

Chapter 5

Other CEQA Considerations

5.1 Introduction

Chapter 3 Environmental Analyses identifies the significant environmental effects of the proposed project, as well as mitigation measures proposed to avoid or minimize such impacts, and Chapter 4 Analysis of Alternatives addresses alternatives to the proposed project. The analysis presented below delineates the significant environmental effects that cannot be avoided if the proposed project is implemented; significant irreversible environmental changes that would result from implementation of the proposed project; growth-inducing impacts of the proposed project; potential urban decay effects caused by economic competition created by the project; and mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.

5.2 Significant and Unavoidable Impacts

Based on the detailed analysis provided in Sections 3.1 through 3.14, and as summarized in Table ES-5 in the Executive Summary of this Draft EIR, the proposed project would result in a total of six significant and unavoidable impacts of which four would occur during construction (short-term throughout the 2.25 to 2.5 years of construction), two would occur specific to the operation of the project, including one impact (i.e., tsunami hazard) that would continue at the project site (although with implementation of mitigation measure the impacts would be reduced) due to natural uncertainties of such an event occurring in the future. The significant and unavoidable impacts are as follows:

Construction (short-term):

Air Quality AQ-1. During construction, the proposed project would violate an ambient air quality standard or contribute substantially to an existing or projected air quality violation (NO_x and CO).

Cultural Resources CUL-1. Construction of the proposed project would cause a substantial adverse change in the significance of a historical resource.

Noise NOI-2. Construction of the proposed project could expose sensitive receptors to or generation of excessive groundborne vibration or groundborne noise levels.

Noise NOI-4. Construction of the proposed project would cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project and in excess of the City's standards.

Operation (long-term):

Hydrology and Water Quality HWQ-5. Although the project site currently includes a risk associated with inundation by seiche, tsunami, mudflow, or sea level rise, implementation of the proposed project could expose additional people and structures to this risk.

Noise NOI-3. Implementation of the proposed project would cause a substantial permanent increase in ambient noise levels in the project vicinity (i.e., Torrance Circle/Boulevard between Catalina Avenue and the project site) above levels existing without the project and in excess of the City's standards.

No feasible or additional feasible mitigation measures are available that would avoid all of the potential impacts or reduce all impacts to less than significant levels. Therefore, potential impacts to these resource areas are considered significant and unavoidable and a Statement of Overriding Considerations, which identifies the specific overriding economic, legal, social, technological, or other benefits of the project that outweigh the s unavoidable adverse environmental effects identified in the EIR, would need to be considered by the decision-makers (PRC Section 21081(b); 14 California Code of Regulations [CCR] Section 15093).

5.3 Effects Found Not to Be Significant

The Notice of Preparation/Initial Study (NOP/IS), Appendix A of this the Draft EIR, determined that several impacts were not found to be significant within the resource areas of Aesthetics (specific to scenic resources), Agricultural and Forest Resources, Biological Resources (specific to habitat or natural communities conservation plans), Cultural Resources (specific to potential to encounter human remains), Geology/Soils (specific to landslide hazard), Hazards and Hazardous Materials (specific to handling hazardous material and being located near a school or airport), Hydrology and Water Quality (specific to groundwater extraction), Land Use and Planning (specific to habitat or conservation plans), Mineral Resources, Noise (specific to being located near an airport), Population and Housing, Public Services (specific to schools or other public facilities), and Traffic and Transportation (specific to affecting air traffic). Please refer to the NOP/IS in Appendix A of the Draft EIR for detailed explanations as to why these effects were not found to be significant.

5.4 Significant Irreversible Environmental Effects

5.4.1 Analysis of Irreversible Changes

Implementation of the proposed project would require the use of nonrenewable resources, such as fossil fuels, and nonrenewable construction materials. The proposed project involves demolition of approximately 207,402 square feet of existing buildings (which includes demolition of all buildings/structures with the exception of Kincaid's and the restroom facility at the Seaside Lagoon, which equals approximately 12,479 square feet), demolition of the existing Pier Parking Structure (approximately 495,000 square feet), and construction of up to 511,460 square feet of new buildings for a total of 523,939 square feet of development (304,058 square feet of net new development), two new parking structures, public recreation enhancements, new roadway connections and upgrades to utilities and other infrastructure. Resources that are committed irreversibly and irretrievably are those that would be used by a project on a long-term or permanent basis. Resources committed to this proposed project

include the use of fossil fuels, and nonrenewable construction materials such as rock, concrete, gravel, and soils.

As addressed in detail in Section 5.4.2 below, fossil fuels and energy would be consumed during construction and operation activities. Fossil fuels in the form of diesel oil and gasoline would be used for construction equipment and vehicles. During operations, diesel oil and gasoline would be used by vehicles coming into the project site. Electrical energy and natural gas would be consumed during construction and operation. Use of these energy resources would be irretrievable and irreversible.

Nonrecoverable materials and energy would be used during construction and operation activities, but the amounts needed would be accommodated by existing supplies. Although the increase in the amount of materials and energy used would be limited, they would nevertheless be unavailable for other uses. Section 5.4.2 below addresses energy use and energy conservation.

The resources utilized for the proposed project would be permanently committed to the project and therefore be considered irreversible.

5.4.2 Energy Conservation

5.4.2.1 Introduction

Public Resources Code Section 21100(b)(3) states that an EIR shall include “mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.” Similarly, CEQA Guidelines Section 15126.4(a)(1)(C) states that “Energy conservation measures, as well as other appropriate mitigation measures, shall be discussed when relevant.”

The physical environmental impacts associated with the generation of electricity have been accounted for in Draft EIR Sections 3.2 Air Quality, 3.6 Greenhouse Gas Emissions and 3.14 Utilities. Even with application of all feasible mitigation, the proposed project would result in temporary significant unavoidable air quality impacts during construction because it would exceed the South Coast Air Quality Management District’s (SCAQMD) daily significance threshold for nitrogen oxides (NO_x) and carbon monoxide (CO). The proposed project would result in less than significant impacts relative to greenhouse gas emissions and utilities. CEQA only requires mitigation measures for impacts that have been determined to be significant (CEQA Guidelines Sections 15041(a) and 15126.4(a)(3); Public Resources Code Sections 21002). Mitigation measures disclosed in Section 3.2 (Air Quality) include MM AQ-1 (“Fleet Modernization for Construction Equipment) and MM AQ-2 (Use of Low-VOC Coatings and Paints”).

