#### CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE 725 FRONT STREET, SUITE 300 SANTA CRUZ, CA 95060 PHONE: (831) 427-4863 FAX: (831) 427-4877 WEB: WWW.COASTAL.CA.GOV



# Th14a

### 9-18-0395 (Beach Oil Minerals)

**DECEMBER 13, 2018** 

#### **APPENDIX**

#### **Table of Contents**

Appendix A – Substantive File Documents

Appendix B – Revised City of Long Beach LCP Policies for SEADIP

Appendix C – Memo from Dr. Jonna Engel Re: Wetlands and ESHA at the Los Cerritos Wetlands Oil Consolidation and Restoration Project Sites.

#### APPENDIX A: SUBSTANTIVE FILE DOCUMENTS

#### **Coastal Development Permit Application and Associated Documents:**

Beach Oil Minerals, Application for CDP 9-18-0395, dated May 4, 2018.

Beach Oil Minerals, Response to Notice of Incompleteness and Supplemental Materials, submittals dated August 27, 2018, August 30, 2018, September 13, 2018, September 28, 2018, October 12, 2018, October 22, 2018, November 1, 2018, November 2, 2018, November 3, 2018, November 6, 2018, November 16, 2018 and November 19, 2018.

City of Long Beach, Application for Local Coastal Program Amendment LCP-5-LOB-18-0026-1, dated February 26, 2018 and Response to Notice of Incompleteness, submitted April 17, 2018.

#### **Environmental Documents:**

City of Long Beach, Final EIR for the Los Cerritos Wetlands Oil Consolidation and Restoration Project, November 2017.

City of Long Beach, *Draft EIR for the Los Cerritos Wetlands Oil Consolidation and Restoration Project*, July 2017.

#### **Coastal Commission Documents:**

Final Adopted Findings for LCP-5-LOB-18-0026-1 (City of Long Beach)

Staff recommendation for CDP E-96-14 (December 10, 1997)

#### **Published Articles and Reports:**

Branum, D., R. Chen, M. Petersen and C. Wills, 2016. *Earthquake Shaking Potential for California*, California Geological Survey Map Sheet 48.

California Council on Science and Technology (CCST), 2015. *An Independent Scientific Assessment of Well Stimulation in California: Well Stimulation Technologies and their Past, Present, and Potential Future use in California*, July 2015. <a href="https://ccst.us/wp-content/uploads/2015SB4summary.pdf">https://ccst.us/wp-content/uploads/2015SB4summary.pdf</a>

California Department of Conservation, 2018. *California Statutes and Regulations for the Division of Oil, Gas, & Geothermal, DOGGR Publication No. PRC10, November 2018.* 

California Geological Survey (CGS), 1999. Earthquake Zones of Required Investigation, Los Alamitos Quadrangle. Seismic Hazard Zones Official Map, released March 25, 1999.

California Ocean Protection Council, Rising Seas in California: An Update on Sea-Level Rise Science, April 2017. <a href="http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf">http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf</a>

California Ocean Protection Council, State of California Sea-Level Rise Guidance, 2018 Update: <a href="http://www.opc.ca.gov/webmaster/ftp/pdf/agenda\_items/20180314/Item3\_Exhibit-A\_OPC\_SLR\_Guidance-rd3.pdf">http://www.opc.ca.gov/webmaster/ftp/pdf/agenda\_items/20180314/Item3\_Exhibit-A\_OPC\_SLR\_Guidance-rd3.pdf</a>

Field, E.H., Biasi, G.P., Bird, P., Dawson, T.E., Felzer, K.R., Jackson, D.D., Johnson, K.M., Jordan, T.H., Madden, C., Michael, A.J., Milner, K.R., Page, M.T., Parsons, T., Powers, P.M., Shaw, B.E., Thatcher, W.R., Weldon, R.J., II, and Zeng, Y., 2013. *Uniform California earthquake rupture forecast, version 3 (UCERF3)—The time-independent model*. U.S. Geological Survey Open-File Report 2013–1165, California Geological Survey Special Report 228, and Southern California Earthquake Center Publication 1792, http://pubs.usgs.gov/of/2013/1165/.

Griggs, G, Árvai, J, Cayan, D, DeConto, R, Fox, J, Fricker, HA, Kopp, RE, Tebaldi, C, Whiteman, EA (California Ocean Protection Council Science Advisory Team Working Group). Rising Seas in California: An Update on Sea-Level Rise Science. California Ocean Science Trust, April 2017.

Honegger D.G. and Nyman, D.J, 2017. *Pipeline Seismic Design and Assessment Guideline*, Pipeline Research Council International, Inc., Catalog No. L51927-R01.

Hough, S.E., and M. Page (2016). Potentially induced earthquakes during the early twentieth century in the Los Angeles Basin. *Bulletin of the Seismological Society of America* 106 (6): 2419-2435.

https://doi.org/10.1785/0120160157

Jurrmain, Claudia and William McCawley, "O, My Ancestor." Heyday Books, Berkeley California and Rancho Los Alamitos Foundation, Long Beach, California. 2009.

Koerper, Henry, "An Unusual Ritual Cache from CA-ORA-263, Seal Beach, California." Proceedings for the Society for California Archeology, Volume 19, 2006.

Leeper, R. B. Rhodes, M. Kirby, K. Scharer, J. Carlin, E. Hemphill-Haley, S. Avnaim-Katav, G. MacDonald, S. Starratt and A. Aranda, 2017. Evidence for coseismic subsidence events in a southern California coastal saltmarsh. *Scientific Reports* 7, 44615; doi: 10.1038/srep44615.

National Earthquake Hazards Reduction Program (NEHRP), 2015. *Recommended Seismic Provisions for New Buildings and Other Structures, 2015 Edition.* FEMA Publication P-1050-1. Prepared by the Building Seismic Safety Council of the National Institute of Building Sciences for the Federal Emergency Management Agency.

Parrish, J., 2018. *The 1933 Long Beach Earthquake*. Summary and Fact Sheet, California Department of Conservation,

https://www.conservation.ca.gov/cgs/Pages/Earthquakes/LongBeach.aspx. Accessed November 26, 2018.

Petersen, M.D., M.P. Moschetti, P.M. Powers, C.S. Mueller, K.M. Haller, A.D. Frankel, Y. Zeng, S. Rezaeian, S.C. Harmsen, O.S. Boyd, E.H. Field, R. Chen, N. Luco, R.L. Wheeler, R. A. Williams, A.H. Olsen and K.S. Rukstales, 2015. *Seismic-hazard maps for the conterminous United States*, 2014. U.S. Geological Survey Scientific Investigations Map 3325, <a href="http://dx.doi.org/10.3133/sim3325">http://dx.doi.org/10.3133/sim3325</a>.

Sahakian, V., J. Bormann, N. Driscoll, A. Harding, G. Kent, and S. Wesnousky, 2017. Seismic constraints on the architecture of the Newport-Inglewood/Rose Canyon fault: Implications for the length and magnitude of future earthquake ruptures. *Journal of Geophysical Research – Solid Earth* 122, 2085-2105, doi:10.1002/2016JB013467.

Walsh III, F.R., and M.D. Zoback, 2015. Oklahoma's recent earthquakes and saltwater disposal. *Scientific Advances* 1(5), e1500195, DOI: 10.1126/sciadv.1500195.

2007 Working Group on California Earthquake Probabilities (WGCEP), 2008. *The Uniform California Earthquake Rupture Forecast, Version 2* (UCERF 2). U.S. Geological Survey Open-File Report 2007-1437 and California Geological Survey Special Report 203, <a href="http://pubs.usgs.gov/of/2007/1091/">http://pubs.usgs.gov/of/2007/1091/</a>.

#### Other:

American Society of Civil Engineers (ASCE), 2017. *Minimum Design Loads and Associated Criteria for Buildings and Other Structures*, ASCE Standard ASCE/SEI 7-16, Sections 21.2.1 and 21.2.2.

American Society of Mechanical Engineers (ASME), 2016. *Transportation Systems for Liquid Hydrocarbons and Other Liquids*, ASME Standard B31.4.

American Society of Mechanical Engineers (ASME), 2016. *Gas Transmission and Distribution Piping Systems*, ASME Standard B31.8.

City of Long Beach, 2018. *Subsidence*. Online fact sheet, <a href="http://www.longbeach.gov/lbgo/about-us/oil/subsidence/">http://www.longbeach.gov/lbgo/about-us/oil/subsidence/</a>, accessed November 26, 2018.

D.G. Honegger Consulting (Honegger), 2016. *Summary of Efforts to Support the Los Cerritos Wetlands Oil Consolidation Project*, letter provided to P.D. Zak, Beach Oil Mineral Partners, signed by D. G. Honegger, December 21, 2016.

Los Cerritos Wetlands Oil Consolidation and Wetlands Restoration Project White Paper, *Water Injection*, February 2017.

Los Cerritos Wetlands Oil Consolidation and Wetlands Restoration Project White Paper, *Induced Seismicity*, February 2017.

Personal Communication from Fred Greve to Alison Dettmer, dated 11/2/18.

Personal Communication from Jonna Engel to Kate Huckelbridge, dated 10/31/18.

Personal Communication from Michael di Sano to Kate Huckelbridge, dated 10/16/18, 10/19/18, 10/23/18, 10/29/18, 10/31/18, 11/1/18, 11/5/18, 11/14/18, 11/16/18, 11/19/18

Personal Communication from Rebecca Robles to Kate Huckelbridge, California Coastal Commission, dated 7/19/18.

Tongva Nation Map, compiled by Militant Angeleno, submitted to staff as part of tribal consultation with the Gabrieleno-Tongva tribe.

### APPENDIX B

## SOUTHEAST AREA DEVELOPMENT AND IMPROVEMENT PLAN (SEADIP) (PD-1)

Ordinance History: C-5328, 1977; C-5336, 1977; C-5501, 1979; C-6058, 1984, C-6058, 1987; C-6424, 1987; C-6425, 1987; C-6448, 1987; C-7528, 1998; C-7625, 1999; C-7904, 2004; 06-0001, 2006; 18-0001, 2018;

The Southeast Area Development and Improvement Plan provides for a total community of residential, business and light industrial uses integrated by an extensive system of parks, open space, and trails. The residential areas shall be family-oriented; the predominant type shall be sales units, although provision is also made for moderately priced apartments as well as luxury condominium units. In reviewing and approving site plans and tract maps for the development of the areas within the City of Long Beach, the City Planning Commission shall be guided by the goals and policies of the Specific Plan and the Commission shall not permit variance from those standards unless it finds that such variance meets the intent of the original standards and is consistent with the overall goals and objectives of the adopted Specific Plan.

Portions of this SEADIP (i.e., the non-wetland portions) are part of the City's Local Coastal Program (LCP). The LCP guides development in the City's coastal zone in accordance with the California Coastal Act. The following Coastal Act policies are hereby incorporated into SEADIP.

