

DRAFT

INITIAL STUDY

**LOS CERRITOS WETLANDS RESTORATION
AND OIL CONSOLIDATION PROJECT**

CITY OF LONG BEACH, CALIFORNIA



Submitted to:

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1. INTRODUCTION

1.1 CEQA PROCESS

In accordance with the California Environmental Quality Act (CEQA) and its Guidelines, this Initial Study (IS) has been prepared for the proposed Los Cerritos Wetlands Restoration and Oil Consolidation Project (proposed project) located in the city of Long Beach. Consistent with State CEQA Guidelines Sections 15063(a) and 15063(a)(1), this IS determines whether the project, considering all phases of project planning, implementation, and operation, may have a significant effect on the environment. As such, and also consistent with State CEQA Guidelines Section 15063(c), this IS provides the lead agency with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) and the environmental issues to be addressed in the EIR.

As required by State CEQA Guidelines Section 15063(d), this IS includes a description of the project, including the location of the project; an identification of the environmental setting; and an identification of potential environmental effects. Because all effects identified as potentially significant will be analyzed in the EIR, this IS does not identify potential mitigation measures; instead, mitigation measures will be provided in the Draft EIR.

The City of Long Beach (City), as the principal public agency responsible for approving the Project, is the “lead agency” for the CEQA environmental review process. Implementation of this project would include approval of discretionary actions by the City; as such, the City Council is responsible for certification of the environmental documentation and for approval of the project.

1.2 CONTACT PERSON

Any questions regarding this IS, its assumptions, or conclusions should be referred to:

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2. PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The Los Cerritos Wetlands Restoration and Oil Consolidation Project (proposed project) would implement a comprehensive wetlands restoration project that will restore portions of a privately owned oil field in the City of Long Beach through creation of a wetlands mitigation bank, while allowing operation of the oil facilities to continue through relocation of operations and equipment to other parts of the project site. The project is proposed by Beach Oil Minerals Partners (BOMP).

The proposed project is located in the City of Long Beach, in Los Angeles County. **Figure 1** shows the regional location of the proposed project, and **Figure 2** shows a localized view of the project site. More specifically, the proposed project would be implemented on four properties: the Synergy Oil Field site, Pumpkin Patch site, Los Cerritos Wetlands Authority (LCWA) site, and City-owned property (City Property) located in the southeast portion of the City. The proposed project includes the development of specific oil facilities currently located on the Synergy Oil Field and City-owned properties on the LCWA site and the Pumpkin Patch site. The location of each site is described in more detail below.

Synergy Oil Field site: The Synergy Oil Field site consists of an approximately 154-acre property located at 6433 E. 2nd Street. The site is bound by the Pacific Coast Highway to the west, 2nd Street to the south, Studebaker Road to the east and the Los Cerritos Channel to the north.

Pumpkin Patch site: The Pumpkin Patch site consists of an approximately 5.5-acre property located at 6701 E. Pacific Coast Highway. The site is located adjacent to of commercial and office land uses which abut the southern boundary of the commercial retail area the “Marketplace.” The site is bound by the Pacific Coast Highway to the west, the San Gabriel River to the south, the commercial-retail uses at the Marketplace to the north, and the undeveloped land associated with the City-owned property to the east.

Los Cerritos Wetlands Authority site: The Los Cerritos Wetlands Authority (LCWA) site consists of an approximately 5-acre parcel located at the northeast corner of the 2nd Street and Studebaker Road intersection. The site is bound by 2nd Street to the south and Studebaker Road to the west, and is adjacent to buildings and facilities associated with industrial uses to the north and east.

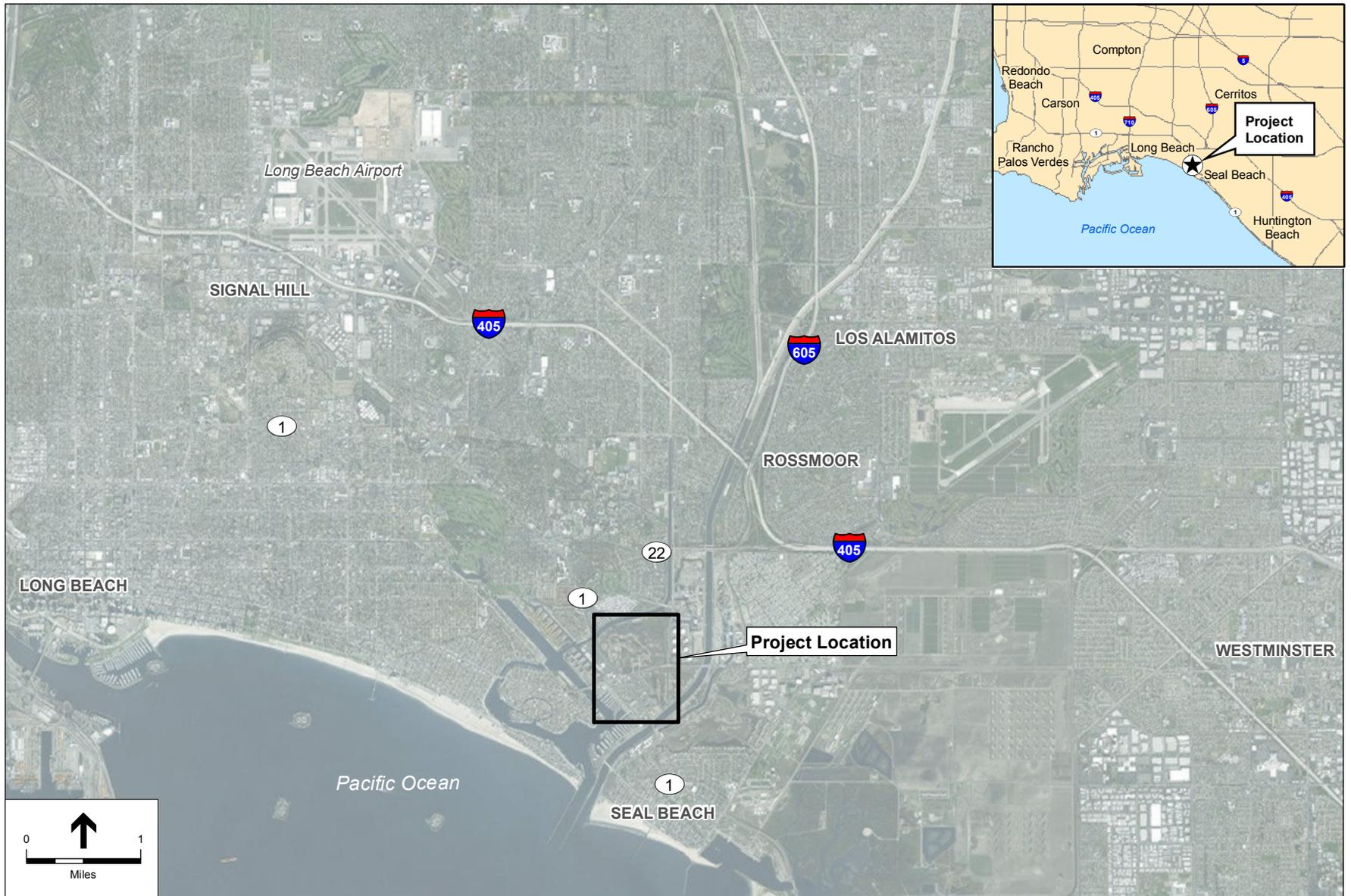
City Property site: The City Property site is an approximately 33-acre site located at 2nd Street and Shopkeeper Road. The site is bound by Shopkeeper Road to the west, 2nd Street to the north, undeveloped land to the east, and the San Gabriel River to the south.

The Assessor Parcel Numbers (APNs) of the project sites and each parcel’s approximate gross acreage are summarized in **Table 1**. **Figure 3** depicts the location of the properties that together make up the proposed project site.

Table 1. Project Site Characteristics

Gross Acres (approximate)	Assessor Parcel Numbers	Section/Township/Range
SYNERGY OIL FIELD SITE		
0.22	7237-017-010	Section 05, Township 12, Range 02 West
6.78	7237-017-011	Section 05, Township 12, Range 02 West
1.73	7237-017-012	Section 05, Township 12, Range 02 West
118.53	7237-0217-013	Section 05, Township 12, Range 02 West
11.05	7237-017-014	Section 05, Township 12, Range 02 West
11.29	7237-017-019	Section 05, Township 12, Range 02 West
0.284	7237-017-805	Section 05, Township 12, Range 02 West
1.388	7237-017-806	Section 05, Township 12, Range 02 West
0.003	7237-017-807	Section 05, Township 12, Range 02 West
0.478	7237-017-808	Section 05, Township 12, Range 02 West
0.015	7237-017-809	Section 05, Township 12, Range 02 West
Total Acres		
154 ¹		
PUMPKIN PATCH SITE		
0.003	7237-020-003	Section 05, Township 12, Range 02 West
4.28	7237-010-043	Section 05, Township 12, Range 02 West
0.722	7237-020-044	Section 05, Township 12, Range 02 West
0.535	7237-020-045	Section 05, Township 12, Range 02 West
Total Acres		
5.5		
CITY PROPERTY SITE		
0.006	7237-020-003	Section 05, Township 12, Range 02 West
0.186	7237-020-041	Section 05, Township 12, Range 02 West
0.005	7237-020-044	Section 05, Township 12, Range 02 West
0.005	7237-020-045	Section 05, Township 12, Range 02 West
0.008	7237-020-051	Section 05, Township 12, Range 02 West
0.103	7237-020-901	Section 05, Township 12, Range 02 West
29.756	7237-020-903	Section 05, Township 12, Range 02 West
1.411	7237-020-904	Section 05, Township 12, Range 02 West
Total Acres		
33 ¹		
LOS CERRITOS WETLANDS AUTHORITY SITE		
0.923	7237-019-007	Section 05, Township 12, Range 02 West
4.07	7237-019-809	Section 05, Township 12, Range 02 West
Total Acres		
5.0		
TOTAL ACRES		
193.783		

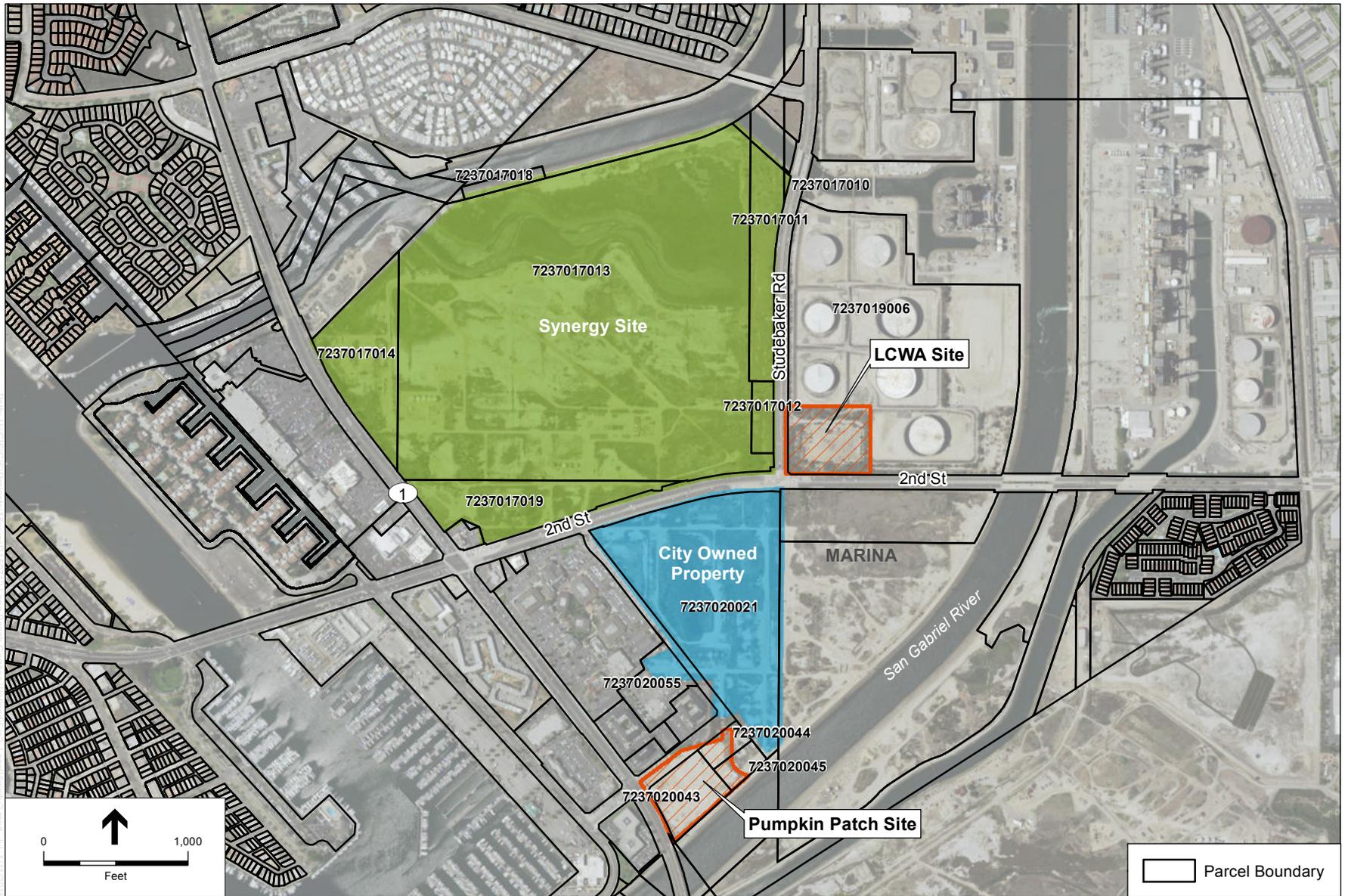
¹ Approximate acreages are rounded up for the Total Acres shown.



