow decision-makers to compare the impacts of approving the proposed Project with impacts of not approving the Project. The No Project Alternative analysis is required to discuss the existing conditions at the time the Notice of Preparation is published (August 4, 2021), as well as what would be reasonably expected to occur in the foreseeable future, if the Project were not approved, based on current plans and consistent with available infrastructure and community services.

Under Alternative 1, development within the City would proceed pursuant to the adopted City General Plan and zoning. The City's projected regional housing need for the 6th Cycle RHNA planning period (2021-2029) is 13,368 dwelling units (11,743 units when accounting for existing applications and pipeline projects). Under Alternative 1, the City would not implement the HEU Implementation Program required to comply with State law, to accommodate the lower-income RHNA units, including amendments to existing land use designations and zoning districts, an affordable housing overlay, and identification of underutilized, residentially zoned parcels in an inventory of candidate housing sites. In total, the Project identifies 378 candidate housing sites (approximately 419 acres). The proposed amendments to the Huntington Beach GPU and the City of Huntington Beach Zoning and Subdivision Ordinance of the City of Huntington Beach Municipal Code (Zoning Text and Zoning Map amendments) for changes to land use designations and base/overlay districts, as well as ancillary amendments to other planning documents, would not be implemented. These amendments, which are needed to accommodate future housing sites as part of the Project's Implementation Program, would not be implemented at the 378 identified candidate housing sites. The capacity for future development of approximately 19,738 housing units that would be facilitated by Project implementation would not be provided under the No Project Alternative. The Project proposes only three candidate housing sites (Sites 3, 4, and 5) for rezoning, and all other sites would retain their existing underlying zoning; see Table 5.8-5: Proposed Zone Changes - Candidate Housing Sites, for existing and proposed zoning. The Project's development capacity changes on these sites (approximately 643,272 square feet less of industrial uses; approximately 122,186 square feet less of commercial uses; and approximately 428 additional housing units) would not occur under this Alternative, the existing underlying zoning would be retained.

Under this alternative, State Housing Law and legislative requirements for implementation of the proposed Project's proposed programs and strategies to increase housing capacity and the production of affordable dwelling units in the City would not occur. Overall, Alternative 1 would not consider the candidate housing sites and adoption of the land use amendments and rezones necessary to achieve the City's RHNA and as a result, the capacity for 11,743 multi-family housing units would not be created.

This alternative would not satisfy the Project objectives stated above because implementation of Alternative 1 would not facilitate the development of sufficient residential units to meet the City's RHNA allocation and would not satisfy legislative mandates for the HEU.

Impact Comparison to the Proposed Project

Aesthetics. Alternative 1 could result in fewer aesthetic impacts than the Project because less housing development would be expected. However, future housing development anticipated by the Project or under Alternative 1 would still allow development to occur under the existing land use and zoning, would be subject to compliance with Municipal Code standards and subject to discretionary design review and other permit approval, thereby minimizing the potential for impacts concerning scenic resources and lighting/glare. Alternative 1 would result in 11,743 fewer dwelling units than the Project. Thus, the Alternative 1 would be considered environmentally superior to the Project concerning aesthetics resources.

Agriculture and Forestry. The City does not have land that is designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, or is zoned for agriculture or forestland/timberland. Consistent with the proposed Project, Alternative 1 would not result in the loss of forestland or conversion of farmland or forestland to other uses. Both the proposed Project and Alternative 1 would have no impact on agriculture and forestry. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning agriculture and forestry.

Air Quality. The air quality analysis for the proposed Project finds that implementation of the Project would result in less than significant impacts concerning pollutants, air toxics, consistency with applicable plans, and odors following compliance with the following regulatory framework and GPU PEIR recommended mitigations and project-specific mitigation measures (MM): Policies ERC-4.B through ERC-4.D and **GPU PEIR MMs 4.2-1** through **MM 4.2-14**, **MM AQ-1**, and **MM AQ-2**. Alternative 1 would be expected to generate fewer pollutant emissions than the Project because fewer dwelling units would be developed. However, because Alternative 1 assumes that Sites 3, 4, and 5 would maintain the existing commercial and industrial uses and would allow for the City's growth under the existing land use and zoning designations, Alternative 1 would still result in some air quality impacts. Although the Project impacts would not be avoided, air quality impacts under Alternative 1 would be incrementally reduced as compared to the proposed Project. Thus, the Alternative 1 would be considered environmentally superior to the Project concerning air quality.

Biological Resources. Except for the two vacant candidate housing sites (Sites 83 and 129), all of the other candidate housing sites are developed/occupied by structures and do not contain special status species, riparian habitats, other sensitive communities, or wetlands. The candidate housing sites are also largely surrounded by urban development. Following compliance with General Plan policies, the Project's potential indirect impacts to special-status species habitats, riparian habitats or other sensitive communities, and wetlands would be reduced to less than significant levels with implementation of **GPU PEIR MMs 4.3-1** and **MM 4.3-2**, as applicable, which would be determined on a project-by-project basis. Alternative 1 would not develop vacant sites 83 and 129 with residential uses. However, these sites would have the potential to be developed consistent with their General Plan and zoning designations and as such would result in a similar impact to biological resources as the proposed Project. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning biological resources.

Cultural Resources. The Project was determined to have the potential to impact historic or archaeological resources and also has the potential to disturb human remains from ground disturbing activities. With the implementation of the recommended **GPU PEIR MMs 4.4-1** through **MM 4.4-3**, the Project and Alternative 1 would reduce potentially significant impacts to a less than significant level. Under both scenarios, historic and archaeological resources could be impacted, including by ground disturbing activities. Vacant sites 83 and 129 have the potential to be developed under the existing General Plan and zoning designations and could still affect cultural resources. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning cultural resources.

Energy. Alternative 1 would demand less total energy than the Project given this alternative would involve less housing development. However, Alternative 1 would allow future development in accordance with the existing land use designations. It is noted that future development would result in more-energy efficient development because Title 24 standards continue to be modified to include more energy efficiency requirements. Overall, Alternative 1 would result in less housing development. Thus, the Alternative 1 would be considered environmentally superior to the Project concerning energy.

Geology and Soils. Candidate housing sites 31, 32, 68, 69, 101, 203, 208 and 294, identified as part of the proposed Project, are located within the Newport-Inglewood Fault zone. Therefore, future housing developments facilitated by the proposed Project could cause potential substantial adverse effects involving rupture of a known earthquake fault. Additionally, of the 378 candidate housing sites, 116 sites are entirely or predominantly located in liquefaction hazard areas. The site-specific underlying geology is not known for the candidate housing sites at this level of programmatic analysis; however, older shallow marine sediments that have the potential to produce paleontological resources have been identified within the City. Therefore, there is a likelihood that earthwork activities associated with future housing development facilitated by the proposed Project would encounter paleontological resources.

Alternative 1 would result in comparable impacts involving geology, soils, and paleontological resources as the Project, given the similar footprints of existing candidate housing sites, existing housing, and parcels with potential for future development under the existing General Plan and zoning and because the City's underlying location within the Newport-Inglewood Fault zone would not change under Alternative 1. Because both the proposed Project and Alternative 1 would result in an increase in potential geology and soil impacts, development under either alternative scenario would be subject to Policies HAZ-1.A and B, GPU PEIR MM 4.4-4, and MMs 4.5-1 through MM 4.5-3. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning geology and soils.

Greenhouse Gas Emission s. Alternative 1 assumes less housing development than the proposed Project but would allow development to occur in the City consistent with the existing General Plan, which would generate GHG emissions. Although GHG emissions may be reduced under this alternative, Alternative 1 has the potential to result in significant unavoidable GHG emissions similar to impacts associated with the Project. Future development under both Alternative 1 and the proposed Project would result in increased GHG emissions, largely due to increased vehicle miles traveled (VMT), as well as from construction activities, stationary area sources (i.e., natural gas consumption for space and water heating devices, landscape maintenance equipment operations, and use of consumer products), energy consumption, water supply, and solid waste generation. Development under Alternative 1 or the proposed Project

would be subject to Policies ERC-12.A and B, and ERC-13.A and C. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning GHG emissions.

Hazards and Hazardous Materials. Project-related impacts concerning hazards and hazardous materials would be reduced to less than significant levels with the implementation of Policies HAZ-4.A, HAZ-6.C, and Haz-6.D, and GPU PEIR MMs 4.7-1 through MM 4.7-4. Compliance with these policies and measures would minimize impacts from the routine transport, use, and disposal of hazardous materials and from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Alternative 1 would have similar potentially significant impacts concerning demolition, transport, or disposal of hazardous materials associated with potential demolition, grading, and construction activities necessary (on a site-by-site basis) consistent with the existing General Plan and zoning. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning hazards and hazardous materials.

Hydrology and Water Quality. The proposed Project could substantially decrease groundwater supplies resulting in a significant and unavoidable impact concerning sustainable management of the Orange County Groundwater Basin. Policies ERC 16.A and ERC 16.C and GPU PEIR MM 4.8-2 are applicable to the Project, but the Project's impact concerning groundwater supplies would remain cumulatively considerable and a significant unavoidable impact would occur. All other project-related impacts concerning hydrology and water quality can be mitigated to a less than significant level with conformance with all applicable local, State, federal regulatory requirements, implementation of Policies ERC-16A and C, and ERC-17A through H, and **GPU PEIR MMs 4.8-1** through **MM 4.8-3**.