The following information is also provided about the proposed project’s energy consumption and energy efficiency measures.

5.4.2.2 Energy Demand

Short-term energy demand would result from construction of the proposed project. This would include energy demand from worker and vendor vehicle trips and construction equipment usage. Long-term energy demand would result from operation of the proposed

project. This would include energy demand from vehicle trips, electricity and natural gas usage, and water and wastewater conveyance. This section quantifies the energy needs of these activities.

Additional regulatory efficiency requirements are discussed in the individual resource sections in Chapter 3 Environmental Analyses. Discussion of not constructing the project and the size of the project is included in the alternatives analysis in Chapter 4 Analysis of Alternatives.

5.4.2.2.1 Construction Activities

Worker, vendor and haul trips have been estimated based on the construction schedule assumptions used in the preparation of the project air quality and climate change analysis. The construction schedule for the proposed project was provided by the project applicant with an anticipated start date in early 2017. Vendor trips are based on construction vendor trip data provided by either CalEEMod defaults or project specific information (specifically for waterside) (See Draft EIR Section 3.13 Traffic and Transportation and Appendix L1). Fuel consumption from worker and vendor trips are estimated by converting the total carbon dioxide (CO₂) emissions from each construction phase to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. Construction is estimated to occur in the years 2017-2018 based on the construction phasing schedule. The conversion factor for gasoline is 8.91 kilograms per metric ton CO₂ per gallon (Kg/MT CO₂/gal) and the conversion factor for diesel is 10.15 kg/MT CO₂/gal.¹ Worker vehicles are assumed to be gasoline and vendor/hauling vehicles are assumed to be diesel.

Calculations for total worker, vendor, and hauler fuel consumption are provided in Table 5-1 (Construction Worker Gasoline Demand), Table 5-2 (Construction Vendor Diesel Demand), and Table 5-3 (Construction Hauler Diesel Demand). Total gasoline consumption from worker trips is estimated to be 142,462 gallons and estimated total diesel consumption, including from construction-related truck hauls and deliveries and from construction equipment, is estimated at 994,641 gallons.

¹ U.S. Energy Information Administration Voluntary Reporting of Greenhouse Gases Program, located here: <http://www.eia.gov/oiaf/1605/coefficients.html>

Table 5-1: Construction Worker Gasoline Demand

Phase	Trips	Trip Length (miles)	CO ₂ Off-Road Equipment (MT)	Kg/CO ₂ /Gal	Gallons
North Site Construction	711	14.7	584.68	8.91	65,620
South Site Construction	954	14.7	642.60	8.91	72,122
Basin 3 Bulkhead Repair	36	14.7	1.47	8.91	165
Small Boat Launch	66	14.7	6.12	8.91	687
Sports Fishing Pier	70	14.7	15.44	8.91	1,733
Seaside Lagoon	88	14.7	5.47	8.91	614
Basin 3 Marina Replacement	114	14.7	4.96	8.91	557
Horseshoe Pier	34	14.7	3.46	8.91	388
Pedestrian Bridge	54	14.7	5.14	8.91	577
Total			1,269	8.91	142,462

Notes:

Trips are round trips

Abbreviations

Kg.- Kilogram

CO₂ - Metric tons of carbon dioxide

Gal - gallons

Table 5-2: Construction Vendor Diesel Demand

Phase	Trips	Trip Length (miles)	CO ₂ Off-Road Equipment (MT)	Kg/CO ₂ /Gal	Gallons
North Site Construction	220	6.9	396.07	10.15	39,022
South Site Construction	314	6.9	409.54	10.15	40,348
Basin 3 Bulkhead Repair	2	6.9	0.18	10.15	17
Small Boat Launch	562	24.0	572.85	10.15	16,439
Sports Fishing Pier	30	6.9	19.39	10.15	1,911
Seaside Lagoon	298	20	8.67	10.15	854
Basin 3 Marina Replacement	62	10	8.82	10.15	869
Horseshoe Pier	92	10	28.23	10.15	2,781
Pedestrian Bridge	168	12	51.19	10.15	5,043
Total			1,495	10.15	147,286

Notes:

Trips are round trips

Abbreviations

MT - metric tons

Kg.- Kilogram

CO₂ - Metric tons of carbon dioxide

Gal - gallons

Table 5-3: Construction Haul Diesel Demand

Phase	Trips	Trip Length (miles)	CO ₂ Off-Road Equipment (MT)	Kg/CO ₂ /Gal	Gallons
North Site Construction	6,461	20	216.79	10.15	21,359
South Site Construction	8,643	20	290.00	10.15	28,572
Basin 3 Bulkhead Repair	64	20	2.15	10.15	212
Small Boat Launch	480	12	9.81	10.15	967
Sports Fishing Pier	80	12	1.64	10.15	161
Seaside Lagoon	476	12	9.73	10.15	959
Basin 3 Marina Replacement	75	12	1.55	10.15	153
Horseshoe Pier	120	10.7	8.62	10.15	849
Pedestrian Bridge	0	20	0	10.15	0
Total			540	10.15	53,230

Notes:

Trips are one way trips

Abbreviations

MT – metric tons

Kg.– Kilogram

CO₂ – Metric tons of carbon dioxide

Gal - gallons

Diesel fuel consumption by construction equipment has been estimated based on the construction schedule and equipment usage assumptions used in the preparation of the project air quality and climate change analysis. The construction schedule and equipment assumptions are based on applicant provided information. Fuel usage is estimated by converting the total CO₂ emissions from each construction phase using the conversion factor for CO₂ to gallons of diesel. The conversion factor for diesel is 10.15 kg/MT CO₂/gal. Construction equipment is assumed to be diesel.

Calculations for total construction equipment diesel consumption are provided in Table 5-4 (Construction Equipment Diesel Demand). Total diesel consumption after all construction phases is estimated to be 794,126 gallons.