SOURCE: ESRI

Long Beach Cerritos Wetland. 150712

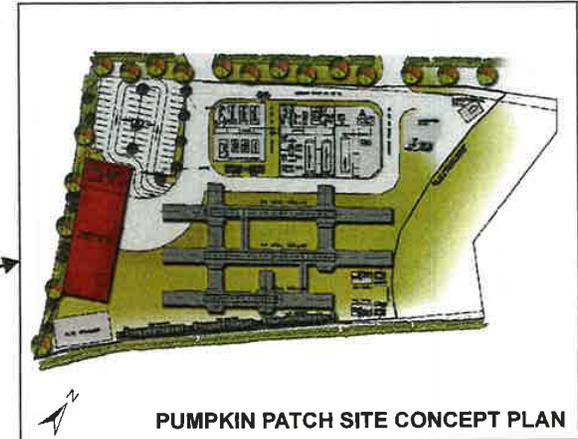
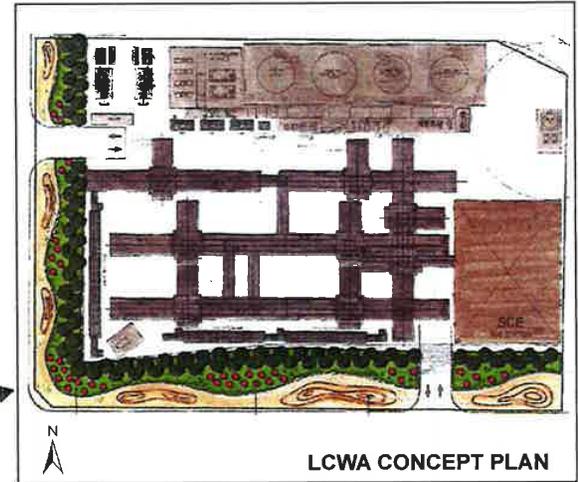
Figure 1
Regional Location



SOURCE: ESRI

Long Beach Cerritos Wetland. 150712

Figure 2
Local Vicinity



- Synergy Oil Field
- City 33 Acres
- Habitat Restoration Areas
- Steamshovel Slough
- Studebaker Trail
- Concept Plan Location

Exhibit A

2.2 ENVIRONMENTAL SETTING

The project site, which includes the four properties described previously, totals approximately 193 acres, consisting of developed and disturbed vacant land. The southern portion of the Synergy Oil Field site is currently being operated as an active oil field. Because of the geologic conditions at the Synergy Oil Field site (i.e., the Newport- Inglewood Fault traverses the site), the oil field is divided between two operating areas, one on each side of the fault. The Pumpkin Patch site is currently used seasonally for the sale of pumpkins and Christmas trees. There is also an existing oil well on the site. The LCWA site is currently undeveloped and is used on a temporary lease basis for equipment storage and staging. The City Property site currently contains approximately 18 oil wells that are currently being operated by BOMP.

The surrounding land uses include open space, commercial, and residential land uses. Additionally, the Synergy site is located south of the Los Cerritos Channel and contains the Steamshovel Slough. The Steamshovel Slough is a remnant of the larger historic Los Cerritos tidal marsh complex. The slough is approximately 650 meters long and is considered a historic or “ancient” marsh in that this remnant marsh has not been modified through dredging or filling. Steamshovel Slough is a fully tidal marsh with an open connection to the Los Cerritos Channel, which flows to the Alamitos Bay, that supports a range of wetland vegetation. The Slough is also home to a wide variety of wildlife, as most of the local special-status species, including California least terns, forage within the Los Cerritos Wetlands. The Pumpkin Patch Site and City Property are located west of the San Gabriel River. Pacific Coast Highway and the Marina Pacifica Mall are located to the west of the site.

The Department of Conservation’s Farmland Mapping and Monitoring Program has designated the sites as urban built-up land. The project site is not encumbered by a Williamson Act land use contract. The proposed project does not contain forest land as defined in Public Resources Code Section 12220(g). Additionally, the project does not contain a preserve area (Habitat Conservation Plan area or Natural Communities Conservation Plan or other preserve areas designated by the City).

The project site is located within two flood zones A and X as defined by the Federal Emergency Management Agency (FEMA). Zone A is defined as an area where no based flood elevations are determined, and is located along the Streamshovel Slough area. The rest of the project sites are located within Zone X, which is defined as an area of 0.2 percent annual chance flood; and an area of 1 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile.

Some areas of the project site, primarily located on the Synergy Oil Field site, are identified as a wetland area on the National Wetland Inventory. The Newport/Inglewood fault, which is an active fault, traverses the Synergy Oil field site through the western portion of the Synergy Oil Field site and bisects the City-owned property in a northwest-southeast direction; therefore, there is a state-designated Alquist-Priolo Earthquake Fault Zone on the project site.

The proposed project would be served by the City of Long Beach Police Department for law enforcement and public safety. The project is located in the eastern division of the Police

Department, and the closest police substation is presently located at 3800 E. Willow Street, west of Lakewood Boulevard. The Long Beach Fire Department would provide fire protection and emergency medical and rescue services for the proposed project. The nearest fire station to the project sites is Fire Station 21, located approximately 0.25 miles west of the project site at 225 Marina Drive.

The project sites are located approximately 3.25 miles southeast of the Long Beach Municipal Airport. The proposed project is not located within an Airport Influence Area.

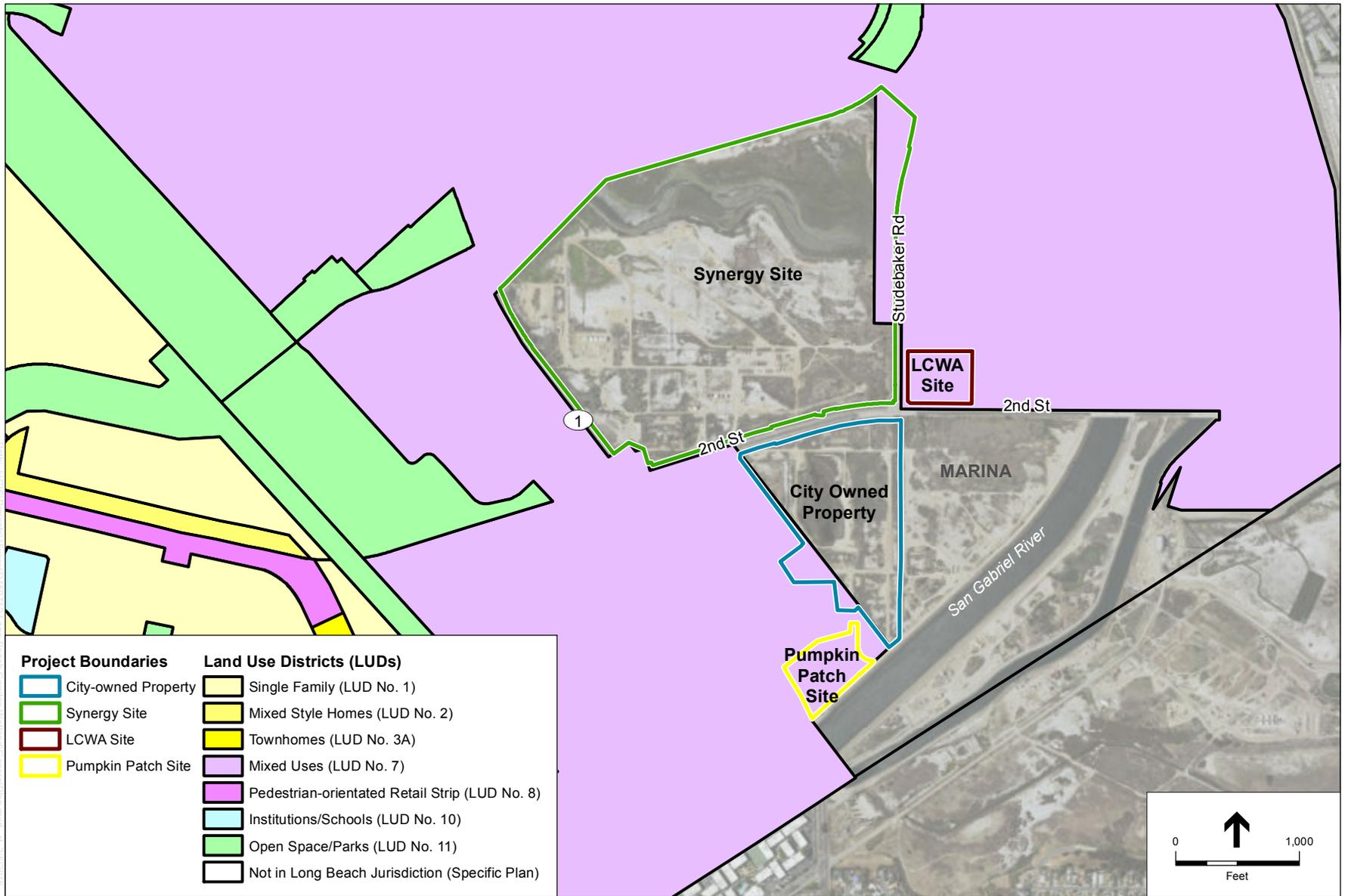
According to the City of Long Beach General Plan Land Use Designations map and shown in **Figure 4**, the Synergy Oil Field site and City Property site are not assigned a specific General Plan Land Use District (LUD); however, the Pumpkin Patch site and LCWA site are designated as LUD No. 7 Mixed Uses. As shown in **Figure 5**, the project site has a Zoning designation of PD-1 (SEADIP) Subareas (11a, 11b, 19, 25 and 33).

2.3 PROJECT DESCRIPTION

The proposed project would implement a proposed comprehensive wetlands restoration project that will restore a privately owned oil field in the City of Long Beach through creation of a wetlands mitigation bank. The proposed project would be implemented on four properties (Synergy Oil Field site, Pumpkin Patch site, Los Cerritos Wetlands Authority site, and City Property site) located in the southeast portion of the City. A summary of the project activities proposed at each of the sites is provided below, with additional detail provided in Section 2.3.1, below.

Synergy Oil Field site: The proposed project would establish a wetlands mitigation bank and public access trail on the northerly 78 acres of the approximately 154-acre Synergy Oil Field property (formerly known as the Bixby Oil Field) located at 6433 E. 2nd Street. This project would implement a wetlands restoration plan on the southerly approximately 72 acres of the Synergy Oil Field over time as the 35 existing oil wells are removed, and would construct public access improvements (including a parking lot on existing disturbed areas) and convert an existing building for use as a visitors' center on the remaining approximately 4 acres of the Synergy Oil Field.

Pumpkin Patch site: The proposed project would construct an approximately 5,200-square-foot, two-story office building 35 feet in height and an approximately 9,750 square feet of storage/warehouse 22 feet in height, and a 47-space parking area on 5.5 acres of the site. Additionally, a portion of the oil production activities currently being conducted at the Synergy Oil Field will be developed on the Pumpkin Patch site. The project proposes the development of three oil well cellars which will house up to a maximum of 50 wells (oil production and water injection), and construction of two tanks: a 3,000 barrel "wet oil" tank (30 feet in diameter and 24 feet high), and a 2,000-barrel "skim oil" tank (24 feet in diameter and 24 feet high). A drill rig, approximately 160 feet in height will be use on-site to initially drill the wells. A workover rig, approximately 120 feet in height will be brought onsite to re-drill wells as necessary. A 22-foot wall will be constructed on the perimeter of the site.