Alternative 1 would eliminate the significant unavoidable impact associated with groundwater supply. The Urban Water Management Plan (UWMP) is based on the development assumptions set forth in the General Plan. The UWMP identifies that water supply, including groundwater supplies, would be adequate. Alternative 1 could result in similar or slightly reduced impacts with respect to drainage patterns, water quality, and water resources given that the candidate housing sites would still develop under the existing General Plan and zoning designations. Thus, the Alternative 1 would be considered environmentally superior to the Project.

Land Use and Planning. The Project includes updates to the City's General Plan Housing Element and Land Use Element to facilitate future housing development on identified candidate housing sites in compliance with State law. Amendments to the Housing Element and Land Use Element would ensure internal consistency between these two General Plan Elements and would ensure consistency with State regulations. Future development facilitated by the Project would be subject to the City's discretionary review and approval process and would need to comply with all applicable federal, State, and local laws and local policies and regulations. Following adoption of the Project and certification of the two General Plan Elements, the proposed Project would be consistent with all land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect. All development facilitated by the Project would either redevelop existing sites or introduce development (infill) in fully urbanized portions of the City and would not divide the community with projects that typically create physical divisions or separation within cities such as freeways or other large infrastructure projects that divide one portion of a City from another.

Neither Alternative 1 nor the proposed Project would physically divide established communities. However, Alternative 1 would preclude the City from meeting its 6th Cycle RHNA allocation of 11,743 dwelling units. Therefore, the City would not be in compliance with State Housing laws which require the adoption of an update to the 5th Cycle Housing Element, which includes the identification of adequate candidate housing sites to meet the City's RHNA allocation. Thus, the Alternative 1 would be considered environmentally inferior to the Project concerning land use planning.

Mineral Resources. The Project includes candidate housing sites 199, 200, 237, 281, 291, 300, 322 and 325, which are located within the Oil Production Overlay District Subdistrict (O1 Subdistrict) established by HBMC Chapter 220: Oil Production Overlay District. The O District provides areas to accommodate oil operations with no drilling. The O1 Subdistrict provides areas where petroleum/oil drilling is allowed, subject to a conditional use permit (CUP). HBMC Chapter 220 specifies that no development shall occur on land subject to the Oil Production Overlay District unless it is part of a reuse plan for the disposition or treatment of any existing or proposed oil wells or oil operations with the district that has been approved in writing by the oil operator or lessee and approved by the City in accordance with HBMC Chapter 220.10. No additional mineral resources are present on the candidate housing sites; therefore, as with the Project, Alternative 1 would result in no impact to mineral resources with compliance to Chapter 220.10. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning mineral resources.

Noise and Vibration. Though precise locations would vary, construction activities at one or more locations within the City, as part of the Project, could potentially occur continuously through 2029. Further, the potential exists for larger construction projects located in the same area or on the same block to overlap construction schedules. Construction activities associated with any individual development could also occur near noise-sensitive receptors and noise disturbances and excessive groundborne vibration/noise levels, could occur for prolonged periods of time. Therefore, consistent with the GPU PEIR, construction noise impacts associated with implementation of the Project are considered significant and unavoidable even with implementation of **GPU PEIR MMs 4.10-1** through **MM 4.10-5**.

Alternative 1 would result in similar significant and unavoidable noise impacts to the Project, particularly from construction activities and residential operations, given this alternative would result in new construction activities from new development. Development occurring in the City would take place consistent with the existing General Plan and zoning regulations and the anticipated growth and development of the City identified in the existing General Plan, which would still be subject to the applicable mitigation measures outlined in the GPU PEIR. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning noise.

Population and Housing. The City's housing stock and population are anticipated to reach 83,934 dwelling units and 203,588 persons by 2030 under Alternative 1, respectively. The Project would facilitate the development of additional housing throughout the City, resulting in a forecast population growth of approximately an additional 11,743 dwelling units and 29,475 persons by 2029. With the additional Project-related housing and population growth, the City's housing stock is anticipated to reach 95,677 dwelling units and 233,063 persons by 2030. Project implementation would facilitate future housing development, inducing indirect population growth in the City beyond 2021 existing conditions. However,

State law requires that the City accommodate its RHNA "fair share" of the region's housing needs, which cannot be achieved under Alternative 1. Without the Project's proposed rezoning/land use amendments the City would not meet the RHNA mandated State law. Thus, the Alternative 1 would be considered environmentally inferior to the Project concerning population and housing.

Public Services. Population is anticipated to increase in the City with or without the proposed Project or Alternative 1. However, implementation of the proposed Project would introduce additional housing and population to the City. With the exception of two candidate housing sites, the candidate housing sites are currently developed and served by existing public services including fire, police, schools, parks/recreational facilities, and library, services and equipment/infrastructure. Therefore, future housing development facilitated by the Project is not anticipated to require construction of new or physically alter fire, police, schools, parks/recreational facilities, and library facilities, the construction of which could cause significant environmental impacts. With the implementation of GPU PEIR MMs 4.12-1 through MM 4.12-7, the Project would result in less than significant impacts. Under Alternative 1, residential and nonresidential growth would still occur under the existing General Plan and zoning which would also require similar public services. Mitigation measures would also be applicable under Alternative 1 to mitigate or offset any potential impacts; this would include the payment of all appropriate development impact fees. Thus, the Alternative 1 would be considered environmentally superior to the Project concerning public services.

Recreation. The Project does not include recreational facilities, but may require the construction or expansion of recreational facilities to meet the Project's demand for recreational facilities to meet General Plan Policy ERC-1.A's park per capita target ratio of 5.0 acres per 1,000 persons. The Project-related demand for parkland facilities would be approximately 147 acres. The construction or expansion of recreational facilities could have an adverse physical effect on the environment; however, any future expansion of existing facilities or construction of new facilities, if required, would be subject to the City's review process including additional environmental review. Following compliance with General Plan Policies, and GPU PEIR MMs 4.13-1 (HBZSO §254.08) and 4.13-2, the Project's potential impacts associated with recreational facilities would be reduced to less than significant.

Development under Alternative 1 would introduce population consistent with the General Plan and zoning. Like the proposed Project, development projects under Alternative 1 would also be subject to compliance with **GPU PEIR MMs 4.13-1** and **MM 4.13-2**, which would ensure project applicants demonstrate compliance with City parkland requirements identified in HBZSO § 254.08 (or Ordinance No. 3596), either through the dedication of on-site park land or through payment of applicable fees and that applicants pay the Park Land/Open Space and Facilities Development Impact Fees in effect at the time of permit. Payment of fees would help offset the costs associated with the physical deterioration of existing facilities and construction or construction or expansion of facilities. In this regard, the Project and Alternative 1 would have a less than significant impact on recreational facilities with implementation of mitigation. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning recreation.

Transportation. All future housing development associated with the Project would be subject to City Municipal Code Chapter 17.65 Fair Share Traffic Impact Fee, which requires payment of traffic impact fees

to help the City construct required capital improvements, accommodate projected growth and fulfill the goals, to implement objectives and policies of the City's General Plan, which includes the maintenance of bicycle, pedestrian, and transit facilities. Following compliance with General Plan Policies CIRC-1.B, 1.F, 2.C, 3.C, 3.D, 5.A, 6.C, 9.B, payment of traffic impact fees, implementation of **GPU PEIR MMs 4.14-1** through **MM 4.14-3**, and with implementation of project-specific **MM TRANS-1**, the Project's potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities would be less than significant.

Under Alternative 1, the City would continue to develop and grow consistent with the existing General Plan and zoning and any development under Alternative 1 would also be subject to the previously noted General Plan Policies and mitigation measures that would serve to minimize and/or avoid traffic related impacts. Because less development could occur as a part of this alternative, Alternative 1 would be considered environmentally superior to the Project concerning transportation.

Tribal Cultural Resources. The proposed Project's potential impacts to tribal cultural resource would be reduced to a less than significant level following compliance with **GPU PEIR MMs 4.4-2** and **MM 4.4-3**. Alternative 1 could have similar impacts to the Project regarding tribal cultural resources because development could occur throughout the City in accordance with existing General Plan and zoning regulations. Construction would likely include grading activities that could unearth tribal cultural resources could occur with the development of the candidate housing sites consistent with their existing General Plan and zoning designations. The level of potential impacts on tribal cultural resources from construction and grading activities would be similar under both the proposed Project and Alternative 1 and would require implementation of applicable mitigation. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning tribal cultural resources.

Utilities and Service Systems. Implementation of the proposed Project is anticipated to incrementally increase population by 29,475 persons by 2029. This increase in population growth would require additional potable water resources, would generate additionally wastewater, would generate solid waste, and would require additional electric, natural gas and telecommunication resources. However, the Project would result in a less than significant impact related to the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities following compliance with the GPU policies PSI-6.A, PSI-7.C, PSI-7.E, PSI-8.C, PSI-9.A, PSI-10.B, PSI-10.D, PSI-10.E, PSI-11.B, ERC-11.C, ERC-12.C, ERC-15.A, and ERC-15.B, and GPU PEIR MMs 4.15-1 and MM 4.15-2. Under Alternative 1, development would occur consistent with the existing General Plan and zoning land use designations, which were accounted for in the 2020 WQMP. Because the 2020 UWMP did not account for future proposed Project housing development, impacts associated with the Project would remain significant and unavoidable. Alternative 1 would cause fewer impacts on water, wastewater, solid waste, electric, natural gas and telecommunication resources with implementation of the previously noted GPU Policies and GPU PEIR MMS. Thus, the Alternative 1 would be considered environmentally superior to the Project concerning utilities and service systems.