Table 5-4: Construction Equipment Diesel Demand

Phase	Pieces of Equipment per Phase	CO ₂ Off-Road Equipment (MT)	Kg/CO ₂ /Gal	Gallons
North Site Construction	73	3,309.32	10.15	326,042
South Site Construction	76	3,755.24	10.15	369,974
Basin 3 Bulkhead Repair	13	52.33	10.15	5,155
Small Boat Launch	37	160.02	10.15	15,765
Sports Fishing Pier	27	178.47	10.15	17,584
Seaside Lagoon	63	225.68	10.15	22,235
Basin 3 Marina Replacement	38	74.78	10.15	7,367
Horseshoe Pier	14	150.57	10.15	14,835
Pedestrian Bridge	19	153.96	10.15	15,169
Total		8,060	10.15	794,126

Notes:

Abbreviations

MT – metric tons

Kg.– Kilogram

CO₂ – Metric tons of carbon dioxide

Gal - gallons

5.4.2.2 Operational Activities

Employees, vendors, and occupants of the proposed project will result in the generation of vehicle trips to and from the project site. This will result in the use of gasoline and diesel fuels over the life of the proposed project. Vehicle trips from the proposed project were estimated in the project traffic study (Appendix L1 of this Draft EIR). Similar to construction worker and vendor trips, fuel consumption from worker and vendor trips are estimated by converting the total CO₂ emissions from each construction phase to gallons using the conversion factors for CO₂ to gallons of gasoline or diesel. Based on the annual fleet mix provided in the model, 89.5 percent of the fleet range from light-duty to medium-duty vehicles and motorcycles and are assumed to run on gasoline. The remaining 10.5 percent of vehicles represent medium-heavy duty to heavy-duty vehicles and buses/RVs and are assumed to run on diesel.

Calculations for annual mobile source fuel consumption are provided in Table 5-5 (Mobile Source Gasoline Demand) and Table 5-6 (Mobile Source Diesel Demand). The tables show the existing, proposed, as well as the net increase in gasoline and diesel demand based on implementation of the proposed project. Mobile sources from the proposed project will require a net increase in approximately 219,529 gallons of gasoline per year and 22,401 gallons of diesel per year beginning in 2019. Although, as vehicular fuel efficiency standards increase, these annual rates of fuel consumption will decrease.

Table 5-5: Mobile Source Gasoline Demand

Phase	Total Vehicle Miles Traveled	CO ₂ Off-Road Equipment (MT)	Kg/CO ₂ /Gal	Gallons
Existing Operations	19,972,771	9,758.39	8.91	1,095,218
Proposed Operations	26,708,566	11,714.39	8.91	1,314,747
Net Increase	6,735,795	1,956.00	8.91	219,529

Notes:

Abbreviations

MT – metric tons

Kg.– Kilogram

CO₂ – Metric tons of carbon dioxide

Gal - gallons

Table 5-6: Mobile Source Diesel Demand

Phase	Total Vehicle Miles Traveled	CO ₂ Off-Road Equipment (MT)	Kg/CO ₂ /Gal	Gallons
Existing Operations	2,321,633	1,134.31	10.15	111,755
Proposed Operations	3,104,601	1,361.68	10.15	134,156
Net Increase	782,968	227.37	10.15	22,401

Notes:

Abbreviations

MT – metric tons

Kg.– Kilogram

CO₂ – Metric tons of carbon dioxide

Gal - gallons

Electricity and Natural Gas Use

Electricity and natural gas would be required to provide energy to the proposed project for indoor and outdoor lighting, building cooling and heating, building appliances, and water heating. Energy demand was estimated using CalEEMod default calculations. As presented in Section 3.14 Utilities, the annual increase in direct project electricity demand would be approximately 9,140,038 kilowatt hours per year (KWhr/yr)², which is an increase of 3,183,829 kWhr per year over existing conditions. Direct project natural gas demand would

² As described in Section 3.14 Utilities, the estimated electricity use assumes compliance with 2013 efficiency standards.

be approximately 45,943,735 thousand British Thermal Units per year (kBTU/yr)³, which is an increase of 17,971,443 kBtu over existing conditions (see also Draft EIR Section 3.14 Utilities). As discussed below, indirect electricity demand for water and wastewater treatment and conveyance would require approximately 565,042 kWh/yr of electricity

Water and Wastewater

Electricity would indirectly be required to supply, treat, and convey water to the project site and treat wastewater generated at the project site. The estimated average daily water demand for the proposed project, as determined on the Water Supply Assessment (WSA) prepared for the proposed project by CalWater, is estimated at 250,588 gallons per day (gpd)⁴ or 91.5 million gallons per year (mgy). Factoring the existing water use at the project site (122,386 gpd), the net increase in average daily water use under the proposed project would be approximately 128,202 gpd or 46.8 mgy.

Wastewater discharges were estimated using the Sanitation Districts of Los Angeles County (LACSD) generation factors. The estimated amount of wastewater generation associated with the proposed project is 188,509 gpd or 44.7 mgy.⁵ When accounting for the replacement of older outdated plumbing fixtures and fittings with new efficient plumbing, the estimated amount of wastewater generation associated with the proposed project would result in an increase in wastewater generation of approximately 64,744 gpd as compared to existing conditions. As shown in Table 5-7, an increase of 45,100 kilowatts per year (kWh/yr) in indirect electricity demand is expected to occur from wastewater generation.

Electricity demand for water-related energy is estimated using the energy intensity provided in the 2006 report prepared for the CEC, *Refining Estimates of Water-Related Energy Use in California* (CEC, 2006). As shown in Table 5-7, in increase of 519,942 kWh/yr in indirect electricity demand is expected to occur for water supply. Combined, indirect electricity demand for water and wastewater treatment and conveyance would require approximately 565,042 kWh/yr of electricity.

³ As described in Section 3.14 Utilities, the estimated natural gas use assumes compliance with 2013 efficiency standards.

⁴ As described in Section 3.14 Utilities, the estimated water demand accounts for water conservation mandates, such as use of water conserving plumbing fixtures and fittings.

⁵ As described in Section 3.14 Utilities, the estimated wastewater generation accounts for water conservation mandates, such as use of water conserving plumbing fixtures and fittings.