SOURCE: ESRI; City of Long Beach 2015

Long Beach Cerritos Wetland. 150712

Figure 4
General Plan



SOURCE: City of Long Beach, 2003

Long Beach Cerritos Wetland . 150712

Figure 5
Planned Development District 1: SEADIP

Los Cerritos Wetlands Authority (LCWA) site: The project proposes to develop up to a maximum of 70 wells (oil production and water injection) in three well cellars to be constructed on the 5-acre LCWA site. In addition to the wells, the project proposes the construction of two oil tanks (a 28,000 barrel sales oil tank 70 feet in diameter and 48 feet high and a 5,000-barrel injection water tank 35 feet high and 32 feet in diameter) and three natural-gas-powered turbines that will be used to generate power for the oil production operations on both the LCWA and Pumpkin Patch sites. A drill rig, approximately 160 feet in height, will be used on-site to initially drill the wells. A workover rig, approximately 120 feet in height will be brought on site to re-drill wells as necessary. A 15- to 20-foot-high ground fare will also be built on-site.

City Property site: The proposed project would, over time remove and abandon, 18 oil wells currently being operated by Synergy on the 33-acre City-owned property located at 2nd Street and Shopkeeper Road.

2.3.1 Project Characteristics

General Proposed Project Activities

Synergy Site

At the Synergy Oil Field site, the proposed project would implement a wetlands restoration plan over approximately 78 acres of the northerly portion of the approximately 154-acre Synergy Oil Field that will be established as a wetlands mitigation bank. In addition, a public access trail would be provided along the perimeter of this area. Establishment of the mitigation bank would be overseen by an Interagency Review Team, whose members include federal and state regulatory agencies, consisting of but not limited to the California Coastal Commission, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and U.S. Environmental Protection Agency (USEPA).

The proposed project would also implement over time, as described in the forthcoming removal and abandonment discussion, a restoration plan (separate from the 78-acre mitigation bank) on approximately 72 acres in the southerly portion of the Synergy site. As a result, over time, the proposed project would remove and remediate approximately 35 wells and associated oil production facilities and equipment from the southerly 72 acres of the Synergy site and restore the degraded wetlands surrounding these facilities. Further, the project would construct and implement public access improvements, including a parking lot on existing disturbed areas and conversion of an existing structure for use as a visitors' center.

Because all existing oil operations cannot be terminated at once, the project proponent has developed an oil well removal plan that describes the removal and abandonment process to be implemented over a period of 40 years. The time frame for commencing the removal of the 53 existing oil wells on both the Synergy and City-owned sites is tied to the completion of construction of the new office building, warehouse, and production facilities on the Pumpkin Patch site. Only after operations commence on the new production sites (i.e., Pumpkin Patch and LCWA sites) would it be feasible to begin the removal of the existing oil wells. The date the Certificate of Occupancy is issued by the City for the office and warehouse on the Pumpkin Patch

site is referred to as the “New Occupancy Date.”

On or before the 20-year anniversary of the “New Occupancy Date,” Synergy would remove and abandon 50 percent of the wells on the Synergy Oil Field site and the City Property site in accordance with the abandonment guidelines set forth by the Department of Conservation's Division of Oil, Gas, and Geothermal Resources (DOGGR). The balance of all remaining wells owned and operated by Synergy on the Synergy Oil Field site and City Property site would be removed on or before the 40-year anniversary from the “New Occupancy Date.” During this period, if any of Synergy’s oil wells operated on these two sites produce less than one full barrel of oil per day for a period of 18 consecutive months, Synergy would remove and abandon that well in accordance with the abandonment guidelines set forth by the DOGGR.

Pumpkin Patch Site

At this approximately 7-acre site, the proposed project would construct a two-story, 35-foot-high, 5,200-square-foot office building for use as Synergy offices, including a 47-space parking lot. In addition, a 22-foot-high 9,750-square-foot storage/warehouse for oil field equipment and materials would also be constructed.

The Pumpkin Patch site would include the drilling of up to 50 new wells (oil production and water injection) and construction and operation of oil production facilities, including a gas compression system, water treatment system, injection water system, and blowdown stack.² A drill rig, approximately 160 feet in height will be used on site to initially drill the new wells. It takes approximately two months to drill a new well. A workover rig, approximately 120 feet in height will be brought on site to re-drill wells as necessary. Oil production facilities would be to the 5 acres located closest to the PCH with the northeastern portion of the project site remaining as open space to protect and also provide a 100-foot buffer from the coastal wetland habitat area. A 22-foot-high perimeter screen wall and perimeter landscaping would also be provided. Access to the site would be provided via a new entrance from Studebaker Road.

In addition to these on-site facilities, a pipeline system is proposed to link the Pumpkin Patch and LCWA sites to transport oil between the two sites for storage or transport to off-site pipelines. The pipeline will be horizontally drilled and will be placed under 2nd Street and will traverse a small portion of the Bryant property (the oil field north of the City’s 33-acre oil field) and the City’s 33-acre oil field.

LCWA Site

At the 5-acre LCWA site, the proposed project would include installation of approximately 70 new wells (oil production and water injection) housed in three well cellars. In association with the wells, the site would provide production equipment, including an elevated piperack,³ a 28,000-barrel sales oil tank (70 feet in diameter and 48 feet high) which will be used to store oil that will be shipped to refineries for future sale, and a 5,000-barrel injection water tank (32 feet in

² A chimney or vertical stack that is used to vent pressure and prevent “loss of containment” of volatile liquids and gases.

³ Supports drillpipe, drill collars, or casing above the ground.

diameter and 35 feet high) to store water that will be injected in the ground to minimize the potential for subsidence, as well as a flare/fired equipment systems area.⁴ The site would also include three natural-gas-powered turbines to provide power for the oil operations on both the LCWA site and the Pumpkin Patch site. A drill rig, approximately 160 feet in height, will be used on-site to initially drill the new wells. It takes approximately 2 months to drill a new well. A workover rig, approximately 120 feet in height will be brought on site to re-drill wells as necessary. The site would be screened with a 22-foot-high perimeter screen wall. The project proposes to improve the existing entry off of Studebaker Road and construct a secondary entry off of 2nd Street.

Off-site infrastructure improvements will be constructed for both the Pumpkin Patch and LCWA sites. The oil produced will be transported to off-site refineries using two existing oil shipping pipelines, in the immediate vicinity of the project site. The project may use one or both of these pipelines to transport oil off-site. One line is referred to as the Plains All American Pipeline and the other is referred to as the Crimson Pipeline. Additionally, natural gas produced from the site will be transported via the active gas pipeline owned and operated by Southern California Gas Company. As the connection points to all three of these pipelines are off-site, the project will also construct oil and gas pipelines that run from the LCWA site and the Pumpkin Patch site to the connection point for each of these existing pipelines. Given the location of all three of these pipelines, it is anticipated that the pipeline connections will be constructed in existing rights-of-way or streets. The project applicant would be required to make street improvements to the areas where the connections points are developed in the right-of-way, including improvements such as sidewalk, curb, and gutter.

City Property Site

Activities on the City property site include the removal and abandonment of 18 oil wells over time, in accordance with the abandonment guidelines set forth by the DOGGR pursuant to the removal and abandonment schedule described previously. The activities would be consistent with the Surface Use Agreement.⁵

Restoration and Oil Production Development Activities

Phase 1 of the restoration plan to implement the wetlands mitigation bank includes grading in strategic locations within the 78-acre mitigation bank area (northern portion of the Synergy Oil Field site) to restore tidal exchange from the Steamshovel Slough; removal of targeted existing oil service roads; installation of a new berm and sheet pile wall to protect the existing oil facilities from potential sea-level rise; and planting of wetland vegetation. Once all plants have been installed, the mitigation bank restoration plan will undergo a 5-year maintenance, monitoring, and reporting period. As part of Phase 1, approximately 95 percent of the above-ground and obsolete pipelines will be removed as well as the tank farms from the southerly 72 acres of the Synergy site. During Phase 1, construction would begin on the Pumpkin Patch site and LCWA site to allow for the commencement of oil production activities and processing from both sites. Once

⁴ Gas combustion device systems.

⁵ Surface use agreements to define notice, location, and operational requirements on a site through a lease agreement.

construction is complete, the office and storage yard at the Synergy Oil Field site would be vacated and those functions would be relocated to the Pumpkin Patch site. This work is anticipated to take approximately 18 to 24 months from the initiation of construction activities.

A trail would start at the visitors' center parking lot and run parallel to Studebaker Road on the eastern perimeter edge of the restored wetlands area (Studebaker Trail). The trail would also be constructed during mitigation bank restoration activities, but would not be open to the public until completion of Phase 2.

Phase 2 of the project is anticipated to take approximately 12 to 18 months to implement and complete. Drilling of the 50 new wells on the Pumpkin Patch site and 70 wells on the LCWA site would continue. Both the Pumpkin Patch and LCWA sites would be operational.

A new parking lot would be constructed on the Synergy site in association with the rehabilitation of the existing office structure for use as a visitors' center. Once construction is completed, the visitors' center and the trail would be open for public use, with the potential for trail access to be docent-led only. This phase also proposes the commencement of habitat restoration activities on the southerly 72 acres of the Synergy Oil Field site, where pipeline and tank removal activities may have temporarily disturbed adjacent habitat. Abandoning the oil production activities at the Synergy Oil Field and City Property sites and establishing oil production at the two smaller sites (the Pumpkin Patch and LCWA sites) allows for the restoration of the natural wetland habitat at the Synergy Oil Field site, and provides the opportunity for future restoration of the City Property site. The project also supports the business decision by Synergy to use directional drilling, which is an innovative technique that extracts oil at an angle through rigs that are co-located at a centralized and more manageable location, allowing oil extraction at a quicker rate that is more cost efficient.

Phased Removal and Abandonment of Existing Oil Wells

As part of the proposed project, Synergy will implement the removal and abandonment of the oil wells and equipment from the Synergy Oil Field and City Property sites.

Upon completion and occupancy of Synergy's new oil operating areas on the Pumpkin Patch and LCWA sites and completion and occupancy of Synergy's office and warehouse facilities on the Pumpkin Patch site (referred to as the "New Occupancy Date"), if an oil well operated on either the Synergy Oil Field or City Property sites produces less than one full barrel of oil per day for a period of 18 consecutive months, Synergy would remove and abandon that well in accordance with the abandonment guidelines set for by the DOGGR. In addition, on or before the 20-year anniversary of the New Occupancy Date, Synergy would remove and abandon 50 percent of their wells operated on the Synergy Oil Field and City Property sites in accordance with the abandonment guidelines set forth by the DOGGR. Habitat restoration would be implemented for any area temporarily impacted by the removal and abandonment of oil wells.

By the 40th anniversary of the New Occupancy Date, all remaining oil wells operated on the Synergy Oil Field and City Property sites would be completely removed and abandoned in accordance with the abandonment guidelines set forth by DOGGR. Habitat restoration would be implemented for any area temporarily impacted by the removal and abandonment of oil wells.

Once all of Synergy’s wells are removed and abandoned from the Synergy Oil Field site, a comprehensive wetland restoration plan for the southerly 72 acres will be developed.

Table 2 demonstrates the estimated phasing and timeline for the removal and relocation of the oil production facilities at the project sites.