Wildfire. The GPU PEIR does not identify the City as being located in a Fire Hazard Severity Zone. Similarly, CAL Fire identifies the City within a Non-Fire Hazard Severity Zone. Additionally, compliance with federal, state, and local laws and regulations, supported by implementation of General Plan Policy HAZ-4.A, would

ensure that impacts to the public and environment related to risk of hazards due to urban fires would be less than significant. Although the majority of the candidate housing sites are developed, Alternative 1 would limit population growth and higher density in the City compared to the proposed Project and in turn further minimize the potential for wildfire or high wind exposure to new residents or structures. Nonetheless, any future development under Alternative 1 would also be subject to General Plan Policy HAZ-4.A. Thus, the Alternative 1 would be considered environmentally equivalent to the Project concerning wildfire.

Ability to Meet Project Objectives

A project objective is to provide adequate sites to accommodate projected housing unit needs at all income levels identified by the 2021-2029 RHNA, as is required by State housing law. Alternative 1 would not facilitate development of 11,743 dwelling units and would not meet the specified affordable housing requirement, which would conflict with State housing law. Alternative 1 would not attain any of the Project objectives, including those that are required to comply with State law, except the Alternative 1 would preserve the community's existing housing stock and no existing housing would be impacted.

Conclusion

Alternative 1 would not satisfy any of the City's housing goals or the Project objective to update the Housing Element and gain certification from the State in accordance with State law. Under the Alternative 1, the City would not meet its 6th Cycle RHNA allocation and would result in risk of penalties and loss of eligibility for funding opportunities due to the City's noncompliance with various State housing-related laws. Thus, this alternative would directly conflict with California Government Code §65583, which stipulates that a jurisdiction must assess its housing element every eight years and identify adequate sites for housing and provide for the existing and projected needs of all economic segments of the community.

Beach and Edinger Corridors Alternative (Alternative 2)

Description of the Alternative

As with the proposed Project, the Beach and Edinger Corridors Alternative (Alternative 2) would meet the City's RHNA. However, residential development under Alternative 2 would be concentrated around the Beach and Edinger Corridors area of the Beach and Edinger Corridors Specific Plan (Specific Plan 14). More specifically, new residential development would occur in portions of Specific Plan 14's Transition Corridor Areas (TCAs), which would support transit-oriented communities, and on fewer total parcels throughout the City. This would further reduce vehicle miles traveled (VMT), transportation-related energy demands, and associated criteria air pollutant and greenhouse gas emissions associated with housing development. However, this approach would require taller building heights and higher densities to achieve the target housing production in this area necessary to meet the RHNA. Also, this alternative would create dense/confined residential development and not as greatly expand housing opportunities across the City, which would not affirmatively further fair housing to the same degree as the Project.

Though Alternative 2 seeks to create denser development projects in the TCAs, this alternative does not limit construction on the proposed Project candidate housing sites. Construction would continue to occur

in other portions of the City; however, it is anticipated that a greater portion of the RHNA would be met through development within the TCAs.

Impact Comparison to the Proposed Project

A large portion of the TCAs identified in the Beach and Edinger Corridors Specific Plan are the same sites identified and previously evaluated for the Project. Alternative 2 assumes that these sites are developed at a higher density than assumed in the 6th Cycle Project to be able to achieve higher densities on fewer sites. However, Alternative 2 would not preclude development on the proposed Project candidate housing sites.

Aesthetics. New housing development under Alternative 2 would concentrate developments in the TCAs of the Beach and Edinger Corridors Specific Plan 14; however, development on the proposed Project candidate housing sites would still be able to occur. Alternative 2 is different than the proposed Project in that Alternative 2 assumes higher density development in the TCAs but continues to allow development in the candidate housing sites. With higher densities in the TCAs under Alternative 2, it is anticipated that housing development would be predominately multi-family.

Similar to the Project, Alternative 2 would not impact City identified scenic vistas such as the Pacific Ocean, the Bolsa Chica Ecological Reserve, the Huntington Beach Mesa, and the low, steep bluffs on the south side of the Pacific Coast Highway. The increase in development associated with both the proposed Project and Alternative 2 could affect the Huntington Beach Municipal Pier with the increase in light and glare in the area. Following compliance with General Plan Policies LU-7.A through LU-7.C, LU-8.B through LU-8.D, CIRC-7.E, and the California Building Standards Code (Part 11 of Title 24), and HBZSO design guidelines that address light and spillage and glare on adjacent properties), both the proposed Project and Alternative 2 would have a less than significant impact on aesthetic resources. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning aesthetics.

Agriculture and Forestry. Because the City does not include properties designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, or zoned for agriculture or forestland/timberland, no impacts would occur. Neither the Project nor Alternative 2 would result in the loss of forestland or conversion of farmland or forestland to other uses. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning agriculture and forestry.

Air Quality. Neither the Project nor Alternative 2 would conflict with an applicable air quality plan. Housing development facilitated by the Project and Alternative 2 would be subject to GPU PEIR MMs 4.2-1 through MM 4.2-14 to minimize potential construction and operational impacts. Additionally, individual projects would be subject to MM AQ-1 and MM AQ-2 to minimize pollutant concentration impacts to sensitive receptors. As with the Project and Alternative 2, potential air emissions reductions resulting from implementation of these mitigation measures cannot be quantified because information on construction scheduling and project size for all individual projects likely to occur in the City is unknown. Without such information, it is not possible to conclude that air pollutant emissions resulting from construction activities under Alternative 2 would be reduced to below SCAQMD significance thresholds.

For these reasons, construction air quality impacts are conservatively concluded to be the same as the proposed Project.

Moreover, future residential development anticipated to occur under Alternative 2 would generate operational emissions associated mobile, energy, water, waste, and land use sources. Alternative 2 would implement the same sustainability and trip-reduction policies and standards included in the proposed Project. Further, Alternative 2 would reduce operational emissions from mobile sources to an even greater extent when compared to the proposed Project, given that new development under Alternative 2 would be concentrated within a smaller radius composed of areas identified as TCA. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning air quality.

Biological Resources. With the exception of the two vacant candidate housing sites (Sites 83 and 129) included as part of the Project, all other candidate housing sites are developed/occupied by structures and do not contain special status species, riparian habitats, other sensitive communities, or wetlands. The TCA area considered for densification/development under Alternative 2 is also a fully developed area with no potential to impact biological resources. As with the Project, Alternative 2 would be subject to applicable GPU Policies ERC-1.F, ERC-3.D, ERC-6.A, through ERC-6.E, ERC-7.A through ERC-7.E, ERC-8.C and ERC-10.A and **GPU PEIR MMs 4.3-1** and **MM 4.3-2**, which would reduce impacts to biological resources to a less than significant level. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning biological resources.

Cultural Resources. The Project has the potential to impact historic and archaeological resources and also has the potential to disturb human remains from ground disturbing activities associated with future construction activities. With the implementation of **GPU PEIR MMs 4.4-1** through **MM 4.4-3**, both the Project and Alternative 2 would lessen potential impacts to a less than significant level. Under Alternative 2, a lesser potential to disturb historic resources, archaeological resources, or human remains would occur as fewer parcels and existing structures have the potential to be impacted than proposed under the Project. Although potential impacts would be further reduced under Alternative 2, **MMs 4.4-1** through **MM 4.4-3** would further minimize impacts to historical and archaeological resources and human remains to a less than significant level, as with the proposed Project. Thus, the Alternative 2 would be considered environmentally superior to the Project concerning cultural resources.

Energy. The Project construction is anticipated to consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass. Although Alternative 2 is anticipated to foster a higher concentration of development in the TCAs, a smaller portion of the City, the overall development density is anticipated to be the same of the proposed Project at 11,743 housing units (when accounting for the 1,625 housing units currently in the pipeline) that is a total 13,368 dwelling units. Additionally, impacts related to energy consumption from operations are anticipated to be equivalent under both the proposed Project and Alternative 2 because the same number of dwelling units and population growth is anticipated in both scenarios. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning energy resources.

Geology and Soils. Candidate housing sites 31, 32, 68, 69, 101, 203, 208 and 294, identified as part of the proposed Project, are located within the Newport-Inglewood Fault zone, which could result in the exposure of future housing developments to impacts associated with seismic events. Therefore, future housing developments facilitated by the proposed Project could cause potential substantial adverse effects involving rupture of a known earthquake fault. Additionally, of the 378 candidate housing sites, 116 sites are entirely or predominantly located in liquefaction hazard areas.

As noted for the proposed Project, older shallow marine sediments that have the potential to produce paleontological resources have been identified within the City. Therefore, there is a likelihood that earthwork activities associated with future housing development facilitated by the proposed Project and Alternative 2 would encounter a paleontological resource. Alternative 2 is assumed to result in fewer impacts to geology, soils, and paleontological resources than the Project given that fewer candidate housing sites have the potential to be developed. Nonetheless, geologic conditions are consistent throughout the City and development under Alternative 2 would be subject to the same conditions as the proposed Project. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning geology and soils.

Greenhouse Gas Emissions. Alternative 2 would plan for the same amount of residential development as the Project and would result in similar construction-related GHG emissions. Such emissions are difficult to quantify as the details of construction, design/size, and timing of each future project to occur in the City is unknown. Like the proposed Project, construction-related emissions anticipated to occur under Alternative 2 would vary on an annual basis. While Alternative 2 is projected to result in the same amount of new residential development as the proposed Project, Alternative 2 would concentrate development along TCA, which includes transit stops and major transportation corridors within the City, thereby enhancing multi-modal transportation opportunities for residents which could decrease VMT and associated operational GHG emissions. No additional GHG mitigation measures beyond what is already required by the GPU PEIR can feasibly reduce GHG impacts. Although impacts may be incrementally reduced, like the Project, Alternative 2 would have significant unavoidable GHG emission impacts. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning GHG emissions.