#### A. LAND USE POLICIES

- All development shall ensure that marine resources are maintained, enhanced and where feasible, restored.
- 2. All development shall maintain, and, where feasible, restore the biological productivity and the quality of coastal waters, streams, wetlands, estuaries and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.
- All development shall provide protection against the spillage of crude oil, gas, petroleum products, or hazardous substances. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.
- 4. Development involving the diking, filling, or dredging of open coastal waters, wetlands (as defined in Coastal Act Section 30121), and estuaries shall be permitted in accordance with other applicable provisions of this LCP where there are no feasible less environmentally damaging alternatives, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following types of development:
  - a. New or expanded energy facilities.
  - Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
  - c. In open coastal waters, other than wetlands, including streams, and estuaries new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
  - d. Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

- Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
- Restoration purposes.
- g. Nature study, aquaculture, or similar resource-dependent activities.

Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.

In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary.

Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this LCP, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

- Environmentally sensitive habitat areas, as defined in Coastal Act Section 30107.5, shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.
- All development that would adversely impact archaeological or paleontological resources shall include reasonable mitigation measures.
- 8. The scenic and visual qualities of coastal areas shall be considered and protected. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of the surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.
- All development shall minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- 10. All development shall assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.
- 11. All development shall minimize energy consumption and vehicle miles traveled.
- 12. Where coastal—dependent industrial facilities or new or expanded oil development cannot feasibly be accommodated consistent with other policies of SEADIP, it may nonetheless be permitted if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

- 13. Oil and gas development shall be permitted in accordance with Section 12, if the following conditions are met:
  - a. The development is performed safely and consistent with the geologic conditions of the well site.
  - b. New or expanded facilities related to that development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.
  - c. The development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence.
  - d. With respect to new facilities, all oilfield brines are reinjected into oil-producing zones unless the Division of Oil and Gas of the Department of Conservation determines to do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental 42 risks. Exceptions to reinjections will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provision is made for the elimination of petroleum odors and water quality problems.
- 14. Where appropriate, developers shall be required to initiate monitoring programs to record land surface and near-shore ocean floor movements in locations of new large-scale fluid extraction on land before operations begin and shall continue until surface conditions have stabilized. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.
- 15. Nothing in this LCP shall affect the activities of any state agency that is responsible for regulating the extraction, production, or transport of oil and gas.

#### B. PROVISIONS APPLYING TO ALL AREAS

- Homes and offices shall be oriented toward open space, green belts and water wherever possible. Vehicular access shall generally be provided from the side opposite these natural amenities.
- Areas, which are designated for single-family detached dwellings, shall be developed in accordance with R-1-N standards. However, if the area is to be re-subdivided, lot size and lot width and setback may be reduced provided that adequate common open space and guest parking are provided, and that the design is consistent with the adjacent residential development.
- 3. Prior to issuance of a building permit, all infrastructure, including street improvements, fire hydrants, water lines, storm drains, and sanitary sewers shall be constructed on a block basis in accordance with the approved plans. Such improvements, including engineering plans, shall be financed by subdivider(s) or by an assessment district or both.
- 4. A minimum of thirty percent of the site shall be developed and maintained as usable open space (building footprint, streets, parking areas and sidewalks adjacent to streets shall not be considered usable open space) except in oil production areas where public safety and operational concerns require limiting access. Bicycle and pedestrian trails not included within the public right-of-way may be considered usable open space). All buildings shall be set back a minimum of twenty feet from all public streets and a wider setback may be required by

- individual subarea. Within this minimum twenty-foot setback area, a strip having a minimum width of ten feet and abutting the street shall be attractively landscaped.
- 5. The maximum height of buildings shall be 30 feet for residential and 35 feet for non-residential uses, unless otherwise provided herein.
- 6. Minimum parking for each residential unit shall be the same as required Citywide by the zoning regulations; except that, in that part of SEADIP within the coastal zone, coastal zone standards shall apply. Minimum parking for commercial and industrial uses shall be provided in accordance with parking standards as specified in the zoning regulations.
- Navigable waterways shall not be extended unless it can be demonstrated that such extension will not have an adverse impact on water quality and boat traffic.
- 8. All developments shall be open and inviting to the public except in industrial and oil production areas where public safety concerns require limiting access. Specifically, the public shall not be excluded from use of private streets and bicycle and pedestrian trails, although the public may be excluded from private yard areas, from private recreation areas designed for the use of residents of the development, and from private drives serving parking lots and garage structures reserved for residents and their guests.
- 9. All development shall be designed and constructed to be in harmony with the character and quality of surrounding development so as to create community unity within the entire area.
- 10. Developers shall construct public open space, trails, pathways and bicycle trails for each development in such a manner that they will be generally accessible to the public and that they will interconnect with similar facilities in adjacent developments so as to form an integrated system of open space and trails connecting major points of destination.
- 11. Public access shall be provided to and along the boundaries of all public waterways as provided for in the wetlands restoration plan.
- 12. Public views to water areas and public open spaces shall be maintained and enhanced to the maximum extent possible, consistent with the wetlands restoration plan.
- 13. Adequate landscaping and required irrigation shall be provided to create a park-like setting for the entire area. A landscaped parkway area shall be provided along all developments fronting on Pacific Coast Highway, 2nd Street, Studebaker Road, Seventh Street and Loynes Drive.
- 14. No additional curb cuts shall be permitted on Pacific Coast Highway, 2nd Street, Studebaker Road, or Seventh Street, unless it can be shown that inadequate access exists from local streets, or unless specifically permitted by Subarea regulations provided herein. This restriction shall not preclude the provision of emergency access from these streets as may be required by the City.
- 15. All utility lines shall be placed underground and utility easements shall be provided as required unless waived by the Commission on the advice of the Director of Public Works.
- 16. Developers shall construct, in accordance with plans approved by the Director of Public Works, all necessary sanitary sewers to connect with existing public sewers, and shall provide easements to permit continued maintenance of these sewers by the City where the City accepts responsibility for such maintenance.

- 17. Developers shall construct, in accordance with plans approved by the Director of Public Works, all new streets and ways within the area. All streets and ways will include:
  - a. Roadway pavement, curbs and sidewalks approved by the Director of Public Works. The sidewalk requirement may be waived or the sidewalk may be combined with an enlarged bicycle trail in such cases where the Commission and the Director of Public Works determine that an independent sidewalk is not required for pedestrian convenience and safety.
  - b. Water lines approved by the General Manager of the Water Department.
  - Fire hydrants approved by the Fire Chief and the General Manager of the Water Department.
  - d. Street lighting using low energy luminaries as approved by the Director of Public Works.
  - e. Storm drainage approved by the Director of Public Works.
  - f. Street trees approved by the Manager of the Park Bureau.
  - Street signs and pavement traffic markings approved by the Director of Public Works.
  - in. All traffic control devices required by the Director of Public Works.
- 18. Developers shall improve and dedicate to the City certain streets, recreation areas and other public facilities necessary to support the proposed private development, as specified by area in subsequent paragraphs. If any such required improvements are found by the Commission to be infeasible or undesirable for engineering, legal or other reasons, the Commission may accept alternative improvements proposed by the developer so long as they meet the intent of the original requirements and are consistent with the overall goals and objectives of the adopted Specific Plan. Developers shall make such improvements or furnish security in connection with such improvements prior to commencement of construction of adjacent areas, which the improvements are designed to support; improvements may be phased with the phased construction of such adjacent areas. In those cases where the developer is to dedicate land area for subsequent improvement by the City, the developer shall not be required to convey such area until the City has budgeted funds for the improvements.
- 19. Developers shall make provision for the continued private maintenance of all common areas that are not to be dedicated and accepted by the City, and of all ways not to be dedicated and accepted by the City, including maintenance of street lighting, walks, curbs, storm drainage, water lines, fire hydrants, and street trees. Such provisions shall be perpetuated by their inclusion in the covenants, conditions, and restrictions of the property owners.

## C. RESPONSIBILITY FOR CONSTRUCTION AND MAINTENANCE OF WETLANDS AND BUFFERS

#### The Wetlands

1. The wetlands and associated habitats, and all fresh, brackish and tidal water supply and control systems shall be constructed at the expense of the developers of Areas 11a, 25 and 26, unless otherwise provided for by agreements between land owners and the managing agency. The developer(s) of commercial uses on Subareas 11a and 25 shall be responsible for wetlands development of Subareas 23 and 33, respectively. The developer(s) of Area 26 shall be responsible for wetlands development of Area 27.

- 2. Owing to the need to make connections with the existing tidal marsh, the major wetlands restoration project between Los Cerritos Channel and 2nd Street shall be accomplished in accordance with a wetlands restoration plan approved by the City and State and federal resource agencies. Restoration of wetlands north of the Los Cerritos Channel and south of the San Gabriel River need not be accomplished concurrently with the major restoration project, or with each other, however, prior to the issuance of permits for residential or commercial development in Areas 25 or 26, each applicant shall develop a detailed phasing plan that assures that restoration of wetlands north of the Los Cerritos Channel and south of the San Gabriel River will be completed prior to or concurrently with the completion of urban development. Said detailed phasing plans shall be submitted for approval to the agency responsible for granting the coastal permit.
- 3. The standard of wetlands restoration for Area 11a and 33 is that it shall be completed pursuant to a wetlands restoration plan approved by the City, State and federal resource agencies. The approved wetlands restoration plan shall include a description of the habitats to be restored, and a phasing plan for implementation. Prior to or concurrently with upland development on related areas. This standard of wetlands restoration for wetlands north of the Los Cerritos Channel and south of the San Gabriel River may be satisfied by using one of the following options:
  - a. Percentage Option. Whenever part of the development acreage is built upon, an equal percentage of the future wetland acreage will be developed as wetlands; and
  - Acre-for-Acre Option. For every acre of wetland identified for fill and/or consolidation under the Local Coastal Plan that will be covered by the development, the developer shall improve one acre of wetland.
- 4. Exceptions to this standard may arise in Areas 25, 26 and 27 where continuing oil operations and/or leasing problems may make it impossible to fulfill part of a permanent wetlands obligation in connection with upland developments. In such instances (and only in such instances), the following method of fulfilling the wetland obligation may be utilized.
  - a. The developer must first develop wetlands on all areas designated for wetlands, which are not encumbered, by active oil operations and/or leases
  - b. If the full wetlands obligation is not satisfied thereby, this obligation may be fulfilled by construction of interim wetland areas as a temporary wetlands restoration measure. If such an interim restoration alternative is needed, an interim wetlands restoration program may be developed for up to 8 acres of the total wetlands obligation for development of Parcel 26, and restoration of areas of Subareas 11a, 25, and 33 which are not encumbered by active oil operations or oil leases, where continuing oil operations and/or leasing problems may interfere with the total restoration program as set forth in the Wetlands Enhancement Plan. Such a program shall be subject to review and approval by the Executive Director of the California Coastal Commission in consultation with the Department of Fish and Game.

This alternate interim wetlands restoration program shall at minimum, include provisions that:

 Identify location and size of affected developable areas and proposed interim wetland areas, and provide for the construction of interim wetlands equal in productivity and size to areas filled. They shall be maintained for wildlife by the developer until such time as the major restoration program can be accommodated on encumbered lands.