Table 2: Project Phases by Site

	Synergy Oil Field site	Pumpkin Patch site	Los Cerritos Wetlands Authority site	City-owned property site
Phase 1 – 18 to 24 months				
	<p>Removal of targeted existing oil service roads, 95 percent of the above ground and obsolete pipelines, and tank farms from the site.</p> <p>Implementation of the mitigation bank restoration plan, including grading, planting, and construction of trail.</p> <p>Implementation of restoration plan for any area temporarily impacted by removal of pipelines and tanks.</p>	<p>Construction of new office building and storage/warehouse building on-site.</p> <p>Drilling of up to 50 new operating oil wells to commence.</p>	<p>Construction of new oil production facilities, an elevated pipe rack, 21,000 barrel sales oil tank, and 5,000 barrel injection water tank.</p> <p>Drilling of up to 70 new operating oil wells to commence.</p>	<p>Removal of 95 percent of the above ground and obsolete pipelines, and removal of the tank farm from the site.</p> <p>Implementation of restoration plan for any area temporarily impacted by removal of pipelines and tank.</p>
Phase 2 – 12 to 18 months				
	<p>Rehabilitation of existing office structure to new visitors’ center and associated surface parking lot.</p> <p>Grand opening of visitors’ center and trail.</p>	<p>Relocation of office operations from Synergy to new building. Kickoff New Occupancy Date.</p> <p>Drilling of up to 50 new operating oil wells to continue.</p>	<p>Drilling of up to 70 new operating oil wells to continue.</p>	
Phase 3 – Within 20 years after New Occupancy Date				
	<p>Removal and abandonment of 50 percent of wells operated on the Synergy Oil Field Site and City Property Site AND</p>			<p>Removal and abandonment of 50 percent of their wells operated on the Synergy Oil Field Site and City Property Site AND</p>

	Synergy Oil Field site	Pumpkin Patch site	Los Cerritos Wetlands Authority site	City-owned property site
	<p>any wells producing less than one barrel of oil per day for a period of 18 consecutive months.</p> <p>Implementation of restoration plan for any area temporarily impacted by removal and abandonment of oil wells.</p>			<p>any wells producing less than one barrel of oil per day for a period of 18 consecutive months.</p> <p>Implementation of restoration plan for any area temporarily impacted by removal and abandonment of oil wells.</p>
Phase 4- Within 40 years of New Occupancy Date				
40 years	<p>Removal and abandonment of one-hundred percent of all oil wells operated on the Synergy Oil Field Site and City Property Site</p> <p>Implementation of restoration plan for any area temporarily impacted by removal and abandonment of oil wells.</p> <p>Development of comprehensive restoration plan for southern 72 acres.</p>			<p>Removal and abandonment of one-hundred percent of all oil wells operated on the Synergy Oil Field Site and City Property Site</p> <p>Implementation of restoration plan for any area temporarily impacted by removal and abandonment of oil wells.</p>

2.4 PROPOSED DISCRETIONARY ACTIONS/ REQUIRED APPROVALS

The proposed project would require an amendment to the Southeast Area Development and Improvement Plan (SEADIP) to allow for the following activities:

- Oil production uses on the Pumpkin Patch site and the Los Cerritos Wetlands Authority (LCWA) site
- The elimination of the extension of Studebaker Road and other circulation improvements
- The designation of the Synergy site as open space and passive recreation uses upon completion of the wetlands restoration work

The proposed project would also require an amendment to the City's Oil Map to include the LCWA site and Pumpkin Patch site within mapped Oil Production Areas. These actions would also require an amendment to the City of Long Beach Local Coastal Program (LCP) to include the Synergy site in the City's LCP; the designation of the Synergy site for oil production (as an interim use), as well as open space and passive recreation uses; the designation of the Pumpkin Patch site for oil production uses; and the designation of the LCWA site for oil production uses. Other approvals may also be required, either from the City or other Responsible Agencies.

The City of Long Beach, the lead agency for the project under the California Environmental Quality Act (CEQA), has discretionary authority over the proposed project.

2.4.1 City of Long Beach

- SEADIP Amendment
- Oil Operating Area Boundary Change
- Site Plan Review for Pumpkin Patch
- Site Plan Review for the LCWA Site
- Site Plan Review for the Synergy Oil Field
- Oil Drilling Permit
- Oil Well Permit
- Certificate of Compliance for the LCWA 5-acre parcel
- Certificate of Compliance for the Synergy 76-acre mitigation bank area, visitors' center, parking lot, and trails

2.4.2 Other Responsible Agencies

- U.S. Army Corps of Engineers
- California Coastal Commission
- California Department of Fish and Wildlife
- U.S. Fish and Wildlife Service
- National Marine Fisheries Service
- Los Cerritos Wetlands Authority
- South Coast Air Quality Management District

- Los Angeles Regional Water Quality Control Board
- Division of Oil Gas and Geothermal Resources

These agencies are potentially required and do not necessarily represent a comprehensive list of all possible discretionary permits/approvals required. Other additional permits or approvals from responsible agencies may be required for the proposed project.

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3. ENVIRONMENTAL CHECKLIST FORM

1. Project Title:

Los Cerritos Wetlands Restoration and Oil Consolidation Project

2. Lead Agency Name and Address:

City of Long Beach, Long Beach Development Services Department, Planning Bureau

333 West Ocean Boulevard, 5th Floor

Long Beach, California 90802

3. Contact Person and Phone Number:

Craig Chalfant, Senior Planner

Long Beach Development Services Department, Planning Bureau

333 West Ocean Boulevard, 5th Floor

Long Beach, California 90802

4. Project Location:

Synergy Oil Field site: 6433 E. 2nd Street, Long Beach, California

Pumpkin Patch site: 6701 E. Pacific Coast Highway, Long Beach, California

Los Cerritos Wetlands Authority site: Studebaker Road and 2nd Street, Long Beach, California

City Property site: 2nd Street and Shopkeeper Road, Long Beach, California

5. Project Sponsor's Name and Address:

Los Cerritos Wetlands, LLC, and Lyon Housing XLV, LLC

6. General Plan Designation(s):

According to the City of Long Beach General Plan Land Use Element, the Pumpkin Patch and LCWA sites are in Land Use District (LUD) No. 7, Mixed Use. The Synergy and City-owned sites have not been assigned a land use district.

7. Zoning Designation(s):

Planned Development -1 (PD-1) as established by the Southeast Area Development and Improvement Plan (SEADIP), Subareas 11a, 11b, 19, 25 and 33.

- 8. Description of Project:** (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

The proposed project would implement a wetlands restoration project which will restore a privately owned oil field in the City of Long Beach through creation of a wetlands mitigation bank. The proposed project includes the relocation of specific oil facilities currently located on the Synergy Oil Field and City-owned property to two properties in close proximity to the Synergy Oil Field and the removal of existing oil wells from the Synergy Oil Field and the City Property site. (See Section 2, Project Description.)

Surrounding Land Uses and Setting. (Briefly describe the project's surroundings.)

The proposed project is located within the City of Long Beach, which is located within the southeastern portion of Los Angeles County, California. The City is bound by the cities of Carson and Los Angeles (including Wilmington and the Port of Los Angeles) to the west; the cities of Compton, Paramount, and Bellflower to the north; and the cities of Lakewood, Hawaiian Gardens, Cypress, Los Alamitos, and Seal Beach to the east. The unincorporated communities of Rancho Dominguez and Rossmoor border the city to the north and east, respectively. The City of Signal Hill is entirely encompassed by the City of Long Beach. The Pacific Ocean is located along the City's southern boundary, and those portions of the city are located within the California Coastal Zone.

- 10. Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement. Indicate whether another agency is a responsible or trustee agency.)

U.S. Army Corps of Engineers

California Coastal Commission

California Department of Fish and Wildlife

U.S. Fish and Wildlife Service

National Marine Fisheries Service

Los Cerritos Wetlands Authority

South Coast Air Quality Management District

Los Angeles Regional Water Quality Control Board

Division of Oil Gas and Geothermal Resources

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

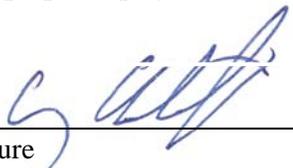
The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology, Soils and Seismicity |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology and Water Quality |
| <input checked="" type="checkbox"/> Land Use and Land Use Planning | <input checked="" type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input checked="" type="checkbox"/> Population and Housing | <input checked="" type="checkbox"/> Public Services | <input checked="" type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation and Traffic | <input checked="" type="checkbox"/> Utilities and Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (To be completed by lead agency)

On the basis of this initial study:

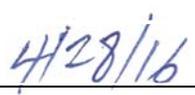
- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.



Signature

Craig Chalfant

Printed Name



Date

Long Beach Development Services | Planning Bureau

For

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less Than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significant.

4. ENVIRONMENTAL CHECKLIST

4.1 AESTHETICS

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

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

Potentially Significant Impact. The project sites are located in the City of Long Beach, just north of the mouth of the San Gabriel River. The existing visual environment includes buildings associated with the Marina Pacifica Mall to the west of the project site, single-story commercial uses and the Seaport Marina Hotel to the southwest, and the Belmont Shore Mobile Estates to the north. To the east, across Studebaker Road, are industrial uses. To the south of the project sites are the San Gabriel River. Views from the project sites include the San Gabriel River Channel south of the Pumpkin Patch site, and distant views of the Pacific Ocean looking west down Marina Drive. Views from the northwestern corner of the Synergy Oil Field site encompass the Alamitos Bay Marina and Los Cerritos Channel, including the boats docked there. Views from the eastern side of the Synergy Oil Field Site are primarily associated with oil production facilities adjacent to the Los Cerritos Wetlands Authority (LCWA) site. The proposed project’s potential to have a substantial adverse effect on scenic vistas will be evaluated in the EIR.

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

Less Than Significant. According to the California Department of Transportation (Caltrans) California Scenic Highway Mapping System, the nearest eligible scenic highway is State Route 1 (SR-1), which traverses the southern portion of the City from northwest to southeast, is located directly west of the project site and is currently

designated as an Eligible State Scenic Highway. However, there are no State-designated scenic highways in the City. The City of Long Beach General Plan Mobility Element identifies a City-designated scenic route on Ocean Boulevard, approximately one mile southwest of the project site (City of Long Beach, 2013). Because the City's and State's plans have not identified any scenic resources in the vicinity of the project sites, this impact is considered less than significant; however, as the project's impacts on aesthetics will be addressed in the EIR, if any scenic resources are identified this will be included in the EIR.

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

Potentially Significant Impact. The proposed project area is primarily an open space, with oil production facilities, that is located in a largely urbanized area in the City of Long Beach, surrounded by the Los Cerritos Channel to the north, Pacific Coast Highway and commercial-retail strip mall to the west, and the San Gabriel River to the south and southeast. The removal and relocation of the existing oil wells and restoration of portions of the project site would alter the visual character and/or quality of the area. The proposed project's potential to substantially degrade the existing visual character or quality of the site and its surroundings will be evaluated in the EIR.

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

Potentially Significant Impact. The project sites are located in a largely urban area and are surrounded by commercial-retail land uses that incorporate light and glare sources associated with exterior signage and lighting for security and wayfinding. The proposed project would include the removal of existing oil wells on two sites and involve the restoration of one of the sites to open space, as well as the construction of new offices, storage spaces, and oil production facilities on the remaining two sites. The proposed activities would not create any reflective surfaces or the potential for light/glare during the day. Nighttime illumination would be designed to provide minimum illumination needed for safety, security and wayfinding. Because the proposed project includes new sources of light on two sites that are currently undeveloped, the proposed project's potential to create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area will be evaluated in the EIR.

References

Caltrans, California Scenic Highway Mapping System Los Angeles County,
http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm, accessed
January 5, 2016.

City of Long Beach, General Plan Mobility Element,
<http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=4112>, 2013, accessed
January 5, 2016.

4.2 AGRICULTURAL AND FOREST RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

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

No Impact. The project sites are located within a highly urbanized area and are currently in use as privately owned or leased oil fields. No farmland, agricultural uses, or related operations are present within the project site or surrounding areas. According to the California Department of Conservation (CDC), pursuant to Farmland Mapping and Monitoring Program (FMMP), there are no farmlands located within the vicinity of the project site (CDC, 2015). Therefore, the project would not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use, and no impact would occur and no mitigation measures are required. This topic will not be evaluated in the EIR.

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

No Impact. The Williamson Act of 1965 allows local governments to enter into contract agreements with local landowners with the purpose of trying to limit specific parcels of land to agricultural or other related open space use. The project sites are not zoned for agricultural use nor is it subject to a Williamson Act Contract within the vicinity of the project site (CDC, 2013). Therefore, the proposed project would not conflict with any zoning for agricultural uses or a Williamson Act Contract and, thus, no impacts would

occur. This topic will not be evaluated in the EIR and no mitigation measures would be required.

- c) **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))?**

No Impact. The project sites are currently developed with facilities associated with oil extraction and located in a highly urbanized area with a zoning designation of Planned Development (PD-1) within the Southeast Community Plan Area (SEADIP). The site is not zoned as forest land or timberland. Thus, the proposed project would not conflict with forest land or timberland zoning or result in the loss of forest land or conversion of forest land or timberland to non-forest uses. Therefore, no impact would occur and no mitigation measure would be necessary. This topic will not be evaluated in the EIR.

- d) **Result in the loss of forest land or conversion of forest land to non-forest use?**

No Impact. Refer to Response 4.2(c), above. This topic will not be evaluated in the EIR.

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

No Impact. As discussed above, the project site is not expected to contain farmland, forest land, or timberland. Accordingly, the project would not result in the conversion of farmland to non-agricultural uses or forest land to non-forest uses. The project site is located in a highly urbanized area and is not adjacent to existing farmland or forest lands. Therefore, no impacts would occur and no mitigation measures would be necessary and this topic will not be discussed in the EIR.

References

CDC, Los Angeles County Important Farmland Map,
<ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/los12.pdf>, 2015, accessed January 5, 2016.