Hazards and Hazardous Materials. For both the proposed Project and Alternative 2, potential impacts concerning hazards and hazardous materials would be reduced to less than significant with the implementation of Policies HAZ-4.A, HAZ-6.C, and D, and GPU PEIR project-specific GPU PEIR MMs 4.7-1, MM 4.7-2, MM 4.7-3, and MM 4.7-4. These policies and measures would minimize impacts from the routine transport, use, and disposal of hazardous materials and from reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Although development under Alternative 2 has the potential to would occur on fewer sites, similar hazards and hazardous materials impacts to the proposed Project could occur. However, following compliance of the previously noted policies and GPU PEIR measures, impacts associated with Alternative 2 can be mitigated to a less than significant level. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning hazards and hazardous materials.

Hydrology and Water Quality. Because the same number of housing units are assumed for the proposed Project and Alternative 2, implementation could substantially decrease groundwater supplies resulting in a significant and unavoidable impact concerning sustainable management of the Orange County Groundwater Basin. Policies ERC 16.A and ERC 16.C and GPU PEIR MM 4.8-2 are applicable; however, the Project's impact concerning groundwater supplies would remain cumulatively considerable and a significant unavoidable impact would occur. All other project-related impacts concerning hydrology and water quality can be mitigated to a less than significant level with conformance with all applicable local, State, federal regulatory requirements, implementation of Policies ERC-16A and C, and ERC-17A through H, and GPU PEIR MMs 4.8-1 through MM 4.8-3.A.

Alternative 2 would result in a slight reduction in impacts to drainage patterns due to the anticipated slight reduction in developed sites. However, like the proposed Project, all other hydrology and water quality impacts associated with Alternative 2 can be mitigated to a less than significant level with conformance with all applicable local, State, federal regulatory requirements, implementation of Policies ERC-16A and C, and ERC-17A through H, and **GPU PEIR MMs 4.8-1** through **MM 4.8-3.A**. Thus, Alternative 2 would be considered environmentally superior to the Project concerning hydrology and water quality.

Land Use and Planning. The Project includes updates to the City's General Plan Housing Element and Land Use Element to facilitate future housing development on identified candidate housing sites in compliance with State law. Amendments to the Housing Element and Land Use Element would ensure internal consistency between these two General Plan Elements and would ensure consistency with State regulations. Future development facilitated by the Project would be subject to the City's discretionary review and approval process and would need to comply with all applicable federal, State, and local laws and local policies and regulations. Following adoption of the Project and certification of the two General Plan Elements, the Project would be consistent with all land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect. All development facilitated by the Project would either redevelop existing sites or introduce development (infill) in fully urbanized portions of the City and would not divide the community with projects that typically create physical divisions or separation within cities such as freeways or other large infrastructure projects that divide one portion of a City from another.

Under Alternative 2, the degree of potential land use conflicts associated with future development would be site-specific and dependent upon the respective settings, similar to that of the proposed Project. Alternative 2 would develop in the Beach and Edinger Corridors in a higher concentration, but development throughout the City would still occur in the candidate housing sites. While this alternative would meet the RHNA allocation for the City, this alternative would create dense/confined residential development and not as greatly expand housing opportunities across the City and would not affirmatively further fair housing to the same degree as the Project. Thus, Alternative 2 would be not be considered environmentally superior to the Project.

Mineral Resources. The Project includes candidate housing sites 199, 200, 237, 281, 291, 300, 322 and 325, which are located within the Oil Production Overlay District Subdistrict (O1 Subdistrict) established by HBMC Chapter 220: Oil Production Overlay District. The O District provides areas to accommodate oil

operations with no drilling. The O1 Subdistrict provides areas where petroleum/oil drilling is allowed, subject to a conditional use permit (CUP). HBMC Chapter 220 specifies that no development shall occur on land subject to the Oil Production Overlay District unless it is in accord with a reuse plan for the disposition or treatment of any existing or proposed oil wells or oil operations with the district that has been approved in writing by the oil operator or lessee and approved by the City in accord with HBMC Chapter 220.10. No additional mineral resources are present on the candidate housing sites; therefore, as with the Project, Alternative 2 would result in no impact to mineral resources with compliance to Chapter 220.10. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning mineral resources.

Noise and Vibration. Though precise locations would vary, construction activities at one or more locations within the City permitted as part of the Project and Alternative 2 could potentially occur continuously through 2029. The potential also exists for larger construction projects located in the same area or on the same block to overlap construction schedules. Construction activities associated with any individual development could also occur near noise-sensitive receptors and noise disturbances and excessive groundborne vibration/noise levels, could occur for prolonged periods of time. In both instances, the proposed Project would cause a significant impact from temporary and long-term construction and operational noise, associated with demolitions, construction, and operations. Even with compliance with General Plan Policies N.1.B, N.2.A, N.3.A through N.3.C, N.4.A, N.4.C, and N.4.D, and **GPU PEIR MM 4.10-1** through **MM 4.10-5**, a potentially significant and unavoidable impact would occur.

As previously noted, Alternative 2 would also result in noise impacts, particularly from temporary and long-term construction and operations. Under Alternative 2, demolition, grading, and construction activities and operational noise are anticipated to be concentrated on fewer sites due to higher densities in developments occurring within the TCAs. However, the difference is anticipated to be negligible. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning noise and vibration.

Population and Housing. The City's housing stock and population are anticipated to reach 83,934 dwelling units and 203,588 persons by 2030, respectively. The Project and Alternative 2 would facilitate the development of additional housing throughout the City, resulting in a forecast population growth of approximately an additional 11,743 dwelling units and 29,475 persons by 2029, assuming 2.51 person per household. With the additional housing and population growth, the City's housing stock is anticipated to reach 95,677 dwelling units and 233,063 persons by 2030. Both scenarios would result in population growth beyond 2021 existing conditions. However, State law requires that the City accommodate their RHNA "fair share" of the region's housing needs, which would also be achieved through implementation of the proposed Project or Alternative 2. Under the Project's proposed rezoning/land use amendments or Alternative 2, the City would meet the RHNA mandated State law. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning population and housing.

Public Services. The Project would result in less than significant impacts on public services with implementation of **GPU PEIR MMs 4.12-1** through **MM 4.12-7**. Although Alternative 2 would concentrate higher density within the TCA, Alternative 2 would introduce the same amount of residential dwelling units as those required by RHNA and facilitated by the Project. As such, Alternative 2 would be subject to

the same applicable mitigation. Impacts to public services associated with Alternative 2 would be similar to the proposed Project with mitigation incorporated. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning public services.

Recreation. The Project and Alternative 2 do not include recreational facilities but may require the construction or expansion of facilities to meet the demand for recreational facilities to meet General Plan Policy ERC-1.A's park per capita target ratio of 5.0 acres per 1,000 persons. The projected parkland demand for Project buildout would be approximately 147 acres of parkland, which would be the same for Alternative 2 given the same population forecast associated with this alternative.

The construction or expansion of recreational facilities could have an adverse physical effect on the environment; however, any future expansion of existing facilities or construction of new facilities, if required, would be subject to review by the City including environmental review. Following compliance with General Plan Policies, and **GPU PEIR MMs 4.13-1** (HBZSO §254.08) and **MM 4.13-2**, the Project's potential impacts associated with recreational facilities would be reduced to less than significant. Development under Alternative 2 would introduce the same number of new residents to the City, similar impacts regarding recreational facilities would occur and Alternative 2 would be subject to the applicable General Plan Policies and mitigation measures. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning recreation.

Transportation. All future housing development associated with the Project would be subject to City Municipal Code Chapter 17.65 Fair Share Traffic Impact Fee, which requires payment of traffic impact fees to help the City construct the required capital improvements, accommodate projected growth and fulfill the goals, to implement objectives and policies of the City's General Plan, which includes the maintenance of bicycle, pedestrian, and transit facilities. Following compliance with General Plan Policies CIRC-1.B, 1.F, 2.C, 3.C, 3.D, 5.A, 6.C, 9.B, payment of traffic impact fees, implementation of **GPU PEIR MMs 4.14-1** through **MM 4.14-3**, and with implementation of Project specific **MM TRANS-1**, the Project's potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities would be less than significant.

Under Alternative 2, new residential development would be concentrated within the TCA. Compared to the proposed Project, this alternative would better support goals to reduce Citywide and regional VMT by placing residential development along multi-modal corridors. This alternative would not restrict the City's ability to implement any planned transportation improvements and new development would continue to be subject to City Municipal Code Chapter 17.65 Fair Share Traffic Impact Fees. Following compliance with General Plan Policies CIRC-1.B, 1.F, 2.C, 3.C, 3.D, 5.A, 6.C, 9.B, payment of traffic impact fees, implementation of **GPU PEIR MMs 4.14-1** through **MM 4.14-3**, and with implementation of **MM TRANS-1** (which would remain applicable to Alternative 2), Alternative 2's potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities would also be less than significant. Thus, Alternative 2 would be considered environmentally superior to the Project concerning transportation.

Tribal Cultural Resources. The proposed Project's potential impacts to tribal cultural resources would be reduced to a less than significant level following compliance with **GPU EIR MMs 4.4-2** and **MM 4.4-3**.