- Provide for a monitoring system undertaken in conjunction with Department of Fish and Wildlife, assuring biological values of the interim wetlands.
- Where legally possible, place deed restrictions over the interim wetlands prohibiting development in such areas until the implementation of the primary restoration program.
- 4. Provide for the construction of the interim wetlands prior to or concurrently with the development of wetland areas of Areas 25 and 26 that cannot be directly mitigated by the acre-for-acre restoration option set forth in the land use plan.
- Insure that interim wetlands are to be viewed as temporary and shall not in any way be construed to increase the total wetland obligation within the study area. These areas may be converted to upland areas for development purposes upon completion of the primary restoration project.
- 6. When sufficient on-site acreage is not available, use of off- site acreage within the San Gabriel River Wetlands system may be permitted for interim wetlands, with such location of off-site interim wetlands being subject to the approval of the Executive Director of the California Coastal Commission in consultation with the Department of Fish and Wildlife.
- 5. If an owner/developer elects to utilize the temporary wetlands option to obtain permits and proceed with development, it is necessary to provide a mechanism, which will assure that monies for future construction of permanent wetlands to replace the temporary wetlands will be available when such permanent construction is imminent. This is particularly important in view of the fact that many years may separate the construction of the temporary and permanent wetlands, and that during that span of time, title may change several times and the obligation for permanent wetlands construction may become clouded or lost. Therefore, when an owner/developer utilizes the temporary wetlands option (in the limited circumstances described in #4 above), he/she must deposit monies in a Wetlands Restoration Fund, under the terms described below, (or provide other means to guarantee development of the permanent wetlands):
  - a. The construction assurance funds shall be deposited at the time the developer applies for construction permits for a temporary wetlands program;
  - The amount of the funds to be deposited shall be derived from the cost estimate referred to in Item 5c, below;
  - c. The first developer shall be responsible for the preparation of construction drawings, specifications, and cost estimates for the total wetland plan in his area. Such cost estimates shall include a contingency factor, which is normal and customary in projects of this magnitude and complexity. These shall be approved by the engineer of the local jurisdiction in consultation with the Department of Fish and Wildlife;
  - d. The Wetlands Restoration Fund shall be established by the City of Long Beach when the first assurance payment is imminent. The fund shall be established in an interest-bearing account. Interest shall accrue to the account. As much as possible, the account shall be managed to earn sufficient annual interest to match the annual increases in the Consumer Price Index for Southern California.

Monies shall be withdrawn from the fund to pay for the construction of permanent wetlands deferred through use of the temporary option. Any monies remaining in the fund, including interest, after all wetlands are totally restored, shall be utilized for on-going maintenance of the wetlands.

When an agency or non-profit corporation accepts permanent management responsibilities of the wetlands, the Fund may be transferred to that agency or corporation.

- e. Wetlands in those areas for which assurance funds were deposited shall be developed at the first available opportunity. When an agency or non-profit corporation accepts permanent management responsibilities of the wetlands, the Fund may be transferred to that agency or corporation.
- 6. Overall custodial and interpretive management and financial responsibility for maintenance of Los Cerritos Wetlands shall be vested in an appropriate governmental agency or private nonprofit corporation upon the initiation of the first wetlands restoration project such as the Los Cerritos Wetlands Authority. Prior to issuance of any permits for any projects related to wetlands restoration, nomination of the managing agency shall be made by the City of Long Beach with the concurrence of the State Department of Fish and Wildlife and California Coastal Commission.

#### The Buffers

- 1. The wetlands are to be separated from urban developments by "buffers" In the context of this LCP, the buffers are treated as a part of the adjacent urban developments, as they will form a part of the amenities. Construction and maintenance of the buffers, therefore, falls entirely on the developers and their successors in interest. The reader should note that buffers are constructed only north of 2nd Street. The restored wetlands south of 2nd Street will have no buffers, owing to the fact that they will be separated from other uses by natural barriers.
- As part of any wetlands restoration activity, buffers between subareas 11a and 33 or wetlands and non-wetlands areas) shall be created in accordance with an approved wetlands restoration plan.
- 3. If urban developments remain the property of landowners and/or developers, they shall be responsible for continuous maintenance of the buffers. This responsibility shall run with the land. If urban developments become condominiums, the buffers shall become a part of the area held in common, and continuous maintenance shall be the responsibility of the property owner's association(s). The agency in charge of the management of the restored wetlands may provide comments and recommendations to those responsible for maintenance of the buffers if lack of proper maintenance is causing the buffers to fail in their primary mission to prevent visual and physical access to the wetlands habitats. Breeches in the buffer which seriously threaten habitat values in the wetlands, and which have been reported by the wetlands management agency and have not been repaired in a timely fashion by the individual or agency responsible for maintenance, may be repaired by the wetlands management agency. Costs for such repairs shall be collected from the property owner's association.
- 4. Where property owners' associations are formed, the requirement for continuous buffer maintenance shall be included in their Articles of Incorporation, and monthly dues shall be sufficient for this purpose.
- 5. The primary mission of the buffer is to prevent physical access into the wetlands and to prevent visual disturbances of wetland wildlife. The buffer, as shown in the Local Coastal

Plan, consists of a berm of mounded soil, a fence, and plant material. Plant material will be chosen to be (in descending order of priority):

- a. of a growth form that supports the primary mission (i.e., of assistance in preventing access and/or screening development from the wetlands);
- b. compatible with soil, water and climate conditions of the immediate site:
- c. fast growing;
- d. compatible with adjacent development;
- e. low maintenance; and
- of wildlife food and/or cover value.

#### D. PROVISIONS APPLYING TO OIL PRODUCTION AREAS

#### Definitions

In addition to definition Section 12.04.040 of the Long Beach Municipal Code, the following definitions apply to oil production areas in SEADIP.

- Oil and gas production facility. Any public or private processing, producing, storing, transmitting, or recovering facility for natural gas or petroleum.
- Consolidation. To significantly reduce the number of producing oil wells, support facilities, or sites required to produce the reservoir with minimal environmental impact.
- Consolidation Site. A site where consolidation is occurring.
- d. Site Restoration. To return a site to its condition prior to oil development, to the maximum extent practicable. At a minimum and unless otherwise specified, this shall include removing all equipment, trash, above-ground concrete and other waste materials, grading and re-contouring a site to match the surrounding land surface or appropriate reference site or historical period, where applicable, and planting with the appropriate, non-invasive California native species for the respective habitat types.
- e. Ecological Restoration. To promote, through direct management action, the recovery of an ecosystem that has been degraded, damaged or destroyed.
- New or expanded oil and gas production facilities shall be sited within a designated oil and gas Consolidation Site. Within the SEADIP area, the only sites so designated are:
  - Subarea 25b (portion thereof) The Pumpkin Patch site legally described as follows:
    - Parcels 4, 5 and 6, as shown on Parcel Map No. 19212, as per map filed in book 260, pages 93 and 94 of parcel maps, in the office of the recorder of said County; except therefrom all oil, gas, petroleum and other hydrocarbon substances conveyed by various instruments both recorded and unrecorded all confirmed and clarified by deed from Fred H. Bixby Ranch Company, a California Corporation, recorded September 16, 1971 as instrument no. 3355, in Book D 5193 Page 959 of official records, which deed recites that the grantecs, their heirs, successors and assigns shall have no right to enter upon the surface of the property or use the property or any portion thereof above a plane parallel to and 500 feet below the present surface thereof without the express approval in writing of the grantor. Subject to covenants, conditions, restrictions, reservations, easements and rights-of-way of record if any.
  - b. Subarea 19 (portion thereof) The LCWA site

Legally described as follows: A portion of Parcel 3 of City of Long Beach Lot Line Adjustment no. 9704-08, recorded December 12, 1997 as instrument no. 97-1958951, official records of Los Angeles County, California, being a portion of the east one-half of section 2, township 5 south, range 12 west, in the Rancho Los Alamitos, as shown on partition map recorded in book 700, page 141 of deeds, in the office of the Los Angeles County Recorder, described as follows:

Beginning at the southwest corner of said parcel 5, being the southwest corner of said east one-half of section 2, and being the centerline intersection of Westminster Avenue (100 feet wide) and Studebaker Road (100 feet wide); thence north 00° 10′ 03′east, along the westerly line of said parcel 3, being the westerly line of said east one-half of section 2, and also being said centerline of Studebaker Road, a distance of 400.00 feet, thence south 89° 50′ 17″ east, a distance of 493.10 feet; thence south 64° 14′ 06″ east, a distance of 75.63 feet; thence south 00° 52′ 38″ west, a distance of 367.39 feet, to the southerly line of said parcel 3, being the southerly line of said east one-half of section 2, and also being said centerline of Westminster Avenue. Thence north 89° 60′ 17″ west along said southerly line and said centerline, a distance of 556.57 feet, to the point of beginning.

- 3. New or expanded oil and gas production facilities may be permitted if in compliance with all of the following:
  - a. General policies:
    - Alternative locations are infeasible or more environmentally damaging.
    - ii. Denying a permit for the new facility would adversely affect the public welfare.
    - iii. Adverse environmental effects are mitigated to the maximum extent feasible.
    - iv. The development is designed, constructed and operated safely and consistently with geologic conditions of the well site.
    - v. New or expanded facilities serve to consolidate existing oil and gas production facilities to the maximum extent feasible and legally permissible. Consolidation of an existing oil and gas facility shall ultimately result in a minimum 75% decrease in land area.
    - vi. Any new wells within a new or expanded facility shall be sited on the smallest feasible footprint and sited below grade.
    - vii. The new or expanded facility shall implement adequate measures to prevent causing or contributing to subsidence hazards.
    - viii. With respect to new facilities, all oilfield brines are reinjected into oil-producing zones unless the Division of Oil and Gas, Geothermal Resources of the Department of Conservation determines to do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental risks. Exceptions to reinjections will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provision is made for the elimination of petroleum odors and water quality problems.
  - Oil and gas products produced at the site shall be transported from the facility by
    pipeline. Transportation by a mode other than pipeline may be permitted only if the City
    has determined use of a pipeline is not feasible by making one of the following findings;
    - i. Temporary activities, including significant pipeline repairs are necessary and temporarily preclude the use of a pipeline;
    - ii. An emergency, which may include a national state of emergency, has precluded use of a pipeline;