CDC, Los Angeles County Williamson Act FY 2012-2013 Map,
ftp://ftp.consrv.ca.gov/pub/dlrp/wa/LA_12_13_WA.pdf, 2013, accessed January 5, 2016.

4.3 AIR QUALITY

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

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

Potentially Significant Impact. The project sites are located within the jurisdiction of the South Coast Air Quality Control District (SCAQMD) within the South Coast Air Basin (SCAB), which consists of the urbanized areas of Los Angeles, Riverside, San Bernardino and Orange Counties. SCAQMD is designated as a nonattainment area for national ambient air quality standards (NAAQS) for ozone (O₃), lead (Pb), and particulate matter less than 2.5 microns in diameter (PM_{2.5}), and is designated as a maintenance area for particulate matter less than 10 microns in diameter (PM₁₀), carbon monoxide (CO) and nitrogen dioxide (NO₂). The SCAB is designated as a nonattainment area under the California ambient air quality standards (CAAQS) for O₃, Pb, PM_{2.5}, and NO. The SCAQMD and Southern California Association of Governments (SCAG), in cooperation with the California Air Resources Board (CARB) and USEPA, have developed air quality management plans (AQMP) designed to bring the SCAB into attainment of the national and state ambient air quality standards. The latest version of the AQMP was adopted by the SCAQMD Governing Board in December 2012 (SCAQMD, 2012).

Implementation of the proposed project would result in the removal and remediation of all existing oil wells and associated oil production facilities on two sites (Synergy Oil Field and City Property sites), which would allow the establishment of a wetlands mitigation bank and public access improvements. Further, the proposed project would include the drilling of up to 120 new wells (oil production and water injection) on two other sites (Pumpkin Patch and LCWA property) to provide new oil production areas to replace the oil production facilities that will be removed from the Synergy Oil Field and City Property sites, as well as construction of a two-story office building, a 9,750-square-foot storage/warehouse for oil field equipment and materials, and associated oil extraction equipment and facilities. Development of the proposed project would have the potential to result in construction and operation emissions. The proposed project's

potential to conflict with or obstruct implementation of the applicable air quality plan will be evaluated in the EIR.

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Potentially Significant Impact. The SCAB is designated under the California and National Ambient Air Quality Standards as being in nonattainment for ozone, coarse inhalable particulate matter, nitrogen oxides (California standard only), and lead (Los Angeles County only) (CARB, 2014). Implementation of the proposed project could result in fugitive dust and emissions, and construction workers commuting to and from the project site would also result in temporary emissions. Pollutant emissions would vary from day to day depending on the level of activity, the specific construction phasing operations, and the prevailing weather conditions. Air emissions associated with the proposed project could adversely affect the regional ambient air quality in the SCAB and locally within the City of Long Beach.

Operation of the proposed project may result in increased emissions of air pollutants from the potential in increased vehicle trips accessing the project site and operational maintenance activities.

Therefore, air emissions from the construction and operation of the proposed project may violate an air quality standard or contribute to an existing or projected air quality violation. The proposed project's potential to violate an air quality standard or contribute substantially to an existing projected air quality violation will be evaluated in the EIR.

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

Potentially Significant Impact. Short-term construction activities and long-term operation of the proposed project may generate emissions that could result in an increase of existing emission levels of criteria pollutants and/or contribute to the nonattainment status for these criteria pollutants in the SCAB. Due to the elevated concentrations of air pollutants that currently occur in the SCAB, when combined with past, present, or reasonably foreseeable future projects in the area, the net increase of criteria pollutants could cumulatively contribute to the nonattainment of criteria pollutants in the SCAB, including O₃, carbon monoxide, particulate matter (PM_{2.5} and PM₁₀), NO_x, and Pb. The generation of these compounds during and after construction could exceed the national and state standards/limits for such emissions (including quantitative thresholds for ozone precursors). The proposed project's potential to result in a cumulative considerable net increase of any criterial pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality threshold will be evaluated in the EIR.

d) Expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. Sensitive receptors are locations where uses or activities result in increased exposure of persons more sensitive to the unhealthful effects of emissions (such as children and the elderly). Examples of land uses that can be classified as sensitive receptors include residences, schools, daycare centers, parks, recreational areas, medical facilities, rest homes, and convalescent care facilities. Existing sensitive receptors in the vicinity of the project site include residential land uses (Belmont Shores Mobile Estates) to the north and northwest of the project site and residential land uses and the Seaport Marina Hotel located southwest of the project area. Development of the proposed project may have the potential to expose sensitive receptors to substantial concentrations of criteria air pollutants and toxic air contaminants (TACs) as a result of emissions generated during construction. The proposed project's potential to expose sensitive receptors to substantial pollutant concentrations will be evaluated in the EIR.

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

Potentially Significant Impact. Land uses typically producing objectionable odors include wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. Although the proposed project is not expected to include any stationary sources or equipment located on-site that would generate objectionable odors, oil production activities may have the potential to create objectionable odors. This potential impact will be evaluated in the EIR.

References

California Air Resources Board (CARB), *Area Designation Maps/State and National*,
<http://www.arb.ca.gov/desig/adm/adm.htm/>, 2014, accessed January 11, 2016.

4.4 BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

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

Potentially Significant Impact. The proposed project is located in the southeastern corner of the City of Long Beach, within the Southeast Area Development and Improvement Plan (SEADIP) area. All of the four properties that comprise the project are surrounded by urbanized land uses, including commercial-retail, residential, and industrial uses. Two of the sites are actively being used for oil production activities, and the other two sites (Pumpkin Patch and LCWA sites) are used seasonally and/or intermittently for seasonal sales, and equipment storage and staging, respectively. The Los Cerritos Wetlands Area may contain sensitive or special-status species. There is a potential for special status plants and wildlife species to be present in the wetlands areas within and nearby the project sites. The proposed project’s potential to have a substantial adverse effect, either directly or through habitat modifications, on any candidate, sensitive, or special-status species in local or regional plans or regulations by the the CDFW or USFWS will be evaluated in the EIR.

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

Potentially Significant Impact. Riparian habitats are those located along banks of rivers or streams. Sensitive natural communities are considered rare in the region by the USFWS, CDFW, or local regulatory agencies and are known to provide habitat for sensitive animal or plant species. According to USFWS National Wetlands Inventory, the project sites are located on lands that are considered Freshwater Emergent Wetlands, which is characterized by herbaceous marsh, fen swale and wet meadow (USFWS, 2016). The proposed project's potential to have a substantial adverse effect on any riparian habitat or other sensitive natural community will be evaluated in the EIR.

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

Potentially Significant Impact. According to USFWS National Wetlands Inventory, the project sites are located on lands that are considered Freshwater Emergent Wetlands, which is characterized by herbaceous marsh, fen swale and wet meadow (USFWS, 2016). Development of the proposed project would ultimately restore all approximately 154 acres of the Synergy Oil Field. Implementation of the proposed project could have a potentially significant impact on the federally protected wetlands on the project site as defined by Section 404 of the Clean Water Act. The proposed project's potential to have a substantial adverse effect on federally protected wetlands will be evaluated in the EIR.

- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

Potentially Significant Impact. Wildlife corridors are pathways or habitat linkages that connect discrete areas of natural open space otherwise separated or fragmented by topography, changes in vegetation, and other natural or human-induced factors, such as urbanization. While the proposed project is located in a highly urbanized area, the Synergy Oil Field contains the Steamshovel Slough, is adjacent to the Los Cerritos Channel and the Los Cerritos Wetlands Area, and these may be considered migratory wildlife corridors. The proposed project's potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites will be evaluated in the EIR.

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

Potentially Significant Impact. The project sites are currently developed with facilities associated with oil extraction. The vegetation on-site is considered sparse and includes ornamental nonnative shrubs and landscaping trees on Pacific Coast Highway, along the western boundary of the Synergy Oil Field site, as well as along the northern edge of 2nd Street along the southern boundary of Synergy Oil Field Site. The removal of any street trees for the project development would occur in accordance with the City's Tree Maintenance Policy, which sets forth guidelines to administer Chapter 14.28 of the Long Beach Municipal Code. The proposed project would involve the establishment of a wetlands mitigation bank and restoration of the wetlands on the Synergy Oil Fields and open space, which would be consistent with the City's requirements for the SEADIP area. The proposed project's potential conflict with the City's policies or ordinances protecting biological resources such as a tree preservation policy or ordinance will be evaluated in the EIR.

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

No Impact. The project sites are not subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

References

California Department of Fish and Wildlife (CDFW), California Regional Conservation Plans, <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>, 2015, accessed January 6, 2016.

USFWS, Wetlands Data Inventory Mapper official website, <http://www.fws.gov/wetlands/Data/Mapper.html>, accessed January 6, 2016.

4.5 CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Cause a substantial adverse change in the significance of a tribal cultural resources as defined in Public Resources Code 21074?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

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

Potentially Significant Impact. The project sites consist of both developed land at the Synergy Oil Field and the City Property sites and vacant land at the Pumpkin Patch and LCWA sites. Development of the proposed project would require some ground disturbance for installation of the new oil wells and associated facilities, as well as the proposed construction of a two-story office building, a 9,750-square foot storage/warehouse building, and two SCE substations, which could impact archaeological resources that may be considered historical resources as defined by the CEQA Guidelines. Additionally, the Synergy Oil Field site includes a structure, commonly referred to as the Bixby office building as it formerly housed the offices for oil production by the Bixby Oil Company and currently houses the office for Los Cerritos Wetlands, LLC. This structure is more than 45 years old and will be evaluated for historical significance. The project proposes to make interior improvements to convert the Bixby office building into a visitors’ center. The proposed project’s potential to cause a substantial adverse change in the significance of historical resources will be evaluated in the EIR.

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

Potentially Significant Impact. The project sites are located within a highly urbanized area that has been completely disturbed; however, ground-disturbing activities, such as grading and excavation could uncover previously unidentified subsurface archaeological resources. Additional background research on the project area, including a records search at the South Central Coastal Information Center (SCCIC), review of historic topographic maps and aerial photographs, California Native American Heritage Commission Sacred Lands File Search, and Native American Heritage correspondence, will be conducted.

The proposed project's potential to cause an adverse change in the significance of an archaeological resource will be evaluated in the EIR.

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

Potentially Significant Impact. The project sites are located in a highly urbanized area and have been subject to previous ground disturbances, including the drilling of oil wells. The project would require excavation and grading in some portions of the site and ground-disturbing activities could unearth undocumented subsurface paleontological resources. The proposed project's potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature will be evaluated in the EIR.

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

Potentially Significant Impact. Since the project would require excavation and grading in some portions of the site, ground-disturbing activities could unearth subsurface human remains. The proposed project's potential to disturb any human remains, including those interred outside of formal cemeteries will be evaluated in the EIR.

e. Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?

Potentially Significant Impact. The project sites are located in a highly urbanized area and have been subject to previous disturbance. Development of the proposed project would result in ground-disturbing activities, such as grading and excavation that could uncover previously unidentified subsurface archaeological materials that could be considered tribal cultural resources. Therefore, potential significant impacts may occur. Additional background research on the project area, including consultation with Native Americans who are traditionally and cultural affiliated with the geographic area of the project, a records search at the South Central Coastal Information Center (SCCIC), review of historic topographic maps and aerial photographs, and a California Native American Heritage Commission Sacred Lands File Search, will be conducted. The proposed project's potential to cause a substantial adverse change in the significance of a tribal cultural resource will be evaluated in the EIR.

4.6 GEOLOGY, SOILS, AND SEISMICITY

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving**
 - i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)**

Potentially Significant Impact. Seismically induced surface or ground rupture occurs when movement on a fault deep within the earth breaks through to the surface as a result of seismic activity. Fault rupture almost always follows preexisting faults, which are zones of weakness. Under the Alquist-Priolo Earthquake Fault Zoning Act of 1972, the California State Geologist (CGS) identifies areas in the state that are at risk from surface fault rupture. This requires CGS to establish regulatory zones, known as Alquist-Priolo Earthquake Fault Zones, around the surface traces of active faults and to issue appropriate maps that identify these areas. The project sites are located along a trace of the Newport-Inglewood Fault, as identified by the California Department of Conservation, Special Studies Zone map (CDC, 1986). The fault traverses the Synergy Oil site and City-owned

property site in a northwest to southeast direction. Due to the proximity of an Alquist-Priolo Special Studies Zone to the project site, potential rupture of a known earthquake fault could have substantial impacts on the project site. Therefore, this topic will be evaluated in the EIR.

ii) Strong seismic ground shaking?