Alternative 2 assumes that a large concentration of projects requiring grading and construction activities would occur within the TCAs because this portion of the City would allow higher density residential developments as part of Alternative 2. However, housing development could still occur in the identified candidate housing sites. Construction and grading activities would not be limited to the TCA. As such, Alternative 2 has the potential to result in similar impacts to the proposed Project. Following compliance with the GPU EIR mitigation measures, Alternative 2's potential to impact to tribal cultural resources would be mitigated to less than significant level. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning tribal cultural resources.

Utilities and Service Systems. The implementation of the proposed Project or Alternative 2 is anticipated to incrementally increase population by 29,475 persons by 2029. This increase in population growth would require additional potable water resources, would generate additionally wastewater, would generate solid waste, and would require additional electric, natural gas and telecommunication resources. Both the proposed Project and Alternative 2 would result in a less than significant impact related to the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities following compliance with the GPU PEIR policies PSI-6.A, PSI-7.C, PSI-7.E, PSI-8.C, PSI-9.A, PSI-10.B, PSI-10.D, PSI-10.E, PSI-11.B, ERC-11.C, ERC-12.C, ERC-15.A, and ERC-15.B, and GPU PEIR MM 4.15-1 and MM 4.15-2. The 2020 UWMP did not account for future proposed housing development as set forth in the RHNA allocation for the City. Even with implementation of the previously noted GPU Policies and GPU PEIR mitigation, Alternative 2 would cause similar impacts on water, wastewater, solid waste, electric, natural gas and telecommunication resources even with implementation of the applicable GPU PEIR policies and mitigation measures. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning utilities and service systems.

Wildfire. The GPU PEIR does not identify the City as being located in a Fire Hazard Severity Zone. Similarly, CAL Fire identifies the City within a Non-Fire Hazard Severity Zone. Additionally, compliance with federal, State, and local laws and regulations, supported by implementation of General Plan Policy HAZ-4.A, would ensure that impacts to the public and environment related to risk of hazards due to urban fires would be less than significant. Similarly, Alternative 2 would introduce the same number of housing units in a portion of the City that is also not subject to wildfire risks. Both, the Project and Alternative 2 would implement GPU PEIR Policy HAZ-4.A, which would ensure that impacts to the public and environment related to risk of hazards due to urban fires remain less than significant. Thus, the Alternative 2 would be considered environmentally equivalent to the Project concerning wildfire.

Ability to Meet Project Objectives

Alternative 2 would concentrate new housing development in the TCA of the Beach and Edinger Corridors Specific Plan 14, in proximity to major transit corridors. This alternative would not preclude construction in other candidate housing sites identified as part of the proposed Project. The TCA serves as a higher density hub within this portion of the City that would allow higher density projects. As discussed above, implementation of Alternative 2 would make the TCA an area for additional housing opportunities, aside from the candidate housing sites. Because Alternative 2 encourages higher density developments within the TCA, it is anticipated that higher investment and interest from potential developers would target this

area. Creating higher density developments could result in meeting the RHNA housing allocation at a faster rate and in fewer development projects. Although Alternative 2 would adopt State-mandated and locally desired programs to implement the City's Project, it would not affirmatively further fair housing or assure equal housing opportunities to the same extent as the proposed Project.

Table 7-1: Ability to Meet Project Alternatives Summary

Project Objective	Ability for Alternative 1 to Achieve Objective	Ability for Alternative 2 to Achieve Objective
Adopt State-mandated and locally desired programs to implement the City's Housing Element.	Alternative 1 would not plan for and accommodate the City's 6 th Cycle RHNA of 11,743 dwelling units.	Alternative 2 would adequately plan for and accommodate the City's 6 th Cycle RHNA of 11,743 dwelling units.
Maintain and enhance the quality and affordability of existing housing in Huntington Beach.	Alternative 1 would not meet this objective because it would only maintain the existing housing stock and would only allow housing to be developed based on the existing General Plan and zoning designations and would not be enough to meet the 6 th Cycle RHNA which mandates that a portion of new homes meet the affordability index.	Alternative 2 would meet this objective, because it would maintain and enhance the quality and affordability of existing housing in the City, as adding additional housing to the City's housing stock would maintain stable housing prices.
Provide adequate sites to accommodate projected housing unit needs at all income levels identified by the 2021-2029 RHNA.	Alternative 1 would not provide additional or adequate housing sites to be able to meet the 6 th Cycle RHNA allocation.	Alternative 2 would provide housing units in a concentrated area of the City. Alternative 2 would not provide opportunity for equitable distribution of new housing. Segregated land use patterns could take place under this alternative. Therefore, Alternative 2 would not align with the goal of Affirmatively Furthering Fair Housing to the same extent as the proposed Project.
Provide for safe and decent housing for all economic segments of the community.	Alternative 1 would not provide enough housing the quantity of housing required to meet the 6 th Cycle RHNA allocation. As such, Alternative 1 would not meet this Project objective.	Alternative 2 would provide safe and decent housing. However, concentrating housing in the TCA may not provide housing for all economic segments of the community.
Reduce governmental constraints to housing production, with an emphasis on improving processes for projects that provide on-site affordable units.	Alternative 2 would not reduce governmental constraints to housing production as future housing will only be developed based on existing General Plan and zoning regulations which do not specifically emphasize the production of affordable housing. Programs proposed as a part of the HEU to support the production of affordable housing would not be implemented under the Alternative 1 scenario.	Alternative 2 would concentrate residential development in the TCA. In effect, there would be a narrower distribution of affordable housing option throughout the City. Overall, Alternative 2 would not fully achieve the Project objective for housing to the same extent as the proposed Project.
Promote equal housing opportunities for all residents, including Huntington Beach's special needs populations.	Alternative 2 would not promote housing opportunities for all residents, including Huntington Beach's special needs population as future housing would only occur organically based on the existing General Plan and zoning designations.	Similar to the proposed Project, Alternative 2 would not displace substantial amounts of housing or existing residents with special needs. As described for the proposed Project, land use changes through 2029 associated with Alternative 2 are anticipated to occur almost entirely on commercially zoned parcels. In limited cases where residential tenants

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Project Objective	Ability for Alternative 1 to Achieve Objective	Ability for Alternative 2 to Achieve Objective
		may be displaced, displacement impacts would be evaluated on a project-specific basis and may include a relocation analysis and plan in accordance with state and local requirements. Overall, Alternative 2 would generally achieve this Project objective to a similar extent as the proposed Project.
Promote a healthy and sustainable Huntington Beach through support of housing at all income levels that minimizes reliance on natural resources and automobile use.	Although the City encourages a healthy and sustainable community, Alternative 2 would not directly encourage the development of transit-oriented communities and provide housing within close proximity to major transportation corridors and multi-modal transit opportunities. As such, this alternative would not increase walkability or non-motorized forms of transportation. Overall, Alternative 2 would not achieve this objective as future housing will be limited to those areas currently designated for residential use under the existing General Plan and zoning.	Alternative2 would encourage the development of transitoriented communities and provide housing within close proximity to major transportation corridors and multi-modal transit opportunities. As such, this alternative would increase walkability and non-motorized forms of transportation. Overall, Alternative 2 would achieve this objective to a similar extent as compared the proposed Project.
Maximize solutions for those experiencing or at risk of homelessness.	Alternative 2 would not provide additional housing in the City beyond what is already assumed to be potentially developed in the future under the existing General Plan and Zoning. As such, not additionally solutions for those at risk of homelessness regarding housing would be generated under Alternative 2.	Alternative 2 would provide additional housing in the City to meet the 6 th Cycle RHNA, but because Alternative 2 would concentrate development in the TCA, this may not be the most adequate area for homeless housing. Overall, this alternative does not fully achieve this objective.
Improve quality of life and promote placemaking.	Alternative 2 would not improve the quality of life or promote placemaking more than what is already assumed under the existing General Plan and zoning. As such, Alternative 2 would not meet this objective.	Alternative 2 would help improve quality of life with the additional housing in the TCA. Concentrating housing in this area would provide walkable areas and access to transit which would reduce driving. Overall, Alternative 2 would moderately achieve this objective.
Affirmatively further fair housing.	Alternative 2 would not foster the development of additional housing not already assumed under the existing General Plan and zoning. Therefore, Alternative 2 would not align with the goal of Affirmatively Furthering Fair Housing.	Alternative 2 would provide housing units in a concentrated area of the City. Alternative 2 would not provide opportunity for equitable distribution of new housing. Segregated land use patterns could take place under this alternative. Therefore, Alternative 2 would not align with the goal of Affirmatively Furthering Fair Housing to the same extent as the proposed Project.

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7.7 Environmentally Superior Alternative

According to State CEQA Guidelines §15126.6(e), No Project Alternative, "if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." **Table 7-2: Comparison of Project Alternatives** and **Table 7-3: Ability of Alternatives to Meet Project Objectives**, summarize the comparative analyses presented in this section (i.e., the alternatives compared to the Project). **Table 7-2: Comparison of Project Alternatives**, summarizes the comparative analyses presented above (i.e., the alternatives compared to the Project).

"No Project" Alternative (Alternative 1): The No Project Alternative would result in fewer impacts than the Project. Although this Alternative could reduce environmental impacts from future housing development facilitated by the Project, Alternative 1 would not achieve any of the Project objectives. Alternative 1 would not provide adequate housing sites to meet the City's 6th Cycle RHNA allocation or satisfy State housing law including AB 1397. Under Alternative 1, the City would not meet its RHNA obligations. Thus, this Alternative would directly conflict with California Government Code §65583, which stipulates that a jurisdiction must assess its housing element every eight years and identify adequate sites for housing and provide for the existing and projected needs of all economic segments of the community.