- iii. There is no existing pipeline for the material to be transported and construction of a new pipeline is infeasible; or
- There is no pipeline network with demonstrated capacity for certain material to be transported.
- Any application for new or expanded oil and gas production facilities shall include a
   Development Plan that includes, at a minimum, the following elements:
  - i. A legal description of the oil and gas lease (mining rights) area and the surface operations area within which the applicant proposes to conduct petroleum operations;
  - ii. A plot plan showing the setback areas, surface location of the proposed well, existing and proposed tanks, wells, fences, and other facilities and appurtenant structures, and their relation to any existing hospital, sanitarium, religious assembly use, rest home, school or dwelling unit or guest room within the distances set forth in this title. A setback shall be provided which will allow all vehicles entering or leaving the drill site to stop or park without extending into the public street or right-of-way;
  - iii. A verified statement signed by the applicant certifying that he or she is duly authorized by the operator to make and file the application and that he or she has read the application and that it is true and correct to the best of his or her knowledge and belief;
  - iv. A detailed project description that includes a description of phasing and/or timing of development (i.e., drilling and operation of new wells, construction and operation of oil production facilities, etc.), decommissioning and abandonment activities, and site restoration activities.
  - v. An analysis of the proposed new or expanded oil and gas production facility's consistency with LCP policies.
  - vi. An analysis of impacts to paleontological, archeological, tribal and other cultural resources. This analysis shall include the results of an investigation to determine if paleontological, archeological, tribal and other cultural resources are present in the project area and, if applicable, a monitoring and mitigation plan that describes how the project will avoid or minimize significant impacts to paleontological, archeological, tribal and other cultural resources.
  - vii. A sea level rise analysis that assesses the effect of sea level rise on the proposed facility.
  - viii. In accordance with Policies in the City of Long Beach Oil Code, and incorporated in the LCP, identify measures to be used to prevent or reduce nuisance effects, such as noise, dust, odor, smoke, fumes, vibration, glare, traffic congestion, and to prevent danger to life and property.
  - ix. Such other information as may be reasonably required to determine consistency with the LCP
  - x. A Consolidation Plan that addresses how the proposed development is consistent with policies requiring consolidation of oil-and gas production facilities (i.e., Policies B.2. and B.3.a.v. above). Where decommissioned oil wells are located within an area that has the potential to undergo ecological restoration (i.e., wetland, habitat, etc.), an ecological restoration plan shall accompany the Consolidation Plan.
  - xi. A Decommissioning Plan that estimates the cost of planning, permitting and implementation of abandonment and removal of all facilities associated with the oil and gas production facility as well as site restoration. To ensure that abandonment is carried out, a performance bond or other acceptable financial security shall be

posted by the operator with the issuing entity prior to issuance of a Coastal Development Permit in an amount commensurate with the estimated costs of decommissioning as described above. The bond or other financial security shall be returned to the applicant upon successful abandonment and restoration of the site. This requirement is not intended to be duplicative of other state or federal requirements. If another government agency requires a bond or financial security for full decommissioning of all facilities, the applicant may provide evidence of obtaining said bond or financial security as a means to satisfy this requirement.

- d. Any application for new and expanded oil and gas production facilities shall provide an Oil Spill Prevention and Response Plan that includes:
  - Identification of oil spill prevention measures to minimize the risk of an oil spill, including but not limited to, appropriate siting, design (e.g. automatic shutdown, leak detection, etc.), and operational procedures (e.g., schedules, methods, and procedures for testing, maintaining, and inspecting equipment, etc.) for all facilities;
  - Oil spill risk and documented worst-case spill assessment, including identification of the coastal and marine resources at risk from oil spill impacts;
  - Response capability analysis of the equipment, personnel, and strategies (both onsite and under contract off-site) capable of responding to a worst-case spill;
  - iv. Spill notification procedures;
  - v. Spill preparedness training and emergency planning;
  - vi. Evidence of financial responsibility/capability to pay for total costs of cleanup and ecological restoration of a worst-case spill.
- 4. New pipelines serving oil and gas production facilities shall adhere to the following:
  - A pipeline corridor shall be sited so as to avoid important coastal resources (e.g., recreation, habitat, archaeological areas) and minimize geologic hazards to the maximum extent feasible.
  - b. Above-ground pipelines shall only be approved in specific locations if it is demonstrated to be the safest and least environmentally damaging alternative. Otherwise, all pipelines shall be buried below the ground surface.
  - Equipment and activities shall be restricted to the pipeline corridor to the maximum extent feasible.
  - d. After completion of backfilling and compacting of the pipeline ditch, the site shall be returned to grade where practical and the excess soil shall be removed to an approved disposal site.
  - e. New pipeline construction and operation shall not alter existing surface drainage patterns in a manner that adversely affects receiving areas.
  - f. Where pipeline segments carrying oil and gas pass through important coastal resource areas (e.g., recreation, habitat, archaeological, or other areas of significant coastal resource value) automatic shutoff valves shall be used to minimize the amount of spilled liquids in the sensitive area. The potential for damage in those areas shall be minimized by considering spill volumes, duration, and trajectories in the selection of a pipeline corridor. In addition, appropriate measures for spill containment and cleanup (e.g., catch basins to contain a spill) shall be included as part of the required emergency response plan.

- 5. Where appropriate, monitoring programs to record vertical land surface and near-shore ocean floor movements shall be initiated in locations of new large-scale fluid extraction on land or near shore before operations begin and shall continue for the duration of extraction activities. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.
- Any operator seeking to perform a well stimulation treatment, defined in California Senate Bill 4, Section 3157 as "any treatment of a well designed to enhance oil and gas production or recovery by increasing the permeability of the formation," shall obtain a coastal development permit for these activities.
- 7. Within 60 days of abandonment of facility operations, the operator shall submit an updated Abandonment Plan and Site Restoration Plan (see policy 3.c.ix above) to update reflected changes in proposed abandonment activities and costs associated with decommissioning.
- 8. General Oil and Gas Facility Operations requirements:
  - a. Lights. All lights shall be shielded or directed so as to confine direct rays to the drill site.
  - b. Vibration. Vibration from equipment shall be kept to a minimum level, and in cases where vibration levels exceed the vibration perception threshold as defined in Section 8.80.200(G) at the property boundary, vibration-dampening equipment of the best available technology shall be installed so as to reduce vibration to a minimum.
  - Painting of Installations. All surfaces of permanent installations within the site shall be painted a neutral color.
  - d. Flaring or Venting. Gas shall not be vented to the atmosphere, nor burned by open flame, unless prior approval therefor is obtained from the D.O.G.G.R. and the City.

#### e. Noise

i. No person, either as owner, agent, or operator, shall conduct any drilling, or redrilling operation at any well located within oil operating areas 5, 6, 7A, 7B, 8, 9, 12, 13, 16, 18, 19, 21, 22, 23, 24 and/or any Oil Consolidation site in any manner so as to create any noise which causes the exterior noise level when measured at the property line of any single- or multiple-family dwelling unit, guest room, commercial building, school, hospital, church, public library or public open space to exceed the noise level standards set forth in Table 1. The exterior noise level generated by the drilling or redrilling operation shall be continuously monitored to ensure conformance to the noise level standards. The costs of such monitoring shall be borne by the operator conducting such operation.

Table 1

EXTERIOR NOISE LEVEL\*

Cumulative Number of Minutes in any One-hour Time Period	Noise Level Daytime 7:30 a.m. to 9:30 p.m.	Standards, dBA Nighttime 9:30 p.m. to 7:30 a.m.
30	50	45
<u>15</u>	<u>55</u>	<u>50</u>
<u>5</u>	60	<u>55</u>
1	<u>65</u>	<u>60</u>
<u>0</u>	<u>70</u>	<u>65</u>

- ii. If the existing ambient noise level, exclusive of existing drilling activity, at the nearest adjacent dweiling unit, guest room, commercial building, school, hospital, church, public library or public open space property line to the requested oil drilling site does not exceed the permitted nighttime noise levels in Table 1 for any period, then the following regulations shall apply:
  - 1. The only activity permitted between the hours of seven p.m. (7:00 p.m.) and seven a.m. (7:00 a.m.) will be "on bottom" drilling, with single joint connections. During the same time frame, none of the following will be allowed:
    - a. Hammering on pipe;
    - b. Racking of pipe;
    - c. Acceleration and deceleration of engines or motors;
    - d. Use of drilling assembly rotational speeds that cause more noise than necessary and could reasonably be reduced by use of a slower rotational speed;
    - e. Picking up or laying down drill pipe, casing, tubing or rods into or out of the drill hole.
  - 2. If the measured ambient level exceeds that permissible within any of the first four (4) noise limit categories in Table 1 above, the allowable noise exposure standard shall be increased in five (5) decibel increments in each affected category as appropriate to encompass or reflect the ambient noise level. In the event the ambient noise level exceeds the fitth (5th) noise limit category, the maximum allowable noise level under said category shall be increased to equal the maximum ambient noise level.
  - 3. If the difference between the noise levels with noise source operating and not operating is four (4) decibels or greater, then the noise measurement of the alleged source can be considered valid with a correction applied to account for the contribution of the ambient noise. The correction is to be applied in accordance with data shown in Table 2.

<u>Table 2</u>
BACKGROUND NOISE CORRECTION

Difference Between Total	Amount to be	
Noise Noise	Subtracted from	
and Background Noise	Total Noise	
Alone	<u>Measurement</u>	
(Decibels)	(Decibels)	
<u>4.0 - 4.5</u>	2.0	
4.5 - 6.0	1.5	
<u>6.0 - 8.0</u>	1.0	
<u>8.0 - 10.0</u>	<u>.5</u>	

#### iii. Acoustical Blankets

1. No person, either as owner, agent or operator, shall conduct any drilling or redrilling operations on any well located within the oil operating areas 5, 6, 7A, 7B, 8, 9, 12, 13, 16, 18, 19, 21, 22, 23 and 24 and/or any oil consolidation site unless all derricks and all drilling machines which produce noise and which are used in connection with said drilling or redrilling operations are enclosed with soundproofing material as provided in Subsection 2 of this Section.

- 2. When soundproofing is required by the provisions of Subsection 1 of this Section, such soundproofing shall comply with accepted A.P.I. standards and shall be subject to Fire Department regulations. All doors and similar openings shall be kept closed during drilling operations, except for ingress and egress and necessary logging and well completion operations. Alternate materials or methods of soundproofing may be used, provided that such alternative has been approved by the City Director of Development Services and the Fire Chief. The Director and the Fire Chief may approve any such alternative if they find that the proposed material and method is equal to soundproofing ability and fire-resistive qualities to the aforesaid specifications. Either may require the submission of evidence to substantiate any claims that may be made regarding the use of such alternative.
- iv. For the purpose of noise abatement, the Director shall have the authority to monitor the operation of oil field equipment used for drilling, redrilling, well servicing, remedial or maintenance work.

#### SPECIFIC DEVELOPMENT AND USE STANDARDS

#### SUBAREA 1

- a. Use: Residential,
- b. Maximum Density: 9.5 dwelling units/gross acre.
- c. Planning or Coastal Commission may require such additional parking (over and above the minimum of two integral spaces) as it determines to be necessary for guests and for storage of boats and recreational vehicles.
- d. The site plan should provide for views of Marine Stadium from Appian Way; a minimum of 20 percent of the property frontage along Appian Way shall be left open to Marine Stadium.
- Developers shall construct, in accordance with plans approved by the Director of Public Works, Paoli Way from its present terminus to the proposed public park in Area 32 and dedicate the same to the City.
- f. Vehicular access shall be limited to no more than two points from Appian Way if the area is developed as a single entity, or to no more than three points if the area is developed as two separate parcels.

#### SUBAREA 2 (a)

- a. Use: Residential.
- This area is fully developed in accordance with Special Use Permit S-90-72 and Subdivision Tract No. 30643.