Potentially Significant Impact. The project sites are located in the seismically active region of Southern California, and located within a trace of the Newport-Inglewood Fault (CDC, 1986). The project site would be subject to shaking during earthquake events. The level of ground shaking that would be experienced at the project site from the Newport-Inglewood Fault or any other active faults in the region would be a function of several factors including earthquake magnitude, type of faulting, rupture and propagation path, distance from the epicenter, earthquake depth, duration of shaking, site topography and site geology. The proposed project's potential to be affected by strong seismic ground shaking will be evaluated in the EIR.

iii) Seismic-related ground failure, including liquefaction?

Potentially Significant Impact. Liquefaction is a form of earthquake induced ground failure that occurs primarily in relatively shallow, loose, granular, water-saturated soils. According to the California Department of Conservation, the project sites are located in Seismic Hazard Zone for liquefaction (CDC, 1999). The proposed project's potential for seismic-related ground failure, including liquefaction will be evaluated in the EIR.

iv) Landslides?

No Impact. The project sites are located in an area of relatively flat topography, with little likelihood of being subject to landslides or earthquake induced landslides. Additionally, the project sites are not expected to be located within a State-designated hazard zone for earthquake induced landsliding.

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

Potentially Significant Impact. Two of the project sites are currently operating as a privately owned oil field and are developed with oil wells and associated oil extraction facilities. The proposed project would include the removal of all associated oil wells and oil extraction facilities and implement habitat restoration. The proposed project would also include construction and implementation of public access improvements, including a parking lot on existing disturbed areas and the conversion of an existing structure for use as a visitors' center. The project also proposes the construction of oil production facilities on two currently undeveloped sites, which will require grading and may potentially disturb soil and expose soil to the potential for erosion. The proposed project could potentially disturb native soil and expose the soil to soil erosion. Also, the change in on-site drainage patterns resulting from the project could also result in potential soil erosion.

The proposed project's potential to result in substantial soil erosion or the loss of topsoil will be evaluated in the EIR.

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

Potentially Significant Impact. Impacts related to liquefaction and landslides are addressed above in Section 4.6(a.iii) and Section 4.6(a.iv), respectively. Lateral spreading results from earthquake-induced liquefaction, causing landslides associated with gentle slopes that flow laterally, like water. Land subsidence occurs when large amounts of groundwater have been withdrawn from certain types of sediments, causing the land to subside. When water is withdrawn the sediments collapse on itself. The project lies in a relatively flat topography where lateral spreading and subsidence and collapse are unlikely to occur. Oil extraction could also cause land to subside; therefore, part of the oil operations include the construction and operation of water injection wells to inject water into the subsurface to mitigate the potential for subsidence. The proposed project's potential to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse will be evaluated in the EIR.

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

Potentially Significant Impacts. Expansive soils are fine-grained soils (generally high plasticity clays) that can undergo a significant increase in volume with an increase in water content and a significant decrease in volume with a decrease in water content. Changes in the water content of a highly expansive soil can result in severe distress to structures constructed on or against the soil. There is a potential for expansive soils to exist within the project area given the presence of the slough and its location near waterways). The proposed projects potential to be located on expansive soil creating substantial risks to life and property will be evaluated in the EIR.

- e) **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?**

No Impact. The proposed project would not be expected to involve the use of septic tanks or alternative water disposal systems. Development of the project would be anticipated to connect to the City's existing sewer lines and wastewater disposal systems. Therefore, no impact would occur. This topic will not be evaluated in the EIR.

References

CDC, Special Studies Zones Map: Los Alamitos Quadrangle,
http://gmw.consrv.ca.gov/shmp/download/quad/LOS_ALAMITOS/maps/LOSALAMITOS.PDF, 1986, accessed January 5, 2015.

CDC, Seismic Hazard Zones Map: Los Alamitos Quadrangle,
http://gmw.consrv.ca.gov/shmp/download/quad/LOS_ALAMITOS/maps/ozn_lalmi.pdf, 1999, January 5, 2015.

CDC, CGS Information Warehouse: Landslides,
<http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>, accessed January 5, 2015.

4.7 GREENHOUSE GAS EMISSIONS

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Potentially Significant Impact. Greenhouse gas (GHG) emissions emitted by human activity are implicated in global climate change or global warming. The principal GHGs are CO₂, methane (CH₄), NO_x, ozone, water vapor, and fluorinated gases. The temporary construction activities associated with the proposed project, which would involve operation of heavy off-road equipment, on-road trucks (for deliveries and hauling), construction worker commute trips, would generate GHGs. Implementation of the proposed project would include the removal of existing oil wells from the Synergy Oil Field and the City Property sites, the drilling and operation of new wells on the Pumpkin Patch and LCWA sites and the development of on-site power generation facilities to support the project operations. Therefore, these activities may directly or indirectly result in the generation of GHG emissions that may have potential significant impacts. Potential impacts associated with GHG emissions generated during construction and operation of the proposed project will be evaluated in the EIR.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Potentially Significant Impact. The California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32) requires California Air Resource Board (CARB) to design and implement emissions limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020 (representing an approximate 25 percent reduction in emissions). The EIR will discuss the applicable plans, policies and regulations adopted for the reduction of GHG emissions and determine whether the project may have the potential to conflict with AB 32 and other regulations adopted for the purpose of reducing GHG emissions.

4.8 HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

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

Potentially Significant Impact. The proposed project would involve the removal and abandonment of approximately 37 existing oil wells on the Synergy Oil Field site and 21 existing oil wells from the City Property site, which would involve the temporary transport of materials associated with oil production. The proposed project's potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials will be evaluated in the EIR.

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

Potentially Significant Impact. Construction and operation of the proposed project may include the accidental release of hazardous materials associated with the removal of oil

production equipment and remediation of oil fields. There are certain hazards associated with petroleum production operations including, but not limited to spills, blowouts, fires, and explosions (OSHA, 2016). The proposed project's potential to create a significant hazard to the public or environment involving the release of hazardous materials into the environment will be evaluated in the EIR.

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

Potentially Significant Impact. The nearest existing schools to the project site are Rosie the Riveter Charter High School, located approximately 0.25 mile northeast of the project area on 690 Studebaker Road; Naples Elementary School, located 1.16 miles southwest of the project site on 5537 The Toledo in Long Beach; Rodgers Middle School, located 1.35 miles northwest of the project site on 365 Monrovia Avenue; and California State University Long Beach, located 1.5 miles north of the project site at 1250 Bellflower Boulevard. Additionally, Kettering Elementary School, at 5550 Silvera Avenue, is located approximately 0.5 mile north of the Synergy site. No new schools are proposed in the vicinity of the project site. The proposed project's potential to emit hazardous emissions or handle hazardous or acutely hazardous substances or waste within one-quarter mile of an existing or proposed school will be evaluated in the EIR.

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

Potentially Significant Impact. California Government Code Section 65962.5 requires the compiling of lists of the following types of hazardous materials sites: hazardous waste facilities, hazardous waste discharges for which the State Water Quality Control Board (SWQCB) has issued certain types of orders; public drinking water wells containing detectable levels of organic contaminants; underground storage tanks with reported unauthorized releases; and solid waste disposal facilities from which hazardous waste has migrated. A search of the Department of Toxic Substances Control (DTSC) Envirostor database did not identify any cleanup sites or hazardous waste facilities on the project sites (DTSC, 2016). According to the SWQCB Geotracker database, the Synergy Oil Field project site contains one active cleanup site and one closed cleanup site (SWQCB, 2016). The active cleanup site is located in the northwestern portion of the Synergy Oil Field site and is known as the Termo Oil Site. Potential contaminants of concern on the Termo Oil Field site include petroleum, fuel and oils, and the last site assessment was conducted on May 14, 2015. The closed site is located at the southwestern corner of the Synergy Oil Field site, and is known as the Chevron #9-0016 site. Potential contaminants of concern on the site include gasoline. However, site cleanup has been completed and the case has been closed since January 11, 1995. The proposed project's potential to be located on a site which is included on a list of hazardous materials sites pursuant to Government Code Section 65962.5 will be evaluated in the EIR.

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

No Impact. The nearest public use airport is the Long Beach Airport, located approximately 4.45 miles northwest of the project sites, at 4100 Douglas Drive in Long Beach. However, the proposed project is located within the Airport Environs Land Use Plan (AELUP) for the Joint Forces Base Los Alamitos, which is a federally owned and operated private airport facility (Orange County, 2016). Because the proposed project is not located within a publicly accessible airport or public use airport area, the project will not be evaluated in the EIR.

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

Potentially Significant Impact. The Boeing Seal Beach complex includes a rooftop heliport located approximately 1 mile east of the project site at 2291 Seal Beach Boulevard in the City of Seal Beach. The proposed project is also located within the AELUP for the Joint Forces Base Los Alamitos (Orange County, 2016). The proposed project's potential to result in a safety hazard for people residing or working in the project area will be evaluated in the EIR.

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

Potentially Significant Impact. The City of Long Beach General Plan Public Safety Element does not establish firm routes of evacuation, rather it provides that emergency response and emergency evacuation procedures for the City based on availability of through streets, multiple access routes and bridges depending on the disaster and the street conditions at the time (City of Long Beach, 1975). The proposed project would not expect to physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the project site. The proposed project would not expect to stage or store construction materials or construction equipment on public roadways. Construction activities would not expect to interfere with emergency response to the project site. The proposed project's potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan will be evaluated in the EIR.

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

Potentially Significant Impact. Although the project sites are located in a highly urbanized area there are wetlands located within the City that have been subject to wildfires, therefore, the proposed project's potential to expose people or structures to

significant risk or loss, injury or death involving wildland fires will be evaluated in the EIR.

References

- CAL FIRE, *Fire Hazard Severity Zones in SRA map*,
http://frap.fire.ca.gov/webdata/maps/los_angeles/fhszs_map.19.pdf, 2007, accessed January 8, 2016.
- City of Long Beach, *General Plan Public Safety Element*,
<http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=2545>, 1975, accessed January 8, 2016.
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<http://planning.lacounty.gov/assets/obj/anet/Main.html>, accessed January 8, 2016.
- Department of Toxic Substances Control (DTSC), Envirostor database search,
<http://www.envirostor.dtsc.ca.gov/public/>, accessed January 8, 2016.
- Occupational Safety and Health Administration, *Safety Hazards with Oil and Gas Extraction Activities*, <https://www.osha.gov/SLTC/oilgaswelldrilling/safetyhazards.html>, accessed January 7, 2016.
- Orange County Airport Land Use Commission, *Airport Land Use Commission for Orange County Airport Planning Areas Figure 1*,
<http://www.ocair.com/commissions/aluc/docs/airportlu.pdf>, accessed March 31, 2016.
- State Water Quality Control Board (SWQCB), Geotracker database search,
<http://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=6701+pacific+coast+highway%2C+long+beach>, accessed January 8, 2016.

4.9 HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

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

Potentially Significant Impact. Construction and operation of the proposed project could impact water quality that could lead to violating water quality standards or waste discharge requirements. The construction phase of the proposed project would be required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) per the General Construction Permit issued by the State Water Resources Control Board (SWRCB). The SWPPP would specify Best Management Practices (BMPs) to be used by the construction phases of the project to minimize or avoid water pollution. The proposed project's potential to violate any water quality standards or waste discharge requirements will be evaluated in the EIR.

Additionally, the proposed project would be required to prepare and implement a Water Quality Management Plan (WQMP) specifying BMPS to be used in project design and project operation. Preparation of a WQMP is required under the Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges, Order No. 01-182, issued by the Los Angeles Regional Water Quality Control Board in 2001. The SWPPP, WQMP and BMPs included in both documents will be evaluated in the EIR.

- b) **Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?**

Potentially Significant Impact. The project sites are located within the West Coast Basin of the Los Angeles Coastal Plain Groundwater Basin, which lies along the coast, and has a surface area of 140 square miles (USGS, 2016). The Long Beach Water Department (LBWD) supplies water to the project site, through groundwater, recycled water and imported water from the Metropolitan Water District of Southern California. In compliance with the State of California legislative requirements, LBWD currently has the right to pump 32,692 acre-feet per year of groundwater from the Central Basin Aquifer and 0.7 acre-feet from the West Coast Basin (LBWD, 2011). Implementation of the proposed project would implement a habitat restoration plan for an existing oil field, and establish two new oil production facilities. The oil production facilities will include up to 120 new wells, which, as part of oil extraction operations, may affect groundwater. The proposed project's potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level will be evaluated in the EIR.

- c) **Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?**

Potentially Significant Impact. The project sites include two vacant sites and two sites currently developed for oil production. There are no streams or rivers on three of the sites, and while two of the sites (Pumpkin Patch and LCWA sites) are adjacent to the San Gabriel River, the project proposes no alteration to the course of the river. The Synergy Oil Field site includes the Steamshovel Slough and is adjacent to the Los Cerritos Channel. There is a potential for erosion and siltation during construction, particularly during demolition and grading activities. The proposed project's potential to substantially alter existing drainage patterns of a site or area that would result in substantial erosion or siltation on- or off-site will be evaluated in the EIR.