Beach and Edinger Corridors Alternative (Alternative 2): This Alternative would meet the majority of the Project objectives as it is assumed that development under this alternative would meet the 6th Cycle RHNA housing needs. However, it would not provide affirmative housing that is accessible to all as this alternative would provide a greater number of new housing with a more concentrated area of the City which might not be accessible to all.

Table 7-2: Comparison of Project Alternatives

Resource Areas	Alternative 1 No Project	Alternative 2 Beach and Edinger Corridor Alternative	
Aesthetics	*	=	
Agriculture and Forestry Resources	=	=	
Air Quality	*	=	
Biological Resources	П	=	
Cultural Resources	П	A	
Energy	¥	=	
Geology and Soils	=	=	
Greenhouse Gas Emissions	=	=	
Hazards and Hazardous Materials	=	=	
Hydrology and Water Quality	¥	A	
Land Use and Planning	A	A	
Mineral Resources	=	=	
Noise and Vibration	=	=	
Population and Housing	A	=	
Public Services	A	=	
Recreation	=	=	
Transportation	A	A	
Tribal Cultural Resources	=	=	
Utilities and Service Systems	A	=	
Wildfire	=	=	

A Indicates an impact that is greater than the proposed Project (environmentally inferior).

[▼] Indicates an impact that is less than the proposed Project (environmentally superior).

⁼ Indicates an impact that is equal to the proposed Project (neither environmentally superior nor inferior).

Table 7-3: Ability of Alternatives to Meet Project Objectives

Would the Alternative:	Alternative 1 No Project	Alternative 2 Beach and Edinger Corridor Alternative
Adopt State-mandated and locally desired programs to implement the City's Housing Element.	No	Yes
Maintain and enhance the quality and affordability of existing housing in Huntington Beach.	No	Yes
Provide adequate sites to accommodate projected housing unit needs at all income levels identified by the 2021-2029 RHNA. Provide for safe and decent housing for all economic segments of the community.	No	No
Reduce governmental constraints to housing production, with an emphasis on improving processes for projects that provide on-site affordable units.	No	Yes
Promote equal housing opportunities for all residents, including Huntington Beach's special needs populations.	No	Yes
Promote a healthy and sustainable Huntington Beach through support of housing at all income levels that minimizes reliance on natural resources and automobile use.	No	Yes
Maximize solutions for those experiencing or at risk of homelessness.	No	No
Improve quality of life and promote placemaking.	No	Yes
Affirmatively further fair housing.	No	No

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8.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

8.1 Introduction

The State California Environmental Quality Act (CEQA) Guidelines §15128 states that "an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR." This section briefly describes effects found to have no impact or a less than significant impact based on the analysis conducted during the Draft Subsequent Environmental Impact Report (SEIR) preparation process.

8.2 Aesthetics

Impact AES-1 Would the Project have a substantial adverse effect on a scenic vista?

GPU PEIR (Volume II, page 4.1-6)

The GPU PEIR concluded General Plan buildout would not have substantial adverse effects on scenic vistas, particularly to areas designated as Transform, which are underdeveloped and underutilized. Future development within the Transform areas are required to adhere to the land use policies to ensure that 1) new development supports the protection and maintenance of environmental and open space resources throughout the planning area; 2) new and renovated structures, building architecture and site design preserve and complement the City's beach culture; and 3) development in the planning area is compatible with surrounding development and public spaces like the scenic vistas of the Pacific Ocean and the Bolsa Chica Ecological Reserve. Further, future development would be required to adhere to Huntington Beach Zoning and Subdivision Ordinance (HBZSO) regulations, adopted Citywide Design Guidelines, and applicable state and City regulations to further minimize aesthetic-related impacts. For these reasons, the GPU PEIR concluded that General Plan buildout would result in less than significant impacts on scenic vistas.

IMPACT ANALYSIS

The Project includes 378 candidate housing sites throughout the City that vary in sizes ranging from a minimum of approximately 0.03 acre to a maximum of approximately 37.4 acres. Of the 378 candidate housing sites, only two sites (Sites 83 and 129) are vacant, comprising less than one-half percent (approximately 0.18 acre) of the approximately 419 acres. The remaining 376 candidate housing sites are developed with residential and non-residential land uses (e.g., commercial and industrial) to varying degrees.

The City has identified the Pacific Ocean, the Bolsa Chica Ecological Reserve, the Huntington Beach Mesa, Huntington Beach Municipal Pier, and the line of low, steep bluffs on the south side of the Pacific Coast Highway between Seapoint Street as scenic vistas. "Scenic vistas" are defined as views or vistas generally panoramic in nature and identified as viewpoints or vistas (e.g., formal turn-outs along roadways) or within planning documents. Implementation of the HEU would not, in and of itself, construct new housing in the City, but would facilitate housing development by providing programs and policies that would promote housing for all persons. **Exhibit 1-1: Candidate Housing Sites** depicts the locations of the

candidate housing sites and indicates none are located near a City-identified scenic vista. Additionally, although accessory dwelling units (ADUs) could be located near a scenic vista, they would be relatively small-scale structures and would be located on an already improved site. Further, future housing development would be required to adhere to all applicable City policies, HBZSO regulations, and City Design Guidelines to further minimize potential impacts to scenic vistas. Namely, future housing development would be subject to compliance with General Plan Policies LU-7.A – LU.7C, and LU-8.B – LU-8.D, which would ensure that future housing developments provide well-designed corridors, community subareas, buildings, streets, and public spaces that contribute to a strong sense of place. This would f also benefit the historic character and architectural diversity in Downtown Huntington Beach, which would be protected and enhanced in new developments. Considering these requirements, the Project would not have a substantial adverse effect on a scenic vista.

GENERAL PLAN POLICIES

See the General Plan Land Use Element for complete policy text.

- Policy LU-7.A
 Policy LU-8.B
- Policy LU-7.BPolicy LU-8.C
- Policy LU-7.C
 Policy LU-8.D

Impact AES-2 Would the Project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

GPU PEIR (Volume II, page 4.1-9)

The GPU PEIR concluded a less than significant impact regarding damage to scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. As noted above, scenic resources identified within the planning area include aspects such as the Pacific Ocean, the Bolsa Chica Ecological Reserve, the Huntington Beach Municipal Pier, Huntington Beach Wetlands, Downtown landscaping features, Huntington Harbour, and parks including Huntington Beach Central Park. Despite the various scenic resources, the GPU PEIR concluded that development under the General Plan would be focused in areas that are currently underutilized or vacant, or areas targeted for such growth, and are generally located away from valued community resources. Further, compliance with General Plan policies would ensure neighborhoods and scenic resources are accessible to all residents, employees, and visitors by improving and maintaining trails and other user pathways and no impacts to a scenic highway would occur. Therefore, the GPU PEIR concluded that damage to scenic resources associated with the General Plan's buildout would be less than significant.

IMPACT ANALYSIS

There are no State-designated scenic highways located within the City, ¹ although the Pacific Coast Highway (State Route 1) is eligible for designation. Instead, Pacific Coast Highway is designated as Major Urban Scenic Corridor. Other Major Urban Scenic Corridors include a portion of Beach Boulevard and Warner Avenue. Minor Urban Scenic Corridors within the City include portions of Bolsa Chica Street,

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Caltrans. 2018. California State Scenic Highway System Map. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed March 2022).

Edinger Avenue, Magnolia Street, and Brookhurst Street. Exhibit 1-1: Candidate Housing Sites depicts the locations of the candidate housing sites and indicates, none of the 378 sites are near Pacific Coast Highway.² However, consistent with the GPU PEIR, some candidate housing sites are along/near locallydesignated scenic corridors. Additionally, as concluded in Section 5.2: Cultural Resources, some candidate housing sites could involve or be near a historic resource. Therefore, the Project could damage scenic resources within a locally-designated scenic corridor. However, future housing development would be required to adhere to General Plan Policies LU-7.A – LU-7C, and LU-8.B – LU-8.D, which would ensure that future individual development projects provide well-designed corridors, community subareas, buildings, streets, and public spaces that contribute to a strong sense of place. This would also benefit the historic character and architectural diversity in Downtown Huntington Beach, which would be protected and enhanced in new developments. The aesthetic integrity of existing scenic resources along locallydesignated scenic corridors would additionally be supported by GPU Policy CIRC-7.E, which requires that development projects adjacent to a designated scenic corridor include open spaces, plazas, gardens, and/or landscaping that enhance the corridor and create a buffer between the building site and the roadway. Implementation of these applicable City policies would minimize impacts to scenic resources along locally-designated scenic corridors. Therefore, the GPU PEIR concluded that impacts to scenic resources within a State scenic highway would be less than significant.

GENERAL PLAN POLICIES

See the General Plan Land Use and Circulation Elements for complete policy text.