#### SUBAREA 2 (b)

- a. Use: Residential.
- Maximum density: 8.4 dwelling units/gross acre (number of permitted units to be calculated on the basis of gross area, including any land area to be dedicated to the City as public park).

- c. Convenient public street access shall be provided through the site in accordance with the adopted Specific Plan, and to Marine Stadium and the public park proposed for Area 31.
- d. Developers shall construct, in accordance with plans approved by the Director of Public Works, bicycle and pedestrian trails along abutting waterways and connecting the proposed trails on Loynes Drive extension to the proposed park in Area 32.

#### SUBAREA 3(a)

- Use: Residential.
- This area shall be developed with single-family detached dwellings at a maximum density
  of 8.4 dwelling units per gross acre.
- If feasible, Manila Avenue south of Colorado Street may be vacated and merged into adjacent property for development. No vehicular access to Bellflower Boulevard shall be permitted.
- d. If vacation of Manila Avenue is not feasible, Manila Avenue shall be developed as a service road with a ten-foot landscaping buffer parallel to Bellflower Boulevard.

#### SUBAREA 3 (b)

- a. Use: Residential
- b. This area shall be developed with single-family detached dwellings.

#### SUBAREA 4 (a)

- a. Use: Residential and Park (Sims Pond)
- b. Maximum density: 6.0 dwelling units/gross acre.
- c. This area shall be developed with single-family detached dwellings in accordance with Subdivision Tract 32868 (S-64-76).
- d. The developer shall construct, in accordance with specifications listed in the Director of Public Works' report on Tentative Tract 32868, an extension of Bellflower Boulevard from Colorado Street to Loynes Drive and an extension of Loynes Drive from street improvements made in Area 4 (b) and shall be reconstructed in accordance with plans approved by the Director of Public Works.

#### SUBAREA 4 (b)

- a. Use: Residential.
- b. Maximum density: 4.1 dwelling units/gross acre.
- **c.** This area shall be developed with single-family detached dwellings in accordance with the approved Tentative Tract Map No. 32277 (S-55-74).
- d. The developer shall construct, in accordance with plans approved by the Director of Public Works, and extension of Loynes Drive and parallel bikeway from Pacific Coast Highway westerly across the developers' lands to the extension of Bellflower-Loynes

roadways built in connection with the development of Area 4 (a) -- Tentative Tract 32868, and dedicate the same to the City.

- e. The developer shall construct, in accordance with plans approved by the Director of Public Works, necessary public access to the proposed public park in Area 31, and dedicate the same to the City.
- f. The natural wetland known as Sims Pond shall be preserved and maintained in accordance with the requirements of the California Department of Fish and Game.

#### SUBAREA 5 (a)

- a. Use: Residential.
- This area is fully developed in accordance with Special Use Permit No. S 37-69 and the approved Subdivision Tract No. 30911.

#### SUBAREA 5 (b)

- a. If this area remains in the ownership of the California Department of Transportation, it should be improved as landscaped open space. If sold, it shall be developed at a maximum density of 2.5 dwelling units per acre, and church uses may also be permitted.
- b. No direct access to this site shall be permitted from Pacific Coast Highway.

#### SUBAREA 6 (a)

- a. Use: Residential.
- b. This area is fully developed in accordance with Subdivision Tract No. 4681.

#### SUBAREA 6 (b)

- a. Use: Residential.
- b. Maximum density: 18.0 dwelling units/gross acre.
- Every effort shall be made to construct apartment units that can be priced so as to serve families of moderate income.

#### SUBAREAS 6 (c), 7 (a), 21 and 22 (b)

- a. Use: Residential.
- b. Maximum density: 5.62 dwelling units/gross acre.
- c. A variety of housing types and densities is encouraged, with higher density apartments oriented toward the golf course in Areas 7 (a) and 21.
- d. No more than three dwelling units shall be provided in any one structure in Areas 7 (a) and 21.
- e. A golf course open to the general public shall be constructed on Area 22 (b).
- No additional street access to Seventh Street shall be permitted.

- g. The developer shall construct, in accordance with plans approved by the Director of Public Works, a new street connecting Loynes Drive and Channel Drive, and a street connecting said new street to Margo Avenue in the vicinity of Sixth Street, and dedicate the same to the City.
- h. The developer shall construct, in accordance with plans approved by the Director of Public Works, a bicycle trail generally parallel to the new street connecting Loynes Drive and Channel Drive, and dedicate the same to the City. This trail will include a segment along Loynes Drive to connect with existing Vista Street, and a spur connection to Seventh Street opposite West Campus Drive.
- The developer shall construct a widening of Pacific Coast Highway in accordance with a plan prepared by the Director of Public Works, which calls for an eight-lane, divided highway with sidewalks and bike trails, and dedicate the same to the City.

#### SUBAREA 7 (a)

a. Use: Residential

b. Maximum density: 5.0 dwelling units/gross acre.

c. This area shall be developed with single-family detached dwellings

#### SUBAREA 8

a. Use: Residential

b. Maximum density: 15.6 dwelling units/gross acre

- Structures should be designed and located in such a manner as to minimize the
  obstruction of views from the adjacent Bixby Hill Community
- d. Only one point of access to Seventh Street shall be permitted, preferably via East Campus Drive. If the developer is unable to obtain permission from California State University to utilize East Campus Drive, access to Seventh Street may be provided via an extension of Pepper Tree Lane. This requirement shall not preclude the provision of a second emergency access as may be required by the City.
- e. The developer shall construct and dedicate a widening of Seventh Street in accordance with a plan prepared by the Director of Public Works to provide for a six-lane highway with curb, sidewalks, and bicycle trail.
- f. The developer shall construct, in accordance with plans approved by the Director of Public Works, an underpass of Seventh Street at the Los Cerritos Channel to provide for pedestrian and bicycle circulation between the residential developments and nearby public schools.
- g. The developer shall construct, in accordance with plans approved by the Director of Public Works, a bridge over Bouton Creek at the Los Cerritos Channel to provide for bicycle and pedestrian circulation from residential developments to the Hill Jr. High School.

#### SUBAREA 9

a. Use: Residential

- This area is fully developed in accordance with Special Permit No. S-158-62 and subdivision Tract No.'s 24883 and 22087.
  - a. SUBAREA 10 (a)

c. Use: Residential

d. This area is fully developed in accordance with Special Permit No. S-174-60.

#### SUBAREA 10 (b)

a. Use: Residential

b. Maximum density: 11.7 dwelling units/gross acre.

- c. Structures should be designed and located in such a manner as to not obstruct views from the Belmont Shore Mobile Estates Park, Area 10 (a). No more than 1/3 of the dwelling units should be located in the narrow eastern section of the site along the Los Cerritos Channel.
- d. A bicycle and pedestrian trail shall be provided through the site from Loynes Drive to the proposed public park in Area 23.

#### SUBAREA 11 (a)

- Use: Commercial; wetlands and open space; existing oil production operations; recreation; accessory uses including visitors' centers or similar facility.
- Commercial uses shall be developed in accordance with the development standards set forth in Long Beach Municipal Code Section 21.32
- c. Wetlands shall be restored pursuant to one two means:
  - (1) A wetlands restoration plan that is intended to support creation and operation of a wetlands mitigation bank that is approved by State and federal resource agencies, including but not limited to the U.S. Army Corps of Engineers and the California Coastal Commission: or
  - (2) A wetlands restoration plan that is approved by State and federal resource agencies, including the U.S. Army Corps of Engineers and the California Coastal Commission, and implemented upon cessation of oil operations.
- d. Passive recreation uses may be permitted, including trails.
- e. The existing Bixby Ranch building shall be used to support the oil production operations. At such time the building is no longer used for oil production operations, the building may be used to support passive recreation uses, including use as a visitor's center.
- f. To ensure that area 11(a) is open and inviting to the public as far as is consistent with the preservation of the wetlands and continuing oil production operations, the following special design features shall apply:

- One pedestrian path and one bicycle trail entrance shall be placed along 2nd Street connecting pedestrian paths and bicycle ways along these highways to the interior trail system. Design treatment of such connections shall ensure that they are visually prominent and open to the public.
- 2. The vehicular entrance at 2nd Street shall provide an open view to wetlands.
- 3. A visitor parking lot shall be provided adjacent to the Bixby Ranch office building for use by the public prior to commencement of building operations.
- g. In addition to the setback for buffer, the elevation and setbacks between an occupiable structure and wetland edge shall be sufficient to ensure stability during liquefaction events caused by the maximum credible earthquake. Such data, including review by the State Division of Mines and Geology, shall be provided at time of site plan approval for any development in this subarea

#### SUBAREA 11 (b)

- Use: Residential at a maximum density of 8.4 units per gross acre shall be permitted.
- b. No more than three dwelling units shall be provided in any one structure, and all shall be designed as sales units. Height limit is two stories in 30 ft. maximum.
- c. Until Area 11 (a) is developed, access may be provided on a temporary basis from Pacific Coast Highway
- d. The developer shall construct in accordance with plans approved by the Director of Public Works, a pedestrian walkway adjacent to Los Cerritos Channel connecting with a pedestrian walkway to be constructed by the developer of Parcel 11 (a) adjacent to Parcel 33, at one end, and at the other end, connecting with either a pedestrian/bikeway along Pacific Coast Highway, or, at the discretion of the Director of Public Works, with the walkway adjacent to the bulkhead in the southeast portion of Parcel 31.
- e. Prior to development, the final details concerning wetlands consolidation on this Parcel shall be approved by the Department of Fish and Wildlife.

#### **SUBAREA 12**

- a. Use: Residential
- This area is fully developed in accordance with Special Use Permit S-140-72 and the approved Subdivision Tract No's. 31204, 31203, 31205, and 29312.

#### SUBAREA 13

- a. Use: Commercial
- b. This area is fully developed in accordance with Special Use Permit S-44-73.

#### **SUBAREA 14**

 a. This area, in the ownership of the California Department of Transportation, should be improved as landscaped open space. If the northwest quadrant is sold, it shall be developed with a maximum of 3.0 dwelling units/gross acre. Access to this property from Seventh Street shall be permitted only through Area 8 or via an extension of Pepper Tree Lane.

#### **SUBAREA 15**

- a. Use: Commercial.
- This area is fully developed in accordance with Special Use Permit No's S-174-60, S-5-60, S-180-72, and S-178-69.

#### **SUBAREA 16**

- a. Use: Commercial
- This area is fully developed in accordance with Special Use Permit No's. S-167-72 and S-13-61.

#### **SUBAREA 17**

- Use: Commercial
- b. This area is fully developed in accordance with the CR zone.

#### **SUBAREA 18**

- a. Use: Commercial
- This area is fully developed in accordance with Special Use Permit No. S-29-75.
   Also see Area 26.