Table 5-7: Indirect Electricity Demand Associated with the Water Cycle

Phase	Estimated Project Demand/ Generation Increase over Existing Conditions (mgy)	Supply (kWh/mg)	Treatment (kWh/mg)	Distribution (kWh/mg)	Total (kWh/yr)
Water	46.8	9,727	111	1,272	519,942
Wastewater	23.6	-	1,911	-	45,100
Total Indirect Electricity Demand					565,042

Notes:

mgy – million gallons per year
 kWh/mg – kilowatt per million gallon
 kWh/yr – kilowatt per year

Energy Demand by Source

Increases in short- and long-term energy demand under the proposed project, assuming standard regulations that include energy efficiency and water conservation requirements, is summarized in Table 5-8. Construction-related demand has been amortized over a 30-year period to compare to annual operational emissions.

Table 5-8: Annual Increased Energy Demand By Source

Activity	Gasoline (gal/yr)	Diesel (gal/yr)	Natural Gas (kBTU/yr)	Electricity (kWh/yr)
Construction (Amortized over 30 Years)				
Worker	4,749	–	–	–
Vendor	–	4,910	–	–
Hauler	–	1,774	–	–
Equipment	–	26,471	–	–
Operations				
Mobile	219,529	22,401	–	–
Natural Gas	–	–	17,971,443	–
Direct Electricity	–	–	–	3,183,829
Indirect Electricity	–	–	–	519,942
Total	224,278	55,556	17,971,443	3,703,771

Notes:

Trips are round trips

Abbreviations

gal/yr – gallon per year
 kBTU/yr – thousand British Thermal Units per year
 kWh/yr – thousand kilowatts per year

5.4.2.2.3 Energy Conservation

While the proposed project would increase the amount of development located at the project site, it is located in an urban area with existing infrastructure to serve the project and it would replace older, less water and energy efficient buildings with new construction. The new buildings would implement current state water and energy efficiency and regulations pursuant to the California Building Code (CBC) that would reduce long-term energy demand. These requirements would reduce wasteful, inefficient, and unnecessary consumption of energy over the long-term. The following addresses energy demand reductions in compliance with these requirements.

Energy Efficiency

The California Energy Code is codified in Title 24, California Code of Regulations, Part 6 and was adopted by the City of Redondo Beach (RBMC Section 9-1.00). Part 6 provides energy efficiency standards for residential and non-residential development with the express goal of “reducing of wasteful, uneconomic, inefficient or unnecessary consumption of energy.” (PRC Section 25402). The California Building Standards Commission reviews and updates the Code every three years. (Health & Safety Code Section 18949.6.

Electricity would be provided to the proposed project by Southern California Edison (SCE).

According to the Southern California Edison 2013 Power Content Label, the energy resources used to generate the electricity it provides consists of 34 percent from unspecified sources (reflects electrical transactions on an open market that are not traceable to a specific generation source), 28 percent from natural gas, 22 percent from renewables (including wind, solar, geothermal, biomass and waste and small hydroelectric), six percent from coal, six percent from nuclear sources, and four percent from large hydroelectric. In 2012, approximately 100,365 million kWh was used within the SCE planning area for the entire state of California and in 2013, this decreased to approximately 99,242 million kWh (CEC, 2015).

The CEC forecasts that consumption will reach approximately 116,637 million kWh in the year 2022 (CEC, 2012). The proposed project is estimated to require 3,703,771 kWh of electricity per year. In response for a request for service, SCE provided a letter stating that SCE would serve the above subject project’s electrical requirements per the California Public Utilities Commission and Federal Energy Regulatory Commission tariffs (SCE, 2015a). The existing electricity regulatory requirements and planning requirements set by the California Public Utilities Commission and the CEC are constantly assessing population growth, electricity demand, and reliability. As discussed on the CEC’s website, the CEC is tasked with conducting assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand and prices. The CEC uses these assessments and forecasts to develop energy policies, that conserve resources, protect the environment, ensure energy reliability, enhance the state’s economy, and protect public health and safety (PRC Section 25301(a)).⁶

⁶ CEC 2015 Integrated Energy Policy Report available online at: http://www.energy.ca.gov/2015_energypolicy/index.html

Renewable Energy Sources

As discussed in Section 3.6 Greenhouse Gases, California's Renewables Portfolio Standard (RPS), established in 2002 under SB 1078, and accelerated by SB 107 [2006] and SB 2 [2011], obligates investor-owned utilities, energy service providers and community choice aggregators to procure 33 percent of their electricity from renewable energy sources by 2020. In 2014 SCE (electricity provider for Redondo Beach) produced 23.5 percent of its electricity from renewable sources (SCE, 2015b).

Water Efficiency

The California Plumbing Code is codified in Title 24, California Code of Regulations, Part 5 and has been adopted by the City (RBMC Section 9-5.01). Part 5, Chapter 4 contains provisions requiring the installation of low flow fixtures and toilets. Existing development will also be required to reduce its wastewater generation and water use by retrofitting existing structures with water efficient fixtures. (Senate Bill 407 [2009], Civil Code Sections 1101.1 et seq). Additionally, Part 5 Sections 5.303.2 & 5.303.4 provide for a minimum 20 percent reduction in water demand and wastewater discharges, which would decrease indoor water demand and wastewater discharges. This would result in a concurrent reduction in energy demand to supply, treat, and convey water and wastewater. Water demand calculations included assume a 20 percent reduction to account for efficiency and conservation required. (such as CALGreen requirements.)

The potable water supply for the proposed project would be delivered by the Hermosa-Redondo District of California Water Service Company (CalWater). The Hermosa-Redondo District uses groundwater, imported surface water, and recycled supplies. According to CalWater's Urban Water Management Plan (UWMP)⁷, water demand in the Hermosa-Redondo District is anticipated to increase from 12,382 acre feet per year (AFY) in 2010 to 14,778 AFY in 2040. The water supply available was 12,516 AFY in 2010 and is projected to be 14,967 AFY in 2040.

In the WSA prepared for the proposed project (Appendix M1), CalWater determines that for the next 20 years (2015–2035), the Hermosa-Redondo District will have adequate water supplies to meet projected demands associated with the proposed project and those of all existing customers and other anticipated future customers for normal, single dry year and multiple dry year conditions. Therefore, there is sufficient water supply to serve the proposed project during normal and dry years and additional supply will not be required.