- d) **Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?**

Potentially Significant Impact. The Steamshovel Slough is located in the northern portion of the Synergy Oil Field site, and the proposed project would include grading in strategic locations within the mitigation area to provide improved water circulation from the Streamshovel Slough area to the mitigation area. This has the potential to alter the existing drainage patterns of this site due to the changes to the Streamshovel Slough area, which may increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. This potential impact will be evaluated in the EIR.

- e) **Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Potentially Significant Impact. The proposed project would introduce new land uses, including a visitors' center on the Synergy Oil Field site, and an office building and warehouse on the Pumpkin Patch site, and new oil production facilities on the Pumpkin Patch and LCWA sites. Development of the Pumpkin Patch and LCWA sites and the parking area on the Synergy Oil Field site will increase impermeable surfaces on these properties such that additional runoff could be generated. The potential for runoff water to exceed the capacity of the existing drainage system and provide substantial additional sources of polluted runoff will be evaluated in the EIR.

- f) **Otherwise substantially degrade water quality?**

Potentially Significant Impact. Refer to Section 4.9(a), above. The proposed project's potential to substantially degrade water quality will be evaluated in the EIR.

- g) **Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?**

No Impact. The project does not propose the development of residential uses. Therefore, the project would not place housing within a 100-year flood plain and the proposed project's potential to place housing within a 100-year flood hazard area will not be evaluated in the EIR.

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

No Impact. The project site is not located within a 100-year flood plain as mapped by the Federal Emergency Management Agency (FEMA) (FEMA, 1968). There two FEMA

Flood Zone categories located on the project sites. The project sites are located in FEMA's Flood Zone A and Zone X. Zone A is defined as an area where no based flood elevations are determined, and is located along the Streamshovel Slough area. The rest of the project sites are located within Zone X, which is defined as an area of 0.2 percent annual chance flood; area of one percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile. Additionally, according to the City of Long Beach Flood Zones Map, the project site is located within a 0.2 percent annual change flood hazard zone.

i) **Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?**

Less Than Significant. As discussed in Section 4.9(h), the project sites are not located within a designated 100-year flood plain area. According to the City's General Plan Public Safety Element, three flood control dams lie upstream from the City: Sepulveda Basin, Hansen Basin, and Whittier Narrows Basin (City of Long Beach, 1975). The Sepulveda and Hansen Basins lie more than 30 miles upstream from where the Los Angeles River passes through the City, and thus, any flooding resulting from a dam failure at either of these locations would be expected to dissipate prior to reaching the City. Additionally, while flooding could occur along both sides of the San Gabriel River, located to the south of the project site, given the topography of the surrounding area and the location of the Whittier Narrows Basin related to the project site, any flooding would be minimal. Further, dams in California are continually monitored by various governmental agencies (such as the State of California Division of Safety of Dams and the U.S. Army Corps of Engineers) to guard against the threat of dam failure. Current design and construction practices and ongoing programs of review, modification or total reconstruction of existing dams are intended to ensure that all dams are capable of withstanding the maximum considered earthquake for the site. The project proposes the construction of an extension to the existing berm adjacent to the Steamshovel Slough. Although not considered a dam or levee, a breach of the berm could result in water from the Slough entering onto the restored wetlands. Although not anticipated to be significant, the potential impacts of a breach of the berm will be evaluated in the EIR.

j) **Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?**

Potentially Significant Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake or storage bank. A tsunami is a tidal wave produced by a significant undersea disturbance such as tectonic displacement associated with large, shallow earthquakes. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity. The project sites are located within close proximity of the Alamitos Bay Marina and are within an area identified as potentially affected by a tsunami or seiche as mapped in the City's General Plan Seismic Safety Element. The project sites and surrounding area are characterized by

a relatively flat topography and are not identified in an area with steep slopes. The proposed project's potential to expose people or structures to a significant risk of loss, injury or death involving inundation by seiche or tsunami will be evaluated in the EIR.

References

- City of Long Beach, *General Plan Public Safety Element*, <http://www.lbds.info/civica/filebank/blobload.asp?BlobID=2545>, 1975, accessed January 11, 2016.
- Long Beach Water Department (LBWD), *2010 Urban Water Management Plan*, <http://www.water.ca.gov/urbanwatermanagement/2010uwmps/Long%20Beach%20Water%20Department/2010%20UWMP%20FINAL%20Board-adopted%20110602.pdf>, 2011, accessed January 8, 2016.
- United States Geological Survey (USGS), *An Introduction to the Central and West Coast Groundwater Basins*, <http://www.wrd.org/engineering/introduction-groundwater-basins-los-angeles.php>, accessed January 8, 2016.

4.10 LAND USE / PLANNING

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a) Physically divide an established community?

Less Than Significant. The proposed project would be developed on primarily vacant lands in the SEADIP area of the City of Long Beach. Surrounding uses include buildings associated with the Marina Pacifica Mall to the west of the project site, single-story commercial uses and the Seaport Marina Hotel to the southwest, and the Belmont Shore Mobile Estates to the north, across the Marina. To the east, across Studebaker Road, are industrial uses. To the south of the project sites are the San Gabriel River. The proposed project would implement a wetlands mitigation bank and public access improvements on an existing oil field, and construct and operate oil production facilities on two vacant parcels. Although the project will be developed adjacent to existing land uses, it will not physically divide an established community. However, the proposed project’s relationship to adjacent existing uses will be addressed in the EIR.

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

Potentially Significant Impact. The project sites are zoned PD-1 (Planned Development) also known as the SEADIP area. The proposed project would require an amendment to SEADIP to allow for oil production uses on the Lyon’s Pumpkin Patch and LCWA sites, and designation of the Synergy Oil Field as open space and passive recreation uses upon completion of wetlands restoration work. The proposed project’s potential to conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project will be evaluated in the EIR.

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

No Impact. According to the CDFW, the project sites are not located with a habitat conservation plan or natural community conservation (CDFW, 2015).

References

California Department of Fish and Wildlife (CDFW), *California Regional Conservation Plans*, <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline>, 2015, accessed January 6, 2016.

4.11 MINERAL RESOURCES		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>Would the project:</i>					
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less Than Significant. The project sites are currently developed as an oil field at two sites: the Synergy Oil Field (37 oil wells) and the City Property sites (21 oil wells). Development of the proposed project would result in the removal and abandonment per DOGGR standards of the existing oil wells at both sites. Although oil production would cease at these two locations, the surface use of the site would not preclude the ability in the future to extract subsurface resources if necessary. However, the proposed project would drill approximately 50 new oil wells at the Pumpkin Patch site and approximately 70 new oil wells at the LCWA site. As oil resources are located in vast subsurface deposits that can be withdrawn from various locations, the project would prevent the loss of availability of a known mineral resource of value to the region and state. Although ,the proposed project would allow for the continued ability to extract a known mineral resources that is of value to the region and the state, impacts associated with project implementation will be evaluated in the EIR.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less Than Significant. According to the California Geological Survey, the project site has been in an area identified as a Mineral Resource Zone 3 (MRZ-3), which indicates the area contains mineral deposits the significance of which cannot be evaluated from available data (CGS, 1982). Although, the proposed project would allow for the continued ability to extract mineral resources from the project sites, the project’s potential to result in the loss of availability of a locally important mineral resource recovery site will be evaluated in the EIR.

References

California Geological Survey (CGS), *Generalized Aggregate Resource Classification Map San Gabriel Valley and Adjacent Production –Consumption Regions*, ftp://ftp.consrv.ca.gov/pub/dmg/pubs/sr/SR_143/PartIV/Plate_4-1.pdf, 1982, accessed January 8, 2016.

4.12 NOISE

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

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

Potentially Significant Impact. The project sites are located within a predominantly urbanized area that contains various sources of noise. The most predominate noise within the project area is associated with traffic from roadways. Existing on-site noise sources include vehicle noises, maintenance activities and other noises associated with the operation of oil fields on the Synergy Oil Field and City Property sites. The LCWA site is mostly undeveloped. The Pumpkin Patch is mostly undeveloped with the exception of one operating oil well and is currently used for seasonal sales of pumpkins and Christmas trees. The LCWA site is undeveloped and is used on a temporary lease basis for equipment storage and stage.

During project construction activities, the use of heavy-duty equipment would generate noise on a short-term basis. Implementation of the proposed project would introduce new uses to the sites, and noise levels from on-site sources would increase over existing conditions. The project may generate additional vehicle trips from the establishment of the visitors' center and public access enhancements at the Synergy Oil Field site that could contribute to noise levels. The proposed project's potential to result in exposure to noise levels in excess of standards established in the local General Plan or noise ordinance or applicable standards of other agencies will be evaluated in the EIR.

b) **Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?**

Potentially Significant Impact. Construction of the proposed project could generate groundborne noise and vibration associated with the removal and abandonment of the existing oil wells; the drilling of 120 new oil wells; the construction of a two-story office building, a 9,750-square-foot storage/warehouse building, and two SCE substations; and the relocation of existing oil production facilities. As such, the proposed project would have the potential to generate and expose people to excessive groundborne vibration and noise levels during short-term construction activities. The proposed project's potential to result in the exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels will be evaluated in the EIR.

c) **Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

Potentially Significant Impact. As discussed in Section .12 (a), the proposed project would introduce new uses to the project area, and noise levels from on-site sources and potentially increased traffic levels could increase during project operation. The proposed project's potential to result in a substantially permanent increase in ambient noise levels in the project vicinity above levels existing without the project will be evaluated in the EIR.

d) **Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?**

Potentially Significant Impact. As discussed in Section 4.12(a) above, construction activity generated by the proposed project would have the potential to temporarily or periodically increase ambient noise levels above existing levels. Development of new uses as a result of the proposed project would also potentially increase noise levels. The proposed project's potential to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project will be evaluated in the EIR.

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

No Impact. The proposed project is not located within a public airport or public use airport. However, the project is located within the airport influence area of the Joint Forces Training Base Los Alamitos which is privately owned by the federal government (Orange County, 2016). Because the proposed project is not located within a public airport land use plan it will not expose people residing or working in the area to excessive noise levels from public use airports and this issue will not be evaluated in the EIR.

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

Potentially Significant Impact. As discussed in Section 4.8 (f), the project site are located within the one mile of the Boeing Seal Beach (rooftop) Heliport, to the east of the project site, within the City of Seal Beach. Further, the proposed project is located within the airport influence area of the Joint Forces Training Base Los Alamitos (Orange County, 2016). The proposed project's potential to expose people residing or working in the project area to excessive noise due to proximity to a private airstrip will be evaluated in the EIR.

4.13 POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a) **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Potentially Significant Impact. The proposed project would provide temporary new employment to the area during the removal and abandonment of the pipelines and tanks at the Synergy Oil Field, and over time, the removal and abandonment of oil wells at the Synergy Oil Field and City Property sites. Further construction phases at these sites would include construction and implementation of public access improvements, such as a parking lot on existing disturbed areas and the conversion of an existing structure for use as a visitors’ center. Construction of a two-story office building and associated parking, drilling of 50 new oil wells, and construction and operation of oil production facilities, located at the Pumpkin Patch site would require temporary construction workers and minimal long-term employees. Similarly, construction activities at the LCWA site would include drilling approximately 70 new oil wells and construction of associated oil production equipment, which would require temporary construction employees and minimal long-term employees. Construction jobs are anticipated to be filled by residents in the local area or by commuters within the larger Los Angeles Metropolitan Area. The proposed project’s potential to induce a substantial population growth to the area as a result of construction activities will be evaluated further in the EIR.

Employment opportunities during operation of the proposed project would be mainly operation of the oil wells and associated production facilities, and operation of the visitors’ center; these are not anticipated to directly increase the population or housing in the area, as positions are anticipated to be filled by local residents or regional commuters. The proposed project’s potential to induce population growth during the operation of the proposed project will be evaluated in the EIR.

Indirect growth from extension of roads and infrastructure would not be anticipated, as the proposed project would not add any new roadways and would be served by existing infrastructure with minor proposed upgrades and connections to accommodate the

proposed project. The proposed project's potential to induce indirect population growth through the extension of roads and infrastructure will be evaluated in the EIR.

b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project is not sited on lands that contain housing units. Therefore, implementing the proposed project would displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. The proposed project's potential to displace substantial numbers of housing units will not be evaluated in the EIR.

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

No Impact. Refer to response in Section 4.13(b), above. The proposed project's potential to displace substantial numbers of people necessitating replacement housing elsewhere will not be evaluated in the EIR.