#### **SUBAREA 19**

- Use: Industrial, Oil Production Uses
- b. This area is fully developed in accordance with the provisions of the MG zone.
- Commercial storage/self-storage (21.15.570) shall be allowed by Conditional Use Permit (21.52.219.5).
- d. New oil and gas production facilities may only be approved in this subarea in accordance with an approved Development Plan.
- e. All industrial and oil and gas production uses shall provide mitigation to address project-related noise, odor, or air emissions through compliance with the California Environmental Quality Act and the LCP.
- f. The Planning Commission may adopt specific performance standards or a specific list of permitted uses to guide developers and the Planning Commission.
- g. No outdoor storage of materials and equipment shall be permitted without being screened from public view. Loading and service areas shall not be permitted within required yard setback areas and all such loading and service areas shall be enclosed or screened so as not to be visible from the street.
- h. Herbicide and pesticide use shall be prohibited.

#### **SUBAREA 20**

Use: Channel View Park, a public park.

#### SUBAREA 21

See Area 6 (c).

#### SUBAREA 22 (a)

a. Use: Residential

b. Maximum density: 8.0 dwelling units/gross acre.

- c. Site plan should provide for views of the proposed golf course on Area 22 (b) from Loynes Drive; a minimum of 20 percent of the property frontage along Loynes Drive shall be left open to the golf course.
- d. No vehicular access shall be provided to Pacific Coast Highway, and no more than two access points to Loynes Drive shall be provided.
- e. The developer shall construct, in accordance with plans approved by the Director of Public Works, a bikeway along the Loynes Drive frontage of his property, and dedicate the same to the City.
- f. The developer shall construct a widening of Pacific Coast Highway in accordance with a plan prepared by the Director of Public works, which calls for an eight lane divided highway with sidewalks, and dedicate the same to the City.
- g. The developer shall cooperate with the Director of Public Works and with the adjacent property owner of Area 22 (b) to provide for the design and construction of a small portion of the new roadway between Loynes Drive and Channel Drive through the eastern portion of Area 22 (a).

#### SUBAREA 22 (b)

See Area 6 (c).

#### SUBAREA 23

- a. The two wetland concepts generally outlined shall include a 8.3 acre brackish pond on Area 23 provided that the Executive Director of the California Coastal Commission determines (i) in addition to the setback for buffer, the elevation and setbacks between development and wetland edge shall be sufficient to ensure stability during liquefaction events caused by the maximum credible earthquake; (ii) that the location and operation of the proposed wetland are acceptable to the Regional Water Quality Control Board, the State Department of Health and to the Local Mosquito Abatement District.
- b. If approval from these agencies results in reductions to the net size of the proposed wetland, restoration at this site shall only occur if the remaining area is sufficient to create a wetland at least the same size as the existing brackish pond at the Marketplace.

#### **SUBAREA 24**

- a. This designation actually applies to two distinct parcels of land, one at the southwest corner of Loynes Drive and Studebaker Road (called herein "24 South"), and the other across Loynes Drive at the northwest corner (called herein "24 North").
- b. Area 24 South is to be developed as an overlook area and interpretive center for the bordering marsh. The developer of Subarea 11 (a) shall dedicate Parcel 24 South to the State of California or other agency responsible for management of Area 33.
- Area 24 North shall be dedicated to the City of Long Beach for park and playground purposes.
- d. The owner of Area 24 shall dedicate area along Studebaker Road for the bicycle trail to be built along Studebaker Road.

#### SUBAREAS 25a and 26

- a. Use: (Area 25a) Business Park (Office Commercial and light Industrial); restaurants and hotel; oil production and accessory uses. Commercial / Self-storage (defined by 21.15.570) is a prohibited land use.
- Use: (Area 26) Business Park (Office Commercial and Light Industrial).
   Commercial / Self-storage (defined by 21.15.570) is a prohibited land use.
- c. These Subareas are intended for office commercial, light industrial, and oil production uses, which will provide mitigation to address project-related noise, odor, or air emissions through compliance with the California Environmental Quality Act.
- d. The Planning Commission may adopt specific performance standards or a specific list of permitted uses to guide developers and the Planning Commission.
- e. No outdoor storage of materials and equipment shall be permitted without being screened from public view. Loading and service areas shall not be permitted within required yard setback areas and all such loading and service areas shall be enclosed or screened so as not to be visible from the street.
- f. No more than 40,000 square feet of floor area for medical/dental offices, and no more than 16,000-20,000 square feet of floor area shall be restaurant use.
- g. Business park uses shall be predominantly office commercial uses, and no less than 75 percent of the area proposed for business park uses shall be devoted to office commercial use.
- h. For new commercial uses, not more than 35 percent of the area of each office commercial lot shall be occupied by a building or buildings.
- i. For new commercial development, all improved building sites shall have a minimum landscaped coverage of 15 percent of the area of each lot and shall be provided with an irrigation system. Boundary landscaping shall be provided on all internal property lines. Parking areas shall be landscaped with a minimum of one tree per each five parking stalls. The proposed retention basin in Area 25a, if constructed, shall be developed in a park-like manner.

- j. Required yard areas: Thirty feet front; ten feet side (except 30 feet side when a side yard abuts Pacific Coast Highway or Westminster and except that the internal side yard may be 0 feet provided the main building on the same lot line on the abutting lot is set back 0 feet and both lots are developed at the same time).
- k. A 30 foot-wide landscaped setback shall also be required along the San Gabriel River Channel property line to create a park-like setting for the bicycle trail along the river bank. (This substitutes for the park in the former Area 30).
- One access from 2nd Street shall be allowed to Area 26; no addition curb cuts shall be permitted on 2nd Street or Pacific Coast Highway. All other vehicular access shall be from Studebaker Read or Shopkeeper Drive.
- m. The developer(s) of Area 25a shall contribute on a fair share basis to the widening of Pacific Coast Highway in accordance with a plan approved by the Director of Public Works, an extension of Studebaker Road in accordance with a plan approved by the City, and dedicate the same to the City.
- n. The developer of Area 25a shall construct, in accordance with plans approved by the Director of Public Works, a bicycle trail along the south side of 2nd Street and along the north side of Pacific Coast Highway, south of Studebaker Road. The developer shall dedicate the same to the City.
- o. The developers of Areas 25a and 26 shall contribute on a fair share basis for the construction of any improvements necessary to cross the San Gabriel River Regional Bikeway from the east levee to the west levee of the river at 2nd Street. These should be limited to on-street pavement markings.
- p. The developers shall contribute on a fair share basis to participate in the cost of constructing the connection between Studebaker Road and Shopkeeper Road, the amount of that participation to be calculated to be the length in feet of property fronting on each side of said roadway multiplied by the average cost per linear foot of constructing one lane of said roadway, to the satisfaction of the City Engineer.
- q. The developers of Areas 25a and 26 shall contribute on a pro rata basis to improve that portion of the San Gabriel River bank adjacent to their property with a pedestrian walk, bicycle trail and related landscaping.
- r. The developer of Area 26 shall construct a bicycle trail along the east side of Studebaker Road for the entire frontage on said road.
- s. A habitat corridor shall be provided in Area 25a from 2nd Street to the San Gabriel River. Such corridor shall be not less than 400 feet in width (when measured from the existing buildings in Area 18, the Marketplace) and shall include Shopkeeper Drive. No building shall be allowed in this corridor, except that no less than 70 feet from Shopkeeper Drive, single story (not to exceed 20 feet in height) commercial office or light industrial use building shall be allowed. The long axis of any buildings in the non-wetland habitat corridor shall be parallel to the long axis of the corridor.

#### SUBAREA 25b (Pumpkin Patch)

 Use: Business Park (Office Commercial and light Industrial); oil production and accessory uses. Commercial / Self-storage (defined by 21.15.570) is a prohibited land use.

- b. New oil and gas production facilities may only be approved in this subarea in accordance with an approved Development Plan.
- c. These Subareas are intended for office commercial, light industrial, and oil and gas production uses, which will provide mitigation to address project-related noise, odor, or air emissions through compliance with the California Environmental Quality Act and the LCP.
- d. The Planning Commission may adopt specific performance standards or a specific list of permitted uses to guide developers and the Planning Commission.
- e. No outdoor storage of materials and equipment shall be permitted without being screened from public view. Loading and service areas shall not be permitted within required yard setback areas and all such loading and service areas shall be enclosed or screened so as not to be visible from the street.
- f. No more than 40,000 square feet of floor area for medical/dental offices, and no more than 16,000-20,000 square feet of floor area shall be restaurant use.
- g. Business park uses shall be predominantly office commercial uses, and no less than 75 percent of the area proposed for business park uses shall be devoted to office commercial use. For new commercial uses, not more than 35 percent of the area of each office commercial lot shall be occupied by a building or buildings.
- h. For new commercial development, all improved building sites shall have a minimum landscaped coverage of 15 percent of the area of each lot and shall be provided with an irrigation system. Boundary landscaping shall be provided on all internal property lines. Parking areas shall be landscaped with a minimum of one tree per each five parking stalls. The proposed retention basin in Area 25, <u>if constructed</u>, shall be developed in a park-like manner.
- i. Required yard areas: Thirty feet front; ten feet side (except 30 feet side when a side yard abuts Pacific Coast Highway and except that the internal side yard may be 0 feet provided the main building on the same lot line on the abutting lot is set back 0 feet and both lots are developed at the same time).
- j. A 30 foot-wide landscaped setback shall also be required along the San Gabriel River Channel property line to create a park-like setting for the bicycle trail along the river bank. (This substitutes for the park in the former Area 30).
- k. The developer(s) of Area 25b shall contribute on a fair share basis to the widening of Pacific Coast Highway in accordance with a plan approved by the Director of Public Works, an extension of Studebaker Road in accordance with a plan approved by the City, and dedicate the same to the City.
- t. The developer(s) of Area 25b shall construct, in accordance with plans approved by the Director of Public Works, a bicycle trail along south side of 2<sup>nd</sup> Street and along the north side of Pacific Coast Highway, south of Studebaker Road. The developer shall dedicate the same to the City.
- m. The developer(s) of Areas 25b shall contribute on a fair share basis for the construction of any improvements necessary to cross the San Gabriel River Regional Bikeway from the east levee to the west levee of the river at 2nd Street. These should be limited to on-street pavement markings.

- n. The developers shall contribute on a fair share basis to participate in the cost of constructing the connection between Studebaker Road and Shopkeeper Road, and Shopkeeper Road in accordance with a plan approved by the City, the amount of that participation to be calculated to be the length in feet of property fronting on each side of said roadway multiplied by the average cost per linear foot of constructing one lane of said roadway, to the satisfaction of the City Engineer.
- o. The developer of Areas 25b shall contribute on a pro rata basis to improve that portion of the San Gabriel River bank adjacent to their property with a pedestrian walk, bicycle trail and related landscaping.
- p. Herbicide and pesticide use shall be prohibited.

#### SUBAREA 27

This area is to be utilized entirely in the wetlands restoration program.

#### **SUBAREA 28**

This site is owned by Orange County and is utilized by the County as a retention basin.