- Policy LU-7.A
- Policy LU-8.B
- Policy CIRC-7.E

- Policy LU-7.B
- Policy LU-8.C
- Policy LU-7.C
- Policy LU-8.D

Impact AES-3

Would the Project, in non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

GPU PEIR (Volume II, page 4.1-10)

The City is in a developed, urban landscape consisting of commercial, industrial, mixed-use, open space, and public use land use designations. The General Plan's updated Land Use Plan anticipated population growth and associated development due to changing demographics and revitalization needs in residential as well as commercial areas. However, growth envisioned under the General Plan was placed into three categories: Conserve, Preserve, and Transform. The GPU PEIR indicated that most of the substantial growth and development would occur within Transform-designated areas, which focuses any intensification of uses and an associated change in visual character in specific areas of the city. While growth would occur in areas outside of the Transform areas as buildings age and properties turnover and reinvestment occurs, the GPU PEIR concluded that growth is not expected to result in changes in intensity or density over existing conditions. Furthermore, the visual character and quality of the City would be

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² Ibid.

preserved through the application of various policies aimed at enhancing the distinct aesthetic identity of existing and future areas and districts via the General Plan updated Land Use Element. Therefore, the GPU PEIR concluded that the degradation of the City's existing visual character or quality would be less than significant. Furthermore, the GPU PEIR concluded that future development under the GPU would not conflict with applicable zoning or other regulations governing scenic quality.

IMPACT ANALYSIS

Various candidate housing sites are located within the Holly-Seacliff Specific Plan, North Huntington Center Specific Plan, Ellis-Goldenwest Specific Plan, and Beach and Edinger Corridors Specific Plan areas and contain mixed-use, industrial, low-density and medium-density residential, and public land uses. The visual character of these areas is generally defined by urbanized development consisting of commercial, residential, and mixed-used properties, recreational parkland, and open space. The Project would facilitate redevelopment of these areas with multi-family residential uses, which would intensify uses and result in changes to visual character in specific areas. The Project would intensify and alter but not degrade the areas' visual character. Other candidate housing sites inventory are located within the Transform areas of the City, which consist of research and technology and industrial land uses. As discussed above, the GPU PEIR accounted for development and redevelopment to occur within the Transform areas. The Project would involve rezoning properties within these areas to residential or adding residential overlays, which would not conflict with applicable zoning and other regulations governing scenic quality.

Additionally, future housing development would be required to adhere to General Plan policies that govern scenic quality (Policies LU-7.A – LU.7C, and LU-8.B – LU-8.D). Future housing development would also be subject to compliance with adopted citywide Design Guidelines, which would ensure that future individual development projects provide well-designed corridors, community subareas, buildings, streets, and public spaces that contribute to a strong sense of place. Compliance with these applicable City policies and City Design Guidelines would minimize impacts to scenic quality. No conflict with regulations governing scenic quality is anticipated.

GENERAL PLAN POLICIES

See the General Plan Land Use Element for complete policy text.

- Policy LU-7.A
- Policy LU-8.B
- Policy LU-7.B
- Policy LU-8.C
- Policy LU-7.C
- Policy LU-8.D

Impact AES-4 Would the Project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

GPU PEIR (Volume II, page 4.1-12)

The GPU PEIR concluded a less than significant impact would occur regarding creation of a new source of substantial of light and glare. The City is a developed, urban landscape consisting of a distribution of residential, commercial, industrial, mixed-use, open space, and public use land use designations. Existing development in the City created a varied source of nighttime lighting such as security, roadway, and high-profile buildings. The GPU PEIR estimated that General Plan buildout could result in the development of

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additional 7,228 dwelling units and approximately 5,384,920 square feet of nonresidential uses by 2040. As a result, the GPU PEIR noted that additional glare impacts could result from highly reflective building materials. The GPU PEIR also anticipated that the largest effect on nighttime lighting would occur in areas of commercial or industrial development because these areas contain lighted signs, nighttime security lighting, and are often co-located with multi-family residential uses that have their own nighttime lighting requirements.

The GPU PEIR concluded that all future development under the General Plan would be required to comply with existing regulations related to light and glare including provisions in the HBZSO to address light spillage and glare on adjacent properties, energy efficiency and requirements for the use of "dark sky" lighting in areas adjacent to environmentally sensitive habitat areas. Furthermore, the GPU PEIR noted that future development would be located within the existing 15 specific plans, which would implement established development standards, design guidelines, and mitigation measures that address light and glare. Therefore, the GPU PEIR concluded that compliance with applicable state and local regulatory framework, and General Plan policies would ensure that impacts concerning the creation of a new source of substantial of light and glare would be less than significant.

IMPACT ANALYSIS

Implementation of the HEU would not, in and of itself, construct new housing in the City, but would facilitate housing development by providing programs and policies that would promote housing for all persons. However, consistent with the GPU PEIR assumptions, development of the candidate housing sites would add new sources of light and glare. Future housing development anticipated by the Project would result in 11,743 additional dwelling units theoretically by 2029. Although the Project would generate more dwelling units in the City, future housing development would occur on fully improved properties where light and glare are presently being generated.

Future housing development would be required to comply with all applicable state and local requirements related to light and glare including, the California Green Building Standards Code (Part 11 of Title 24), and HBZSO design guidelines that address light and spillage and glare on adjacent properties. Additionally, future housing development within the identified specific plans would adhere to the establish established development standards, design guidelines and existing mitigation measures that address light and glare within those specific plans.

Considering these requirements, the Project would not have a substantial adverse effect from the creation of a new source of substantial light or glare, which would adversely affect day or nighttime views in the area. Therefore, the Project would result in a less than significant impact concerning light and glare.

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GENERAL PLAN POLICIES

There are no applicable General Plan policies.

8.3 Agriculture and Forestry Resources

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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

- Impact 8.2-1: Would the project 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?
- Impact 8.2-2: Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?
- Impact 8.2-3: Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- Impact 8.2-4: Would the project result in the loss of forest land or conversion of forest land to non-forest use?
- Impact 8.2-5: Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

GPU PEIR (Volume II, Section 6.5, page 6-5)

The GPU PEIR concluded that the GPU's potential impacts concerning farmlands and forestry resources would be less than significant. As presented in the GPU PEIR, except for nurseries, there are no other agricultural uses within the City. As such, no farmland would be at risk for conversion and no conflicts would exist with any Williamson Act contracts due to implementation of the GPU.

IMPACT ANALYSIS

As concluded in the GPU PEIR, there are no designated farmlands, agricultural or forestland uses, lands zoned for agriculture (or Williamson Act Contract) or timberland/forestry uses in the City. Therefore, consistent with the GPU PEIR's findings, the Project would not result in impacts to agricultural or forestland.

GENERAL PLAN POLICIES

There are no applicable General Plan policies.

8.4 Biological Resources

- Impact 8.3-1 Would the Project 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?
- Impact 8.3-2 Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?
- Impact 8.3-3 Would the project have a substantial adverse effect on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

GPU PEIR (Volume II, page 4.3-8)

The GPU PEIR indicated that potential impacts to special-status plant and animal species, riparian habitat, and wetlands would be less than significant. As discussed in the GPU PEIR, the General Plan does not propose any changes that would directly convert existing open space areas containing native vegetation and/or habitat for special-status species, riparian habitat, or wetlands to developed uses. Although, the GPU PEIR stated that the General Plan does have the potential to indirectly impact habitat for special-status species, riparian habitat, and wetlands by increasing environmental pollutants, promoting habitat fragmentation, and introducing invasive species. The GPU PEIR noted that development would be required to adhere to General Plan Policies ERC-1.F, ERC-3.D, ERC-6.A, ERC-6.B, ERC-6.D, ERC-7.A - ERC-7.E, ERC-8.C and ERC-10.A and Mitigation Measure 4.3-1, which requires that future developments conduct a nesting bird survey in all habitats within 250 feet of the construction area during the nesting bird season to further reduce the impacts. In addition, Mitigation Measure 4.3-2, which requires a wetland delineation to be conducted on vacant parcels prior to construction and development (as determined necessary by the City), would reduce impacts to protected wetlands. The GPU PEIR ultimately concluded that impacts to sensitive species, habitats, and wetlands would be less than significant with mitigation incorporated.

IMPACT ANALYSIS

Except for the two vacant candidate housing sites (Sites 83 and 129), all other candidate housing sites are developed/occupied by structures and do not contain special status species, riparian habitats or other sensitive communities, or wetlands. The candidate housing sites are also largely surrounded by urban development. Additionally, the two vacant candidate housing sites were previously highly disturbed and also void of such resources. However, as concluded in the GPU PEIR, future housing development could indirectly impact special-status species habitats, riparian habitats or other sensitive communities, or wetlands, by increasing environmental pollutants, promoting fragmentation, and introducing invasive species. Future development would be required to adhere to General Plan Policies ERC-6.D, ERC-7.A, ERC-7.B, ERC-7.E, and ERC-8.C, which would identify and protect habitat areas and connections, protect habitat resources in wetlands, and protect coastal habitat resources. Following compliance with General Plan policies, the Project's potential indirect impacts to special-status species habitats, riparian habitats or

other sensitive communities, and wetlands would be reduced to less than significant with implementation of Mitigation Measures 4.3-1 and 4.3-2, if applicable, which would be determined on a project by project basis. See also **Section 5.7: Hydrology and Water Quality**.

GENERAL PLAN POLICIES

- Policy ERC-6.D
- Policy ERC-7.E
- Policy ERC-7.A
- Policy ERC-8.C
- Policy ERC-7.B

Impact 8.3-4

Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

GPU PEIR (Volume II, page 4.3-14)

The GPU PEIR indicated that there would be a less than significant impact to existing wildlife corridors in the City. As discussed in the GPU PEIR, the General Plan does not propose any changes that would directly convert existing open space areas containing wildlife connections, corridors, and habitat into developed uses. Although, the GPU PEIR concluded future development under the General Plan could potentially result in the indirect loss or degradation of wildlife corridors through increased light and noise pollution, introduction of invasive species, habitat fragmentation, and increased urban runoff. The GPU PEIR also concluded that adherence to General Plan Policies ERC-6.A through ERC-6.D would ensure that wildlife corridors would be preserved and enhanced.

