



Existing Conditions vs. Proposed Project

Beach Oil Minerals Partners (BOMP) is proposing the Los Cerritos Wetlands Oil Consolidation and Restoration Project (Project) on four parcels within southeast Long Beach, California. These parcels include the Synergy Site, City Property, Pumpkin Patch, and LCWA site. An identification of the existing conditions and itemization of what is proposed on each parcel is provided in Table 1 below.

Table 1: Existing Conditions and Proposed Project on Each Parcel

Project Site	Existing Conditions	Proposed Project
Synergy Site (~150 acres)	<ul style="list-style-type: none"> • 39 wells • ~66,000 linear feet of pipelines • 2 tank farms • Misc. oil facilities and distribution lines • Los Cerritos Wetlands (Steamshovel Slough) • Bixby Ranch building 	<ul style="list-style-type: none"> • Removal of oil operations (wells, pipelines, tank farms and misc. oil facilities and distribution lines) • Remediation of contamination • Restoration of wetlands • Establishment of non-wasting endowment for long term wetlands monitoring and maintenance • Creation of public access • Establishment of visitors center • Transfer of property to LCWA • Establishment of perimeter sidewalks and bike lanes
City Property (~33 acres)	<ul style="list-style-type: none"> • 13 wells • ~21,000 linear feet of pipelines • 1 tank farm • Misc. oil facilities and distribution lines • Los Cerritos Wetlands (Marketplace Marsh) 	<ul style="list-style-type: none"> • Removal of oil operations (wells, pipelines, tank farm and misc. oil facilities and distribution lines) • Remediation of contamination • Operation of new pipeline and utility corridor • Establishment of perimeter sidewalks and bike lanes
Pumpkin Patch (~7 acres)	<ul style="list-style-type: none"> • 1 well • ~1,000 linear feet of pipelines • Los Cerritos Wetlands (back 2 acres) • Seasonal sale of pumpkins and Christmas trees (front 5 acres) 	<ul style="list-style-type: none"> • Removal of oil operations (well and pipelines) • Restoration of wetlands (back 2 acres) • Operation of new office building and warehouse • Operation of 50 new wells (production, water injection and water source wells) • Operation of new oil processing facilities • Operation of new microgrid components (EV charging station and solar panels) • Providing of perimeter landscaping • Establishment of perimeter sidewalks and bike lanes • Establishment of bike station at PCH and River Channel • Establishment of entry monument
LCWA Site (~5 acres)	<ul style="list-style-type: none"> • Leased for storage and staging 	<ul style="list-style-type: none"> • Operation of 70 new wells (production, water injection and water source wells) • Operation of new oil processing facilities • Operation of new microgrid components (natural gas turbine system) • Providing of perimeter landscaping • Establishment of perimeter sidewalks and bike lanes • Transfer of property from LCWA to BOMP

Los Cerritos Wetlands Oil Consolidation and Restoration Project
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The Newport-Inglewood earthquake fault also traverses the area, and is located on the Synergy site and City Property. Both the existing oil operations and the proposed project include pipeline components which cross the earthquake fault. However, and as itemized in Table 2 below, the proposed project incorporates state of the art leak detection, automatic shutdown mechanisms and adequate containment, whereas these features are absent in the existing operations.

Table 2: Existing Conditions and Proposed Project Relative to Newport-Inglewood Fault

	Existing Conditions	Proposed Project
Total pipeline length	~ 17 miles	~ 2,200 feet
Number of earthquake fault crossings	12 (8 on Synergy Site, 4 on City Property)	1 (on City Property)
Design conditions	Typically, old California standards dictated 10 – 20% lateral load was added to foundation designs to deal with earthquakes.	The pipeline is designed to withstand a 7.0 magnitude earthquake. Under current standards, and based on the results of the soil report, 50 - 70% lateral loading will be added to foundation designs.
Is leak detection provided?	No	Yes. Includes 3 fiber optic lines. Also, the water injection, gathering and dry oil lines would have a secondary leak detection system monitoring pipeline flow, pressure and temperature.
Does the facility have automatic shutdown mechanisms?	No	Yes. The proposed leak detection systems would generate a signal causing emergency shutdown valves on both the Pumpkin Patch and LCWA sites to close.
Assumed length of time to shut off all flow following a major spill event.	~ 70 minutes ¹	~ 5 minutes
Gallons released before full shutdown (assuming peak production rates)	90,000 gallons	30,816 gallons
Is pipeline containment provided?	No	Yes. The proposed pipeline would be surrounded by a 12" earthen berm on both sides. The containment trench would be designed to contain approximately 140,000 gallons, or 75% larger than the maximum assumed fluid release.
¹ This assumes two workers are available onsite, and it would take approximately 30 minutes to detect a spill and manually shut down the first 2 wells. Thereafter, two wells could be shut down every 5 minutes until all wells are off.		

As above, the existing pipelines are currently located throughout the Los Cerritos Wetlands, and cross the earthquake fault in twelve locations, as compared to the proposed project which crosses the fault in one location. The proposed project includes state of the art leak detection and automatic shutdown valves to minimize the volume spilled; these features are absent in the existing operations. The project includes ample containment, and the spilled volume would be removed via vacuum trucks. As the existing pipelines do not have containment, any spilled fluids would spread unimpeded through the wetlands. Given that the proposed pipeline is designed to withstand a magnitude 7.0 earthquake, and incorporates leak detection, automatic shutdown and adequate containment, it represents a much safer scenario than the existing conditions.