#### **SUBAREA 29**

- Use: Commercial office, restaurants, commercial recreation and commercial retail
  uses.
- b. All improved building sites shall have a minimum landscaped coverage of 15 percent and shall be provided with an irrigation system. Boundary landscaping shall be provided on all interior property lines. Parking areas shall be landscaped with a minimum of one tree per each five parking stalls.
- No more than 5,000 square feet of floor area shall be used for medical/dental
  offices.
- d. The developer shall construct a widening of Pacific Coast Highway in accordance with a plan prepared by the Director of Public Works which calls for a six lane, divided highway with sidewalks and bike trail, and dedicate the same to the City.
- e. The developer shall dedicate and improve necessary land along the San Gabriel River bank to provide a pedestrian walk, bicycle trail and related landscaping, such development to continue one-half of the distance under the Pacific Coast Highway bridge to join with similar facilities in Area 25. Also, the developer shall continue Studebaker extension bikeway from Pacific Coast Highway to Marina Drive.
- f. The maximum height of buildings shall be 30 feet for residential and 35 feet for non-residential uses, unless otherwise provided herein. Architectural features, such as tower elements, may be approved up to a height of 43 feet through the site plan review.
- g. Curb cuts shall be permitted on Pacific Coast Highway, Studebaker Road, and Marina Drive subject to the approval of the City Traffic Engineer and/or CALTRANS, where appropriate.
- h. Development in or near wetlands. The City shall preserve and protect wetlands within Subarea 29. "Wetlands" shall be defined as any area, which may be covered

periodically or permanently with shallow water, including, but not limited to, saltwater marshes, swamps, mudflats and fens. In addition, "wetlands" shall also be defined as specified in the Commissions Statewide Interpretive Guidelines and Section 13577(b) of the California Code of Regulations. As part of any discretionary review or the required environmental analysis associated with a development proposal in Subarea 29, the applicant shall provide evidence from a qualified biologist whether or not wetlands exist on the site of the proposed development. If any wetlands are identified on the site, the applicant shall be required to obtain confirmation of the wetlands delineation from the U.S. Fish & Wildlife Service and/or the State Department of Fish & Game, and the applicant shall solicit the resource agencies' recommendation on the appropriateness of the proposed development, the permissibility of the development impacts, and any required mitigation.

All proposed development must conform to the following:

Within Subarea 29, the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of the Coastal Act where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following (1-8):

- a. New or expanded port, energy and coastal-dependent industrial facilities, including commercial fishing facilities.
- b. Maintaining existing, or restoring previously dredged depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
- c. In wetland areas only, entrance channels for new or expanded boating facilities, and in degraded wetlands identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411 of the Coastal Act, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.
- d. In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
- e. Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
- g. Restoration purposes.
- h. Nature study, aquaculture, or similar resource dependent activities.

Where it has been determined that there is no feasible less environmentallydamaging alternative and the proposed impacts are one of the eight allowable uses specified above, the diking, filling or dredging of open coastal waters, wetlands, estuaries and lakes shall be mitigated to minimize adverse environmental effects through habitat replacement, restoration and enhancement activities. There shall be no net loss of wetland acreage or habitat value as a result of land use or development activities. Mitigation ratios may vary depending on the specific site conditions; location of habitat areas; the amount of impacts, the nature, quality and uniqueness of the affected habitat, resource agency consultation, precedential coastal development permit decisions, and other factors. However, typical mitigation ratios are 3:1 for riparian areas and 4:1 for Saltmarsh habitats. Specifically, when wetland impacts are unavoidable, replacement of the lost wetland shall be required through the creation of new wetlands at a ratio determined by the appropriate regulatory agencies but in any case at a ratio of greater than one acre provided for each acre impacted so as to ensure no net loss of wetland acreage. Replacement of wetlands on-site or adjacent, within the same wetlands system and in-kind mitigation shall be given preference over other mitigation options.

Development located adjacent to wetland habitat areas shall not adversely impact the wetlands. A 100 foot buffer shall be provided between development and wetland habitats and a 50 foot buffer shall be provided between development and riparian areas unless, in consultation with the U.S. Fish & Wildlife Service and/or the State Department of Fish & Game, it is determined that a reduced buffer is sufficient. Uses and development within buffer areas shall be limited to minor passive recreational uses or other improvements deemed necessary to protect the habitat and shall be located in the portion of the buffer area furthest from the wetland. All identified wetlands and buffers shall be permanently conserved or protected through the application of an open space easement or other suitable device.

Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge soils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

In addition to the other provisions of this section, diking, filling or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish & Game, including but not limited to the 19 Coastal Wetlands identified in its report entitled "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with the provisions of the Coastal Act.

Erosion control and flood control facilities constructed on water courses can impede the movement of sediment and nutrients, which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a Coastal Development Permit for such purposes are the method of placement, time of year of placement and sensitivity of the placement area.

#### **SUBAREA 30**

(Deleted)

#### SUBAREA 31

Use: Jack Dunster Marine Biological Reserve and Costa del Sol, public parks.

#### **SUBAREA 32**

- a. Use: Public park.
- b. This area is to be improved by the City.

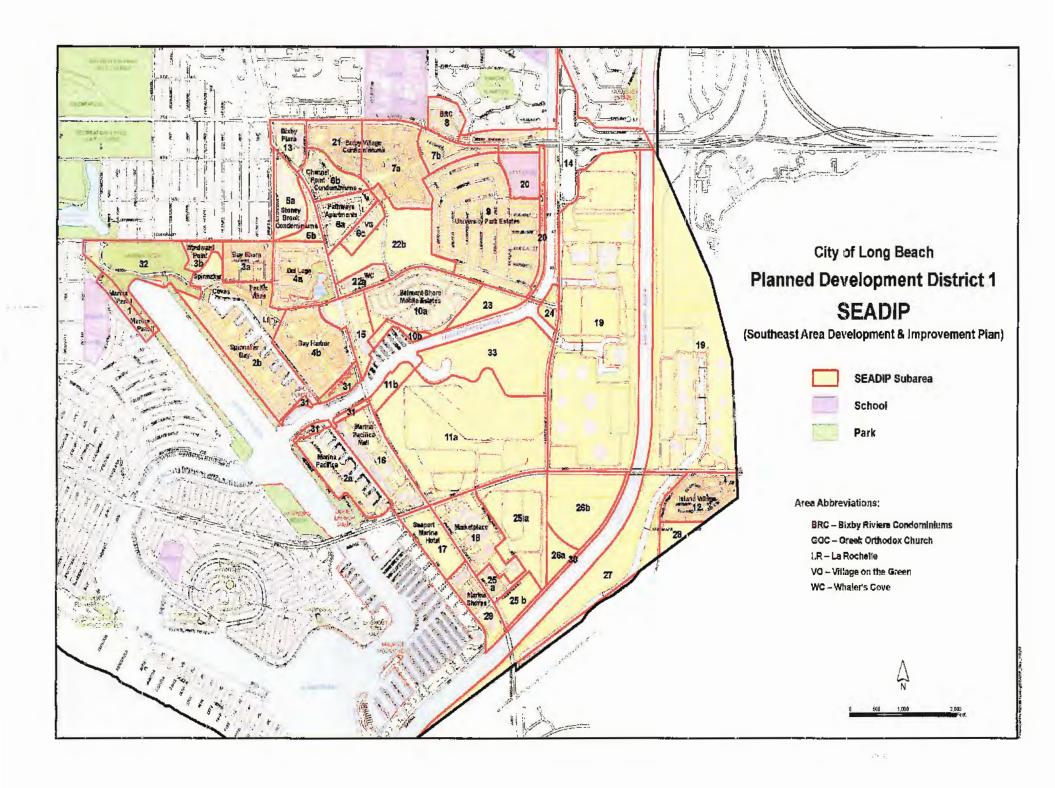
#### SUBAREA 33

- Use: Wetlands and open space; existing oil production operations, recreation.
- Upon cessation of oil operations, the area shall be restored pursuant to the wetlands restoration plan approved by the City, State and federal agencies.

Wetlands shall be restored pursuant to one of two means:

- (1) A wetlands restoration plan that is intended to support creation and operation of a wetlands mitigation bank that is approved by State and federal resource agencies, including but not limited to the U.S. Army Corps of Engineers and the California Coastal Commission; or
- (2) A wetlands restoration plan that is approved by State and federal resource agencies, including the U.S. Army Corps of Engineers and the California Coastal Commission, and implemented upon cessation of oil operations
- c. Wetlands shall be restored pursuant to one of two means:
  - (1)A wetlands restoration plan that is intended to support creation and operation of a wetlands mitigation bank that is approved by State and federal resource agencies, including but not limited to the U.S. Army Corps of Engineers and the California Coastal Commission; or
  - (2) A wetlands restoration plan that is approved by State and federal resource agencies, including the U.S. Army Corps of Engineers and the California Coastal Commission, and implemented upon cessation of oil operations.
- d. Passive recreation uses shall be permitted, including trails.
- e. The wetlands restoration area may be permitted to operate as a wetlands mitigation bank if approved by State and federal agencies.

The recently established least tern site shall be designated as habitat area and preserved as such unless or until the Department of Fish and Game may determine that it is appropriate to experiment with enhancing least tern habitat and allow up to two acres within Parcel 33.



## APPENDIX C

#### CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA 89 SOUTH CALIFORNIA ST., SUITE 200 VENTURA, CA 93001 (805) 585-1800



#### MEMORANDUM

FROM: Jonna D. Engel, Ph.D., Senior Ecologist, Technical Services Ecology

Group

TO: Kate Huckelbridge, Senior Environmental Scientist, Ocean and Energy

Division

SUBJECT: Synergy/BOMP: Los Cerritos Wetland Oil Consolidation and Restoration

Project

DATE: July 25, 2017

**Documents Reviewed:** 

Pfeiffer, T. & T. Bomkamp (Glenn Lukos Associates). May 3, 2017 [Revised June 2, 2017]. Technical Memorandum: Impacts to Areas that Potentially Meet the California Coastal Act Definition for Environmentally Sensitive Habitat Areas (ESHA) Associated with the Los Cerritos Wetlands Oil Consolidation and Restoration Project, Long Beach, California. Project Number: 10320002MITI. To: Kate Huckelbridge, Jonna Engel, Chuck Posner.

- Pfeiffer, T. & T. Bomkamp (Glenn Lukos Associates). May 3, 2017. Technical Memorandum: Impacts to Areas that Potentially Meet the California Coastal Act Definition for Environmentally Sensitive Habitat Areas (ESHA) Associated with the Los Cerritos Wetlands Oil Consolidation and Restoration Project, Long Beach, California. Project Number: 10320002MITI. To: Kate Huckelbridge, Jonna Engel, Chuck Posner.
- Pfeiffer, T. & T. Bomkamp (Glenn Lukos Associates). February 3, 2017. Biological Technical Report for Los Cerritos Wetlands Oil Consolidation and Restoration Project, City of Long Beach, Los Angeles County, California. Prepared for City of Long Beach Development Services, Planning Bureau.
- Sparanza, John II (EIP Associates). May 24, 2005. Technical Memo: Marina Shores Wetlands. Addressed to Jill Griffiths, City of Long Beach.