⁷ The 2010 Urban Water Management Plan is incorporated by reference and available at: http://www.water.ca.gov/urbanwatermanagement/2010uwmps/CA%20Water%20Service%20Co%20-%20Hermosa%20Redondo%20District/_HR_UWMP_2010.pdf. The proposed project is located within the geographic boundaries of the UWMP, which provides Water Supply System Description, Water Supply System Demands, Water Supply System Supplies, Water Supply Reliability and Water Shortage Contingency Plan (i.e. planning for drought conditions), Demand Management Measures, and a discussion of Climate Change related to water supply. The Appendices to the UWMP are available at: <http://www.water.ca.gov/urbanwatermanagement/2010uwmps/CA%20Water%20Service%20Co%20-%20Hermosa%20Redondo%20District/>. A hard copy of the UWMP is available for public review at: City of Redondo Beach, 415 Diamond Street, Redondo Beach, CA 90277.

Transportation Fuel Efficiency

The Federal Government sets fuel efficiency standards for construction equipment. Tier 4 efficiency requirements are contained in 40 CFR Parts 1039, 1065, and 1068 (originally adopted in 69 Fed. Reg. 38958 [June 29, 2004], and were most recently updated in 2014 [79 Fed. Reg. 46356]). Similarly, the Federal Government sets national fuel efficiency standards for light duty vehicles, pursuant to the Corporate Average Fuel Economy (CAFE) standards, which were recently updated in 2010 (75 Fed. Reg. 25324 et seq. (May, 7, 2010)); see also Health & Safety Code, Sections 39002, 43000 et seq.). Similarly, federal fuel efficiency standards are anticipated to continue to increase between now and 2020 and beyond. Additionally, drivers are beginning to convert to electric or alternative fuel vehicles.

It is however legally infeasible for individual municipalities to adopt more stringent fuel efficiency standards. The Clean Air Act (42 U.S. C. Section 7543(a) states that “No state or any political subdivision therefore shall adopt or attempt to enforce any standard relating to the control of emissions from new motor vehicles or new motor vehicle engines subject to this part.”

The City of Redondo Beach is also a member of the Southern California Association of Governments (SCAG), which is charged with preparing a Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) pursuant to SB 375 (2008). SB 375 required the preparation of a SCS, as part of its regional transportation plan, designed to achieve certain goals for the reduction of greenhouse gas emissions from automobiles and light trucks in a region.

There are a total of 17 operating petroleum refineries in California (U.S. Energy Information Administration, 2015). Demand for gasoline is ultimately fulfilled by oil refineries in the region. Exxon Mobil operates a 750-acre refinery in Torrance, California. This facility processes an average of 155,000 barrels of crude oil per day and produces 1.8 million gallons of gasoline per year (Exxon Mobil, 2015).

Tesoro operates a 930-acre refinery in Los Angeles County near the L.A. Harbor. At full capacity, this facility can process up to 363,000 barrels of crude oil per day and distributes all grades of gasoline and ultra-low-sulfur diesel (Tesoro Corporation, 2015).

Construction and operation of the proposed project would require the use of approximately 224,278 gallons of gasoline and 55,556 gallons of diesel fuels per year. The 17 operable refineries in California have a capacity of approximately 2,000,000 barrels per stream day (U.S. Energy Information Administration, 2015). This rate represents the maximum number of barrels of input that the distillation facilities can process within a 24-hour period while running at full capacity with no allowance for down time. Regional gasoline and diesel sources will be sufficient to serve the construction and operational fuel needs of the proposed project. No additional capacity will be required.

Additionally, as discussed in Sections 3.6 Greenhouse Gases and 3.13 Traffic and Transportation of this Draft EIR, the proposed project would be a redevelopment project located within walking or bicycling distance to public transportation, as well as existing residential uses within the City. The proposed project would reduce region-wide vehicle miles traveled (VMT) by implementing infill development within walking distance to public transportation and by placing retail adjacent to existing residential uses.

Solid Waste

As addressed in Section 3.14, the City has enacted numerous waste reduction and recycling programs in order to comply with AB 939, which required every city in California to divert at least 50 percent of its annual waste by the year 2000 and be consistent with AB 341, which sets a 75 percent recycling goal for California by 2020. The City has enacted numerous programs to meet and exceed the mandated waste diversion and recycling requirements, including curbside recycling, multi-family centralized recycling and commercial recycling as well as school recycling programs, backyard and worm composting. The City currently achieves a 70 percent diversion rate.

As presented in Section 3.14 Utilities of this Draft EIR, the operation of the proposed project is expected to generate approximately 0.49 tons per day (tpd) of solid waste based on CalEEMod solid waste generation factors and factoring in the City's 70 percent diversion rate. This is a 0.32 tpd increase as compared to existing conditions. There is a remaining daily capacity of 26,986 tpd in landfills that may serve the project site, and thus there is adequate capacity at local landfills to accommodate solid waste generated by the proposed project.

5.4.2.2.4 Summary

As described above, the proposed project would be infill/redevelopment located within an area that has existing energy, water, and transportation infrastructure available to serve the proposed project. It would comply with regulations that address energy and water conservation, which would reduce long-term energy demand. As such, the energy demand for the proposed project would not be wasteful, inefficient, or unnecessary.

5.5 Growth-Inducing Impacts

As discussed below, the proposed project would not directly foster significant economic or population growth or the construction of new housing in the Redondo Beach and South Bay region. Although the proposed project would lead to the redevelopment of the existing Redondo Beach waterfront area, this would not stimulate significant population growth, remove obstacles to population growth, or necessitate the construction of new community facilities that would lead to additional growth in the surrounding area.

5.5.1 Direct Growth-Inducing Impacts

A project would directly induce growth if it would remove barriers to population growth (e.g., a change to a General Plan and Zoning Ordinance that allowed new residential development to occur) or if it would result economic growth that triggers an increase in population and housing through new housing construction and/or an influx of workers from outside the region. The proposed project involves the redevelopment of the Redondo Beach waterfront, which does not include any housing development. As described in greater detail in Chapter 2 Project Description, the development contemplated under the proposed project has been planned for in the City's Local Coastal Program.