IMPACT ANALYSIS

Except vacant candidate housing sites Nos. 83 and 129 all candidate housing sites are developed/occupied by structures and do not serve as wildlife corridors. Therefore, future housing development would not directly convert existing open space areas containing wildlife connections or corridors into developed uses. Additionally, the Project is not anticipated to result in corridor/habitat fragmentation, as the candidate housing sites are largely surrounded by urban development. However, as concluded in the GPU PEIR, future development could result in indirect loss/degradation of wildlife corridors through increased light and noise pollution, introduction of invasive species, and increased urban runoff. As concluded in the GPU PEIR, adherence to General Plan Policies ERC-6.A through ERC-6.E would ensure that wildlife corridors would be preserved and enhanced. Following compliance with General Plan policies, the Project's potential indirect impacts to wildlife corridors would be reduced to less than significant. See also Section 5.7.

GENERAL PLAN POLICIES

- Policy ERC-6.A
- Policy ERC-6.B
- Policy ERC-6.C

- Policy ERC-6.D
- Policy ERC-6.E

Impact 8.3-5 Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

GPU PEIR (Volume II, page 4.3-7)

The GPU PEIR indicated that there would be no impact to local policies protecting biological resources. As discussed in the GPU PEIR, the City has adopted two local policies to protect biological resources: the Local Coastal Program and Huntington Beach Municipal Code (HBMC) Chapter 13.50, Regulation of Trees. The GPU PEIR concluded that all future development would be required to comply with the Local Coastal Program (where located in the California Coastal Zone) and HBMC. Therefore, the GPU PEIR concluded that no impacts related to conflicts with a local policy or ordinance protecting biological resources t would occur from implementation of the General Plan.

IMPACT ANALYSIS

None of the candidate housing sites are located in the California Coastal Zone, and therefore would not be subject to Local Coastal Program policies. All future housing development would be subject to compliance with HBMC Chapter 13.50 to protect the City's trees. Therefore, no impacts related to conflicts with any local policies or ordinances protecting biological resources would occur from implementation of the Project.

GENERAL PLAN POLICIES

See Impacts 8.3-1 through 8.3-4 for biological resources-related policies.

Impact 8.3-6 Would the project conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?

GPU PEIR (Volume II, page 4.3-7)

The GPU PEIR indicated that the City is not located within an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or any other approved local, regional, or state habitat conservation plan. Therefore, the GPU PEIR concluded that no impact would occur related to conflicts with any provisions adopted HCP, NCCP or any other approved habitat conservation plan from implementation of the GPU.

IMPACT ANALYSIS

As previously stated, the City is not located within an adopted HCP, NCCP or any other approved local, regional, or state habitat conservation plan. Therefore, the Project no impact would occur related to conflicts with any provisions adopted HCP, NCCP or any other approved habitat conservation plan from implementation of the Project.

GENERAL PLAN POLICIES

There are no applicable General Plan policies.

8.5 Mineral Resources

Impact 8.4-1: Would the project 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?

Impact 8.4-2: Would the project 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?

GPU PEIR (Volume II, page 4.5-17)

As discussed in the GPU PEIR, the State Mining and Geology Board generalized aggregate resource classification map for the Orange County-Temescal Valley and adjacent production-consumption regions identifies the Mineral Resource Zone (MRZ) classifications for land located within the City. Based on this mapping, most of the City is designated as MRZ-1 or MRZ-3. The MRZ-1 classification indicates that adequate information is available to determine the absence of significant construction deposits (i.e., sand and gravel), while the MRZ-3 classification indicates that the significance of mineral resources could not be evaluated from available data. In addition, a small area of land generally located along the uplifted mesa north of Talbert Avenue, west of Beach Boulevard, and east of the community of Huntington Harbor is designated MRZ-2, which indicate that adequate information is available to indicate that significant construction aggregate deposits are present; see General Plan Figure ERC-5, Mineral Resource Zones. Although this area is designated MRZ-2, the GPU PEIR noted that no active mining occurs at these sites because new uses have been introduced to this area.

In addition to the potential for the GPU to impact sand and gravel mineral deposits, the GPU PEIR also evaluated potential impacts to oil resources in the City, which has been the site of oil extraction for nearly 100 years. The GPU PEIR noted that while oil wells are scattered throughout the City, implementation of the GPU would not result in land use changes that would deter oil extraction.

The GPU PEIR ultimately concluded that development associated with the GPU would not result in the direct or indirect loss of availability of a known or locally important mineral resource, including sand, gravel, peat, or oil. The GPU PEIR also concluded that implementation of the GPU would not result in a loss of mineral resources not already anticipated, and would have a less than significant impact on mineral resources.

IMPACT ANALYSIS

Because of its association with rocks, petroleum/oil is included among "mineral resources" and is frequently called mineral fuel. The Project includes candidate housing Sites 199, 200, 237, 281, 291, 300, 322 and 325 which are located within the Oil Production Overlay District Subdistrict (O1 Subdistrict) established by HBMC Chapter 220: Oil Production Overlay District. The O District provides areas to accommodate only oil operations with no drilling. The O1 Subdistrict provides areas where petroleum/oil drilling is allowed, subject to a conditional use permit (CUP). HBMC Chapter 220 specifies that no development shall occur on land subject to the Oil Production Overlay District unless it is in accord with a reuse plan for the disposition or treatment of any existing or proposed oil wells or oil operations with the district that has been approved in writing by the oil operator or lessee and approved by the City in accord with HBMC Chapter 220.10.

The City may approve the plan only if open space has been reserved around the oil operation site to allow for all existing and future equipment which could reasonably be expected to be used on the site including any setbacks from new development required by the Fire Chief, access from the public street to all oil operation sites, screening of oil facilities and soundproofing/fire protection as required by the Fire Chief.

No additional candidate housing sites occur in the O or O1 District or within the Mineral Resource Zone (MRZ)-2-designated areas where mineral resources are known to be present. Most of the candidate housing sites are within MRZ-1-designated areas where adequate information is available to determine the absence of significant mineral resources. Additionally, no mineral resources of known value to the region and the residents of the state occur within the City. Finally, the General Plan does not identify any available locally-important mineral resources. Therefore, following compliance with HBMC requirements, future development facilitated by the Project would result in a less than significant impact to mineral resources.

GENERAL PLAN POLICIES

There are no applicable General Plan policies.

8.6 Wildfire

Impact 8.5-2: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?
- b) Due to the slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?
- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?
- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

GPU PEIR (Volume II, page 4.7-12)

The GPU PEIR concluded that the planning area does not face substantial risks due to wildfire, since it is fully urbanized and surrounded by other urbanized communities. The GPU PEIR notes that the City is not located within at-risk areas designated as Fire Hazard Severity Zones, but that General Plan implementation could lead to an increase in development that could be at risk of potential urban fires. Compliance with General Plan Policies HAZ-4.A and HAZ-4.B, which include provisions for new development to be designed to include adequate fire and emergency vehicle access and that existing buildings are maintained to minimize fire risks, would be required. The GPU PEIR ultimately concluded that compliance with federal, state, and local laws and regulations, supported by implementation of the

General Plan policies, would ensure that impacts to the public and environment related to risk of hazards due to urban fires would be less than significant.

IMPACT ANALYSIS

As noted above, the GPU PEIR does not identify the City as being located in a Fire Hazard Severity Zone. Similarly, CAL Fire identifies the City within a Non-Fire Hazard Severity Zone. Additionally, none of the candidate housing sites are located in or near state responsibility areas or lands classified as very high fire hazard severity zones.³ The Huntington Beach Emergency Management and Homeland Security (EMHS) office is responsible for organizing the emergency preparedness activities in the planning area, often in coordination with neighboring cities, the Orange County Sheriff's Department, and state and federal agencies. The Huntington Beach Emergency Operations Plan and Hazard Mitigation Plan directs the municipal government's emergency preparation, response, and recovery activities. In addition, training for residents and employees within the planning area continues through the Community Emergency Response Team (CERT) Program.

An efficient roadway and circulation system is vital for the evacuation of residents and the mobility of fire suppression, emergency response, and law enforcement vehicles. Because the City is not in a wildfire risk area, the Project would not exacerbate wildfire risks or expose residents to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Future development facilitated by the Project would generate additional traffic and result in new residences requiring evacuation in the event of an emergency.

Future projects subject to rezoning and within overlay zones would be required to comply with existing federal, State, and local laws and regulations, supported by implementation of General Plan Policy HAZ-4.A, which requires that all new construction be compliant with City Specification #401 for fire access and other emergency response personnel, to minimize potential risks associated with urban fires. Therefore, compliance with applicable policies and regulations would ensure that impacts to the public and environment due to interference with emergency response or evacuation plans would be less than significant.

Furthermore, because the Project does not propose development, it is not anticipated that the Project would expose people or structures to significant risks, as a result of runoff, post-fire slope instability, or drainage changes. Future development projects would be subject to the appropriate measures to minimize slope instability during construction, runoff, post-fire instability or drainage changes, on a site-by-site basis through the implementation of structural or non-structural Best Management Practices (BMPs). Therefore, as concluded in the GPU PEIR, compliance with federal, state, and local laws and regulations, supported by implementation of General Plan Policy HAZ-4.A, would ensure that impacts to the public and environment related to risk of hazards due to urban fires would be less than significant.

GENERAL PLAN POLICIES

Policy HAZ-4.A

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³ CAL FIRE. 2022. FHSZ Viewer. https://egis.fire.ca.gov/FHSZ/ (accessed March 2022).

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