4.14 PUBLIC SERVICES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a) **Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:**

i) **Fire protection?**

Potentially Significant Impact. Local fire protection and prevention services (and paramedic services) within the City are provided by the City of Long Beach Fire Department (LCFD) (City of Long Beach, 2016). The LBFD operates 22 fire stations throughout the City. There two stations that would potentially serve the project site, Long Beach Fire Dept. Station 14 located at 5200 E. Eliot Street and Fire Station 8, located at 5365 E. 2nd Street. The proposed project would be designed to meet modern fire safety codes, including access requirements and fire suppression and emergency response systems. The LBFD would check and review site design plans for compliance with appropriate safety codes prior to construction.

Development of the proposed project would increase the daytime visitor and employee population. The proposed project’s potential to adversely impact fire protection services will be evaluated in the EIR.

ii) **Police protection?**

Potentially Significant Impact. The Long Beach Police Department (LBPD) provides police protection services and emergency services to the project site and the surrounding area. The LBPD consists of over 800 sworn personnel and has a total staff of 1,200 personnel. There are three LBPD patrol stations: North Patrol Division, East Patrol

Division and West Patrol Division (LAPD, 2016). The East Patrol Division is located closest to the project site, approximately 3.6 miles northwest of the project site at 3800 E. Willow Street. The proposed project's potential to adversely impact police protection services will be evaluated in the EIR.

iii) Schools?

No Impact. The proposed project would not include the development of any residential land uses. However, during construction of the proposed project, it is expected that most of these workers would live in the region and would commute to the project site from where their children are already enrolled in school. Even if these workers came from out of the area, they would likely return to their out-of-town residences once the facilities were built and would not take their children out of their current schooling situation. Therefore, substantial temporary increases in population that would adversely affect local school populations are not expected. During operation of the proposed project, the number of employees is not expected to increase significantly over existing operations, and no impact on schools is anticipated. The proposed project's potential to adversely impact schools will not be evaluated in the EIR.

iv) Parks?

No Impact. Recreational facilities and programs in the City of Long Beach area provided by Long Beach Parks, Recreation and Marine Department (PRM). Within the City, there are 162 parks with 26 community centers, two historic sites, two major tennis courts and one golf course (PRM, 2016). The proposed project would restore and remediate the Synergy Oil Field and City-owned property and create a passive open space recreation area with a visitors' center and public access trail. The proposed project's potential to adversely impact parks will not be evaluated in the EIR.

v) Other public facilities?

No Impact. The Long Beach Public Library provides library services to the City of Long Beach. The proposed project would not include any residential land uses or any land uses that would induce a substantial permanent population. The proposed project's potential to adversely impact libraries will not be evaluated in the EIR.

References

City of Long Beach Fire Department, official website, <http://www.longbeach.gov/fire/>, accessed January 8, 2016.

City of Long Beach Police, official website, <http://www.longbeach.gov/police/contact-us/contact-us/>, accessed January 8, 2016.

City of Long Beach Parks, Recreation and Marine (PRM), official website, <http://www.longbeach.gov/park/>, accessed January 8, 2016.

4.15 RECREATION		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
<i>Would the project:</i>					
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a) **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?**

Less Than Significant Impact The proposed project involves the implementation of a wetlands habitat restoration project to establish a wetlands mitigation bank, and the establishment of two new oil production sites. Although no new housing is proposed that would increase the residential population in the project vicinity, restoration of the project site would attract visitors to the site and has the potential to attract additional visitors to nearby sites as well.

The proposed project’s potential to increase the use of existing neighborhood and regional parks such that substantial physical deterioration of the facilities would occur or be accelerated will be evaluated in the EIR.

- b) **Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?**

Less Than Significant. The proposed project would include the construction of passive recreational amenities on the Synergy Oil Field site, including a visitors’ center and pedestrian trail. No adverse physical effects on the environment are anticipated, but the EIR will analyze the implementation of these two project components.

4.16 TRANSPORTATION AND TRAFFIC

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a) **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

Potentially Significant Impact. Construction of the proposed project has the potential to affect the transportation system through the hauling of excavated materials and debris, the transport of construction equipment, the delivery of construction materials, and travel by construction workers to and from the project sites. Although project operation will introduce new trips due to the visitors' center and pedestrian trail, these trips are not anticipated to occur during peak commuting hours, they will mostly be non-peak hour trips. The potential for the resulting increase in the use of the area's transportation facilities that could exceed roadway and transit system capabilities will be evaluated in the EIR.

- b) **Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?**

Potentially Significant Impact. The Metropolitan Transportation Agency (Metro) is responsible for implementing the Congestion Management Program (CMP) for the County of Los Angeles. The CMP is a State mandated program designed to address the impacts urban congestion has on local communities and the region as a whole. Metro adopted the most recent CMP in October 2010. The CMP for Los Angeles County requires an analysis of any project that could add 50 or more trips to any CMP intersection or more than 150 trips to a CMP mainline freeway location in either direction during either the AM or PM weekday peak hours. Implementation of the proposed project could generate additional short-term vehicle trips, which could potentially add more than 50 trips to a CMP roadway intersection or more than 150 trips to a CMP freeway segment. The proposed project's potential to conflict with an applicable congestion management program due to short-term vehicle trips will be evaluated in the EIR.

- c) **Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

Potentially Significant Impact The proposed project is located within the airport influence area of the Joint Forces Training Base Los Alamitos (Orange County, 2016). The proposed project's potential to result in a change in air traffic patterns will be evaluated in the EIR.

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

Potentially Significant Impact. The proposed project would include one roadway modification: the construction of a new driveway off of 2nd Street. This roadway improvement would have the potential to alter the existing circulation pattern in the project area, particularly during peak hours. This may substantially increase hazards in the project area, such as sharp curves or queuing, which may be considered a hazardous condition; thus, this potential impact and will be evaluated in the EIR.

- e) **Result in inadequate emergency access?**

Potentially Significant Impact. The proposed project could impact emergency access during construction activities due to the potential need for improvements to intersections and roadways in the project vicinity. Further, construction activities for the proposed project could generate traffic trips, which could temporarily increase the daily traffic volumes on local roadways and intersections. The proposed project's potential to result in inadequate emergency access will be evaluated in the EIR.

f) **Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?**

Less Than Significant. The project sites are served by several public transit options, including Long Beach Transit and Orange County Transit Authority (OCTA). Long Beach Transit operates bus routes 121, 131, and 171 along the Pacific Coast Highway, adjacent to the project site. OCTA operates bus routes number 1 along the Pacific Coast Highway adjacent to the project area. The City of Long Beach General Plan Mobility Element identifies a Class II Bike Lane along the Pacific Coast Highway, which runs along the western boundary of the project site (City of Long Beach, 2013). Project construction would not likely require the temporary closure of any streets, bus stops, or the Class II bike lane, but the proposed project's potential to conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities will be evaluated in the EIR.

References

City of Long Beach, *General Plan Mobility Element*,
<http://www.lbds.info/civica/filebank/blobdload.asp?BlobID=4112>, 2013, accessed
January 8, 2016.

4.17 UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Potentially Significant Impact. Wastewater service is provided by the Long Beach Water Department, which operates and maintains approximately 765 miles of sanitary sewer lines and delivers over 40 million gallons per day the Los Angeles County Sanitation Districts facilities. Wastewater generated by the proposed project would be delivered to the Joint Water Pollution Control Plan (JWPCP) of the Los Angeles County Sanitation District or to the Long Beach Water Reclamation Plan of the Los Angeles County Sanitation Districts (LBWRP) (City of Long Beach, 2016). The proposed project would increase the amount of wastewater generated on-site as a result of the new visitors' center that would be constructed, which may conflict with wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board. The proposed project's potential to conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board will be evaluated in the EIR.

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

Potentially Significant Impact. The proposed project would introduce a new visitors' center and new oil wells, both of which may increase the demand for water services compared to the existing water demand. The proposed project's potential to require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities will be evaluated in the EIR.

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

Potentially Significant Impact. Similar to the existing uses, the proposed project would consist of primarily pervious surfaces, and stormwater would either be absorbed into the ground or directed to on-site retention facilities, such as the well cellars, or run off into the Los Cerritos Channel or San Gabriel River. Temporary construction activities and long term operations could require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. The proposed project's potential to require or result in the construction of new storm water drainage facilities or expansion of existing facilities will be evaluated in the EIR.

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

Potentially Significant Impact. The potable water supply for the project site would be provided by the Long Beach Water Department, or other local water purveyor which uses groundwater, imported surface water and recycled supplies. Construction of the proposed project would use water for various purposes, such as dust suppression, mixing and pouring concrete, and other construction related activities. Typically, the majority of water used during construction is associated with dust suppression during grading and trenching, which is generally performed by water trucks. Water usage during construction would be temporary and not substantial and would not exceed the existing supply.

The proposed project would introduce a new visitors' center and 120 oil wells; both of these uses would require water for their operations. The proposed project's potential to have sufficient water supplies available to serve the project will be evaluated in the EIR.

- e) **Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

Potentially Significant Impact. The proposed project would introduce new land uses, such as a visitors' center, and would therefore induce additional population (e.g., users of the visitors' center) on-site, which may increase wastewater generated from the project. Therefore, the EIR will analyze the potential impacts associated with project wastewater generation and wastewater treatment capacity in the region.

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

Potentially Significant Impact. Construction of the proposed project would generate solid waste, including short-term construction debris and well cuttings from long-term operations. The materials that would be removed would be removed and disposed of at a local recycling facility equipped to handle construction debris in a timely manner and in accordance to all applicable laws and regulations. Further, debris associated with the removal and abandonment of the oil wells would be in accordance with the terms of the Surface Use Agreement which requires abandonment to a standard acceptable to the State of California Division of Oil, Gas, and Geothermal Resources. Further, the proposed project would introduce a new land use to the site, —a visitors' center and public access opportunities — which would increase the daytime population of visitors on-site. As a result of this increase in the daytime population and additional oil wells, the generation of solid waste on the project site would increase. Therefore, the EIR will evaluate waste generated by the project and planned solid waste disposal capacity for the region.

- g) **Comply with federal, state, and local statutes and regulations related to solid waste?**

Potentially Significant Impact. The proposed project would be required to comply with all applicable federal, state, County, and City statutes and regulations pertaining to solid waste disposal. This includes compliance with AB 939, the California Solid Waste Management Act, which requires each city in the state to divert at least 50 percent of their solid waste from landfill disposal through source reduction, recycling, and composting. AB 341 builds upon AB 939 and requires jurisdictions to implement mandatory commercial recycling with a statewide 75 percent diversion rate (from landfill disposal) by 2020. The proposed project's potential to conflict with federal, state, and local statutes and regulations related to solid waste will be evaluated in the EIR.

References

City of Long Beach Water Department, official website, <http://www.lbwater.org/sewage-treatment>, accessed January 8, 2016.

4.18 MANDATORY FINDINGS OF SIGNIFICANCE

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

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

Potentially Significant Impact. As discussed above, the proposed project could impact the habitat of fish or wildlife spaces, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of rare or endangered plant or animal. Moreover, the proposed project could result in potentially significant impacts with regard to historic and cultural resources. The EIR will analyze and document such potentially significant impacts.

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

Potentially Significant Impact. The potential for cumulative impacts occurs when the independent impacts of the proposed project are combined with impacts from other developments to result in impacts that are greater than the impacts of the proposed project alone. Located within the vicinity of the project site are other current and reasonably foreseeable projects whose development, in conjunction with that of the proposed project,

may contribute to potential cumulative impacts. Impacts of the project's construction and implementation on a both individual and cumulative basis will be addressed in the EIR for the following subject areas: aesthetics, air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, public services (fire protection, police protection and parks), recreation, transportation and traffic, and utilities and service systems.

With regard to cumulative effects for the issues of agriculture and forest resources, population and housing, and other public services (schools and libraries) as well as parks and recreation, the proposed project would not combine with related projects or other cumulative growth to result in significant cumulative impacts. With regard to agricultural and forest resources, the proposed project would have no impact to these resources and would not combine with other projects to result in cumulative impacts. With regard to population and housing, schools, libraries, and other recreational facilities, the proposed project would not include permanent or temporary housing, and thus would not increase the permanent population of the area, and would not directly contribute to population growth, and the need for schools, and libraries within the project site vicinity. Therefore, cumulative impacts for these subject areas would be considered less than significant and will not be evaluated in the EIR.

c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impacts. The proposed project could result in potentially significant impacts with regard to aesthetics, air quality, biological resources, cultural resources, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, public services (fire protection, police protection and parks), recreation, transportation and traffic, and utilities and service systems. These potential effects will be analyzed in the EIR.