The proposed project would create a number of new short- and long-term employment opportunities. During project construction, a number of design, engineering, and construction-related jobs would be created. This would be a temporary situation, lasting until project construction is completed. Short-term construction impacts would directly affect employment in the area. However, short-term employees would likely come from the existing large labor

pool within the South Bay and greater Los Angeles area as a whole, and would not result in new workers relocating to the area.

Currently, there are approximately 1,289 employees working within the project site. It is anticipated that a new net increase of approximately 1,438 employees (2,727 total employees) on the site would occur as a result of the proposed project. The increase in employment needs from operation of the proposed project is not expected to result in population in-migration or relocation because of the large size of the workforce that currently exists in the South Bay and Los Angeles region as a whole.⁸ Given the highly integrated nature of the Southern California economy and the prevalence of cross-county and intercommunity commuting by workers between their places of work and places of residence, it is unlikely that this increase in the number of workers would change their place of residence in response to the proposed Project, consequently, there would not be an increased need for new housing. Therefore, no significant increase in population and housing would be triggered by implementation of the proposed project. As a result, the proposed project would not result in a significant growth in population in the vicinity of the project site.

Therefore, because the proposed project (1) would not involve the development of housing, and (2) would not significantly affect the economy of the region such that an increase in population and housing would occur, and thus, the proposed project would not have a substantial direct growth-inducing impact.

5.5.2 Indirect Growth-Inducing Impacts

A project would indirectly induce growth if it would remove obstacles to population growth or trigger the construction of new community service facilities that could increase the capacity of infrastructure in an area that currently meets the demand (e.g., an increase in the capacity of a sewer treatment plant or the construction or widening of a roadway beyond that which is needed to meet existing demand).

The proposed project is located in an urbanized area and is on a site that is currently developed. As discussed in Section 3.14 Utilities of this Draft EIR, while the existing on-site infrastructure would be improved and upgraded as part of the proposed project, substantial off-site infrastructure improvements would not be required to serve/accommodate the proposed project. Further existing energy supplies and water supplies are available, and adequate wastewater treatment capacity exists to accommodate the proposed project.

Although the proposed project includes roadway improvements, specifically the new main street and Pacific Avenue Reconnection, the roadways would serve local traffic within an existing highly developed/urbanized area, and would not result in indirect growth-inducing impacts.

As discussed under direct growth inducing impacts above, the proposed project would provide new job opportunities; however, given the project site's location within a well-established urban community that has a large population base, existing housing stock, and established

⁸ In August of 2015, Los Angeles County had an unemployment rate of 7 percent. (<http://data.bls.gov/map/MapToolServlet>.) In 2014/2015, Los Angeles County had a population of 9.8 million. (<https://suburbanstats.org/population/california/how-many-people-live-in-los-angeles-county>)

infrastructure, it would not induce population growth in the area. Accordingly, negligible impacts to population, housing, and community services and infrastructure are anticipated. Since the proposed project would not involve development of housing and would not result in substantial direct increases in employment in the regional workforce, the proposed project would not have any significant effects on population growth that would tax existing facilities and require the construction of new facilities, the construction of which could have environmental effects.

5.6 Urban Decay

For this CEQA analysis, urban decay is defined as physical deterioration of properties or structures that is so prevalent, substantial, and lasting a significant period of time that it impairs the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community. Physical deterioration includes abnormally high business vacancies, abandoned buildings, boarded doors and windows, parked trucks and long-term unauthorized use of the properties and parking lots, extensive or offensive graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees and shrubbery, and uncontrolled weed growth or homeless encampments.

This assessment of the potential for urban decay is based on the *Market Study of the Proposed Waterfront Revitalization Project (2015)* prepared by AECOM for the proposed project (Appendix O of this Draft EIR). The market study defines the market area and evaluates the demand for the proposed waterfront development, specifically the retail dining entertainment (RDE), hotel, and office elements of the proposed project. This analysis assumes that if there would be sufficient market demand for the proposed services at the Redondo Beach waterfront and other similar waterfront areas, the establishments would be economically viable in the long term, and there is little to no potential for urban decay in neighboring areas.

5.6.1 Market Area and Project Overview

The market area is the geographical area a business or business center draws the majority of its customers. The boundaries are based on the shopping behaviors of residents, visitors, and employees. For the proposed project, the residential, employee, and tourist market area is described below:

- Residential Market – the primary market, defined as a 10-minute drive time, is the largest source of sales for a retail center. The secondary market area, which is a 10-30 minute drive time, captures the majority of spending anticipated from residents outside of the primary market area. The primary market area for the proposed project has 48,732 households in 2014 and is projected to have 49,713 households in 2019. Average household income in 2014 was \$117,228. The secondary market area has 162,550 households in 2014 and is projected to have 166,324 households in 2019. Average household income in 2014 was \$98,230 (AECOM, 2015).
- Employee Market – Regional and local employment growth provide a source of demand for retail, office, and hotel components of the proposed project. To estimate retail demand, a 5-minute drive time was evaluated at the primary source of non-resident employee spending at the proposed project. A secondary market area was also established that evaluates a 10-minute drive time to the proposed project. The primary market area had 7,121 employees in 2014 and is projected to have 7,590 employees in 2019. The

secondary market area had 43,142 employees in 2014 and is projected to have 46,000 employees in 2019 (AECOM, 2015). These estimates exclude people who live and work in the market area as they are included in the residential market area. To estimate office demand, the primary market area was defined as the City of Redondo Beach and the secondary market area is the larger South Bay (Manhattan Beach, Hermosa Beach, Redondo Beach, and inland areas of Hawthorne, Lawndale, Gardena, Torrance, Lomita, Palos Verdes, Rolling Hills, and Carson).

- **Tourist Market** – The health of the tourist market can affect the marketability of the proposed project. In 2013, there were approximately 28.5 million overnight visitors to Los Angeles region and this number is projected to increase to approximately 35 million overnight visitors by 2020. Los Angeles International Airport (LAX) had over 33 million passenger arrivals in 2013 and airport arrivals have increased 4 percent a year since 2010 (AECOM, 2015). For this evaluation, the primary tourist market area is Redondo Beach and the secondary market area is the South Bay. Visitors to these areas represent the available tourist market for the proposed project. Based on available overnight visitation data, it was estimated there were 313,000 visitors to Redondo Beach and 2.4 million overnight visitors in the South Bay in 2014. Redondo Beach had an inventory of 1,383 hotel rooms in 2014 and is projected to have 1,514 hotel rooms in 2019, with an 80 percent occupancy rate. The South Bay had 9,667 hotel rooms in 2014 and is projected to have 10,583 hotel rooms in 2019, with an 80 percent occupancy rate (AECOM, 2015).

5.6.1.1 Demand for Retail, Dining, and Entertainment (RDE) Uses

There is a high level of competition in the retail market for the South Bay. The proposed project is positioned to compete with other RDE developments and indirectly with other traditional regional shopping centers. The existing waterfront developments at Hermosa Beach Pier, Manhattan Beach Pier, and Riviera Village, would appeal to a similar customer. The proposed Runway development in Playa Vista and The Point development in El Segundo represent the most direct competitive shopping center development for the proposed project. Two regional shopping centers in the project area, Del Amo Mall and South Bay Galleria, would indirectly compete with the proposed project. The regional shopping centers typically rely on department store anchors, RDE shopping environments rely on a mix of activities and experiences, with less retail and more food and beverage, to drive business to the center (AECOM, 2015). While RDE projects are generally smaller than regional/super regional malls, they typically outperform such malls on nearly every other measure if well located, developed, and operated. (AECOM, 2015). Table 5-9 summarizes the total estimated market demand for retail, dining, and entertainment uses at the proposed project. This is sufficient to support the proposed RDE program of approximately 305,000 square feet of net new development.

Table 5-9: Market Demand for RDE at Proposed Project

	Year 1 Opening	Year 5 Stabilized Operations
Food and Beverage (Dining)	\$90 Million	\$102 Million
Retail/Entertainment	\$84 Million	\$94 Million
Total Demand	\$174 Million	\$196 Million

Source: AECOM 2015, Figures 23, 24, and 25

Based on the level of demand, rent survey, and historic performance of comparable properties, implied sales for the proposed project have been determined based on a range of possible scenarios. Using the total demand estimate as a guide, retail, dining, and entertainment sales at the proposed project are estimated to total \$196 million during stabilized operations (Year 5).

Table 5-10 presents the estimated sales per square foot by RDE component at stabilized operations (Year 5).

Table 5-10: Estimated Sales Per Square Foot for RDE at Proposed Project in Year 5

	Sales Per Square Foot
Food and Beverage (Dining)	\$900
Retail/Entertainment	\$800
Entertainment	\$325
Total	\$780

Source: AECOM 2015, Figure 26

The proposed Project includes a specialty cinema. While the competitive market appears to have a significant number of traditional cinemas, the proposed specialty theater would be unique to the area. Given the anticipated capture of entertainment spending and market demographics for the proposed project, the proposed luxury cinema concept appears to have an available market.

5.6.1.2 Boutique Hotel

The proposed boutique hotel would operate within the context of the South Bay tourist submarket. Local visitation trends and competitive hotel properties within the submarket would affect demand and financial performance at the proposed project. Redondo Beach has an estimated inventory of 1,383 rooms in 14 hotel or motel properties, representing 16 percent of the South Bay hotel room inventory. In comparison to the hotels in the surrounding cities of Manhattan Beach and Hermosa Beach, the room supply in Redondo Beach is the largest among the beach cities. Approximately 67 percent of the hotels in Redondo Beach are classified in the upper-priced market segment, compared to the South Bay's inventory of upper-priced rooms – approximately 48 percent.

A survey of local hotels was created in order to compare the historic performance of select properties within the Redondo Beach submarket relative to the larger submarket and market areas. Based on an assessment of the submarket area, two existing properties (Shade Hotel in Manhattan Beach and Beach House in Hermosa Beach) are directly comparable to the boutique hotel envisioned at the proposed project. There are five additional properties currently under construction or in planning stages (The Redondo Beach Hotel, Shade Hotel in Redondo Beach, Provenance Hotel, Clash Hotel, and OTO Hotel in Hermosa Beach) with over 670 additional rooms that will be considered primary competition to the proposed project. Currently, the reporting properties in the local survey appear to be headed towards 2014 average daily rate (ADR) of \$203 with occupancy rates over 80 percent.

Boutique hotels typically command a higher ADR than other hotel properties, with a premium up to 20 to 30 percent above market pricing for competitive properties. Based on current pricing at the existing competitive properties (Shade and Beach House), the ADR at the proposed project might be well above the local reporting properties. However, to be conservative, it is assumed that the ADR for the hotel property would start at \$230 in 2014 dollars. Occupancy rates are assumed to be in line with the competitive hotel properties. For planning purposes, a target occupancy level in the opening year (Year 1) is projected at 65 percent and is anticipated to increase to 80 percent upon hotel stabilization (Year 5).

Table 5-11 summarizes the total estimated market demand for hotel use at the proposed project. This is sufficient to support the proposed hotel of approximately 120 rooms.

Table 5-11: Market Demand for Boutique Hotel at Proposed Project

	Year 1 Opening	Year 5 Stabilized Operations
Gross Revenues	\$10.5 Million	\$12.9 Million
ADR	\$240	\$240
Occupancy	65 percent	80 percent
Revenue per Available Room	\$160	\$190

Source: AECOM, 2015 - Figures 35 and 36

5.6.1.3 Creative Office

The proposed office uses would operate within the context of the South Bay commercial office market, part of the larger South Bay submarket. Within the South Bay, Redondo Beach provides approximately 2.5 million square feet, or 5 percent, of local supply. Two new-to-market properties serve as creative office benchmarks in the South Bay: Runway at Playa Vista and The Grand Kansas in El Segundo.

Demand for office space in Redondo Beach stems from regional employment growth. Employment growth and required office space are developed from fair share capture estimates of regional growth projections, in which 30 percent of total future employment growth is anticipated to require office space.

The proposed project is projected to capture a significant amount of estimated office demand in Redondo Beach due to:

- Projected growth in regional employment
- Lower vacancies in Redondo Beach compared to the South Bay and Los Angeles County
- Higher rents in Redondo Beach compared to the South Bay
- Lack of recently developed office property in Redondo Beach
- Lack of planned and proposed office space outside of this proposed project

- Oceanfront location
- Mixed-use development context

The market provides sufficient demand to support the proposed office program of approximately 45,000 square feet. Achievable office rent for the proposed project is estimated at \$3.50 full service gross per square foot.⁹ Table 5-12 summarizes the estimated gross rental revenues for creative office use at the proposed Project.

Table 5-12: Market Demand for Creative Office Space at Proposed Project

	Year 1 Opening	Year 5 Stabilized Operations
Occupancy	75 percent	95 percent
Gross Revenue	\$1.4 Million	\$1.8 Million
Revenue per Square Foot	\$31.50	\$39.50

Source: AECOM, 2015 - Figures 35 and 36

5.6.2 Potential of Urban Decay at the Project Site

The proposed project would replace existing structures at the waterfront site. As described in Chapter 2 Project Description of this Draft EIR, several existing structures, including the Sportfishing Pier, portions of Horseshoe Pier, the International Boardwalk, and the Pier Parking Structure are suffering from deterioration. The new development under the proposed project would rehabilitate or replace structures to stop further deterioration and eventual urban decay. Therefore, the proposed project would be a benefit to the area by reducing the potential for urban decay of existing facilities.

Urban decay could occur if the proposed project is not economically viable into the future and structures become vacant and deteriorate. As described in Section 5.6.1 above, the market study performed for the proposed project concludes that there is sufficient existing and future market demand for the proposed RDE, hotel, and office developments. Therefore, under opening and stabilized operations, it would be unlikely for businesses to close due to economic failure. As a result, there would not be any urban decay impact in the future at the proposed project site.

5.6.3 Potential For Urban Decay in Surrounding Areas

Urban decay could potentially result in other nearby areas if the proposed project detracts visitors from those areas and it results in store closures, vacancies, and deterioration. A review of RDE/Lifestyle developments within a 10-minute drive time of market area was conducted to examine market saturation. The results indicate that there appears to be an opportunity for the proposed project to fill a potential gap in the market for RDE offerings in the South Bay

⁹ Full Service Gross (FSG) - a rental rate that includes normal building standard services which are provided and paid by the landlord

(AECOM, 2015), and with features such as the market hall and luxury cinema and proximity to the harbor and beaches would provide unique features that would put the development in direct competition with other retail centers in the region. However, in particular, Hermosa Beach and Manhattan Beach offer a waterfront experience to visitors, similar to Redondo Beach. As described previously, for the residential market, the primary market for sales at retail centers is the area within a 10-minute drive time, and the secondary market is within a 10-30 minute drive time. Manhattan Beach is separated from the project site by the City of Hermosa Beach and would have some secondary market overlap. Hermosa Beach is located immediately the north of Redondo Beach and would have some primary market overlap.

Manhattan Beach benefits from a more dense market area because of its closer proximity and transportation linkages to Los Angeles and LAX. Manhattan Beach has become a very upscale area with high home values and a successful retail and commercial district. The proposed project at Redondo Beach is unlikely to detract visitors from Manhattan Beach, and would not result in any urban decay at Manhattan Beach. There would be no urban decay impact at Manhattan Beach as a result of the proposed project.

Hermosa Beach is the smallest of the three cities, and generally has a younger population, a greater proportion of renters, a smaller proportion of family households, and the smallest employment base. The city is still affluent with a median household income of \$101,655 from 2009 through 2013 relative to a median household income of \$61,094 in California over the same time period (U.S. Census Bureau, 2015). The city also attracts many tourists for the beach experience. Hermosa Beach is known for its nightlife entertainment offerings.

Similar to the existing Redondo Beach waterfront, some commercial areas of the Hermosa Beach waterfront have struggled with unattractive street frontages, difficult parking, sub-par tenanting, high turnover rates, and deteriorating structures (City of Hermosa Beach, 2014). The City of Hermosa Beach has identified strategies for economic development in the downtown waterfront area; however, it recognizes that it will take a combination of actions by public and private sectors before a real transformation can occur (City of Hermosa Beach, 2014). Since 2010, there has been a change in ownership and usage patterns in the downtown district and public investment in streetscapes that have provided momentum for revitalization of the area (Hermosa Beach, 2014). The current efforts for redevelopment in Hermosa Beach would help prevent urban decay in the area. Hermosa Beach benefits from spill-over residential demand from Manhattan Beach that is increasing home ownership and family representation. Hermosa Beach also gets more spillover from visitors at Manhattan Beach than does Redondo Beach.

The RDE for the proposed project at Redondo Beach includes a market hall, waterfront restaurants, and a luxury cinema that are unique to the market area. These main features would not be in direct competition with existing establishments at Hermosa Beach that offer more nightlife entertainment. Because of the affluence of city residents, attractive beach experience for tourists, the current efforts for revitalization, the spillover of residents and visitors from Manhattan Beach, and the unique RDE offerings at Redondo Beach relative to those offered at Hermosa Beach, it is unlikely that there would be urban decay at Hermosa Beach establishments as a result of the proposed project. Further, the market study has indicated that the proposed project would fill a gap in the market by providing a RDE development within the South Bay (AECOM, 2015), and therefore the proposed project is not expected to be in direct competition with surrounding retail centers and other waterfront development and would not attract sufficient market away from other developments such that urban decay would occur.

The market study for Redondo Beach identified a market demand for hotel rooms in the South Bay to be 1,407 rooms with a planned 674 rooms that includes proposed Hermosa Beach hotels, leaving a demand for 733 new hotel rooms. Because there continues to be unmet demand for hotel rooms, the boutique hotel at Redondo Beach would not detract from visitors at existing or proposed hotels in Hermosa Beach. As a result, there would be no urban decay based on hotel vacancies at Hermosa Beach.

5.6.4 Urban Decay Summary

As described above, the proposed project would remove existing structures that are currently suffering from age and deterioration with new construction. Further, the market study provided for the proposed project, determined that adequate market demand exists in the region to support the proposed project. Further, there is sufficient demand within the region to support both the proposed project as well as existing commercial and hotel development in the surrounding areas. Therefore, urban decay is not likely to occur as a result of the proposed project.