On Friday, May 5, 2017, I met CCC staff Chuck Posner and Zach Rehm, Synergy Oil representative Michael Di Sano, and Synergy's biological consultants Thienan Pfeiffer and Tony Bomkamp, from Glenn Lukos Associates (GLA), in Long Beach, to visit the four Los Cerritos Wetland Oil Consolidation and Restoration Project sites including the

Pumpkin Patch, Long Beach City property, Los Cerritos Wetlands Authority (LCWA) property, and the Synergy Oil Field. In preparation for the site visit I reviewed the biological reports cited above that include wetland determinations and environmentally sensitive area (ESHA) assessments and looked at historical and current aerial photographs. The purpose of the site visit was to observe and assess on-the-ground biological conditions at each site.

The proposed project is still in the development phase and has not been submitted to the Coastal Commission for formal review. The conclusions drawn in this memo are meant as guidance to Coastal Commission staff and have not been vetted by the Coastal Commission itself. A final determination on ESHA and wetland impacts will not be made until the matter is brought before the Coastal Commission for a decision.

## Pumpkin Patch Site

The Pumpkin Patch site is located at 6701 E. Pacific Coast Highway and consists of approximately seven acres with an approximately five acre upper area and an approximately two acre lower area. The upper area owes much of its elevation to fill material placed on top of a former landfill. The upper area has been and continues to be used for seasonal commercial activities including, as the name implies, a pumpkin patch and kid's carnival area as well as a Christmas tree lot and the associated staging and parking for these activities. The upper area of the site is proposed for oil well consolidation. The lower area north of the upper area includes a slope covered with iceplant that abuts oil operations and associated roads and pads within non-tidal pickleweed mats and unvegetated wetland flats.

GLA conducted a wetland delineation of the site in Spring 2016. They found that while the depressed area in the south-east corner of the site did support two wetland status plants including sand spurry (*Spergularia marina*, OBL) and southern tarplant (*Centromadia parryi* ssp. *Australus*, FACW), it did not meet the criteria for a jurisdictional or CCC wetland (Figure 1). GLA conducted focused botanical surveys of the pumpkin patch site in 2011, 2013, and 2016 and found that that while the upper area of the pumpkin patch site did support a few small patches of the rare plant, southern tarplant, that is state listed S2 and California Native Plant Society (CNPS) listed 1B.1<sup>1</sup>, the population on the site did not rise to the level of ESHA (Figure 2). In addition to the vegetation and wetland surveys, GLA also conducted burrowing owl surveys at the pumpkin patch site in 2015, 2016, and 2017 during which no burrowing owls were ever observed.

On our site visit I found that the upper area of the Pumpkin Patch site was a very degraded flat area that consisted primarily of compacted bare dirt with scattered patches of non-native weeds save for an oval shaped depression at the south-east corner of the site, similar in size and shape to the "artificial seasonal wetland" identified

-

<sup>&</sup>lt;sup>1</sup> State level 2 communities and species are identified as "imperiled – at high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors. CNPS 1B plants are rare throughout their range with the majority of them endemic to California. Most of the plants that are ranked 1B have declined significantly over the last century.

on the May 24, 2005 EIP memo to the City of Long Beach (Figure 3). The depression supported patches of tarplant, sand spurry, and rabbit's foot grass (*Polypogon monspeliensis*, FACW) and exhibited several primary indicators of hydrology such as surface soil cracks, sediment deposits, and inundation visible on aerial images (Figure 4). In addition, GLA conducted wet season fairy shrimp surveys in this area in 2011-2012, 2012-2013, and 2016-2017 and while no federally-listed fairy shrimp were detected, common versatile fairy shrimp (*Branchinecta lindahli*) were identified on February 3, 2012 and every week from December 6, 2016 through February 14, 2017 (see Table 7 of the Jurisdictional Delineation within the February 2017 Biological Technical Report). Aquatic invertebrates are another primary indicator of hydrology. Finally, on page 18 of the Jurisdictional Delineation in the February 2017 Biological Technical Report, GLA states that "Ponding of 14-day duration was not observed during the 2012-2013 rainfall season...." thus implying that 14-day ponding did occur in the 2011-2012 and 2016-2017 wet seasons. Fourteen days of ponding is also considered primary evidence of hydrology.

Based on my review of the biology reports cited above, study of aerial images, and my site visit observations, unlike GLA, I do find that the area colored dark blue and labeled "artificial seasonal wetland" on the exhibit attached to the May 24, 2005 EIP memo and identified by a black and white boundary line labeled "non-jurisdictional depression" on exhibit 5D of the February 3 Biological Technical Report (Figure 1), is a wetland because it meets the criteria for wetland hydrology and therefore meets the Commission's one parameter criteria for an area being a wetland.

As stated above, GLA did identify southern tarplant on the Pumpkin Patch site; primarily within the seasonal wetland on the south-east corner of the upper area (Figure 2). GLA determined that the southern tarplant population on the site did not rise to the level of ESHA. During our site visit I also observed scattered patches of a few individual southern tarplants as well as the larger concentration of southern tarplant in the north-east corner in the seasonal wetland (Figure 2). When determining whether a rare plant or animal population rises to the level of ESHA we take several things into consideration including:

- Number of individuals in the population
- Size of the area occupied by the population
- Degree of isolation and level of fragmentation of the population
- Connectivity to other natural areas/open space suitable to the species
- Level of disturbance/degradation of the area occupied by the population
- Adjacent development and other disrupting activities (and the legality thereof)
- Level of invasion by non-native species
- Potential jeopardy to regional populations by loss of the respective population

The southern tarplant on the Pumpkin Patch site consists of a relatively small number of individuals concentrated in the north-east corner of the site. This small southern tarplant population is fragmented as well as isolated from other populations in the area. The upper area of the Pumpkin Patch site with southern tarplant is extremely degraded

consisting primarily of compacted fill material on top of a former landfill. I do not believe that the physical and biological factors of the site are suitable for supporting a persistent, self-sustaining southern tarplant population. Furthermore, other more robust populations of southern tarplant are thriving within the larger Los Cerritos Wetlands area. For these reasons, I concur with GLA and find that the southern tarplant population on the Pumpkin Patch site does not rise to the level of ESHA.

## Long Beach City Property Site

The City Property site is an approximately 33-acre site located at 2<sup>nd</sup> Street and Shopkeeper Road. The site is bound by Shopkeeper Road to the west, 2<sup>nd</sup> Street to the north, undeveloped land to the east, and the San Gabriel River to the south. The southern end of the City Property abuts the north-east edge of the Pumpkin Patch Site. The City Property site has supported oil activities for many years and is scattered with road, oil wells, aboveground pipes, and an area of oil tanks. Like the Synergy Oil Field site, the oil infrastructure on the site is surrounded by areas of non-tidal (alkali meadow, southern willow scrub) and tidal wetlands (southern coastal brackish marsh, southern coastal salt marsh) that are in very good condition as well as degraded (ruderal) upland and wetland areas (Figure 5).

A significant population of rare southern tarplant occurs within areas of native alkali meadow, mulefat scrub, and coastal brackish marsh on the City Property. Scattered southern tarplant individuals also occur in highly disturbed gravel and poor soil areas around the existing tank farm and oil field infrastructure (Figure 6). As part of the proposed project, the tank farm would be removed and it is possible that this area would need to undergo soil remediation following removal. I find that the bulk of the southern tarplant population on the City Property that is associated with the alkali meadow, mulefat scrub and coastal brackish marsh is thriving and unfragmented and therefore rises to the level of ESHA. However, the scattered individuals around the tank farm and oil infrastructure are fragmented within a very disturbed area with poor soil and therefore do not rise to the level of ESHA.

During our site visit, we were told that the alignment of the proposed project pipeline through the City Property, that originally impacted a corner of mulefat scrub and a stretch of alkali meadow, had been changed to avoid all direct impacts to native habitat. We walked the new proposed project pipeline alignment, along the easternmost existing road bed, and confirmed that what was described to us as the new alignment does avoid direct impacts to native habitat, wetland or otherwise. However, I have not been provided with maps that confirm the revised alignment we walked at the site. Thus, I am unable to confirm at this time that the proposed project avoids impacts to native habitat and wetlands on the City Property.

## Los Cerritos Wetlands Authority Site

The Los Cerritos Wetlands Authority site consists of an approximately four-acre parcel located at the northeast corner of the 2<sup>nd</sup> Street and Studebaker Road intersection. The site is bound by Westminster Avenue to the south and Studebaker Road to the west, and is adjacent to buildings associated with industrial uses to the north and east. The

site is proposed for oil well consolidation; it does not support any wetlands or any species or habitat that meet the definition of ESHA.

## Synergy Oil Field

The Synergy Oil Field consists of an approximately 150-acre property located at 6433 E. 2<sup>nd</sup> Street. The site is bound by Pacific Coast Highway to the west, 2<sup>nd</sup> Street to the south, Studebaker Road to the east and the Los Cerritos Channel to the north. It supports a rich array of native wetland and upland habitats (Figure 7) as well many degraded and ruderal areas all interspersed with oil field infrastructure. The northern portion of the site is dominated by Steamshovel Slough which is a highly valued and relatively pristine tidal wetland that supports a wide array of native organisms including plants, invertebrates, fish, and birds.

GLA provides a detailed description of the wetland and terrestrial resources within the Synergy Oil Field in the February 3, 2017 Technical Biology Report and the June 2, 2017 ESHA memo. As mentioned above, the site currently supports large areas of native wetlands and uplands. Two rare plant populations occur on the site including estuary seablight (*Sueda esteroa*, S2) and southern tarplant. The estuary seablight occurs in wetland habitat within Steamshovel Slough (Figure 8). The southern tarplant occurs in both non-wetland and wetland areas and there are three populations on the site that show large patches or a large number of small concentrated patches of tarplant that I find rise to the level of ESHA because of their size or number of patches, the health of the plants, and the proximity to each other (Figure 8, purple circles).

The ultimate goal of the proposed project at the Synergy Oil Field site is to restore all 150 acres to native wetland and upland habitat. The project is proposed to occur in two phases with Phase 1 occurring upon receipt of the permit and Phase 2 within 40 years of Phase 1. Phase 1 would establish the Upper Los Cerritos Wetlands Mitigation Bank and public access trail on the northerly 76.52 acres of the Synergy Oil Field (formerly known as the Bixby Oil Field). Phase 2 would occur on the southerly 73.07 acres of the Synergy Oil Field.

The development footprint for Phase 1 of the proposed project is shown as an area bounded by a white line with white diagonal lines (Figure 8). The restoration work is concentrated on the slopes surrounding the north and east boundaries of the property surrounding Steamshovel Slough that support native and non-native upland habitat and includes work to create tidal channels in degraded wetland habitat that is currently mapped as unvegetated wetland, pickleweed and Parrish's glasswort patches, and a large patch of southern tarplant. Additionally, Phase 1 includes development of a berm running in a diagonal from the north-west corner of the property to the south-east corner of the property that separates Phase 1 of the project from Phase 2 of the project<sup>2</sup>. The berm footprint impacts degraded wetland habitat consisting of unvegetated wetland; pickleweed, saltgrass, and Parrish's glasswort patches; and a small patch of southern tarplant.

\_

<sup>&</sup>lt;sup>2</sup> It is important to note, that obsolete pipelines, oil tanks, roads, and some wells will be removed from the Phase 2 portion of the project during Phase 1.

Section 30233 of the Coastal Act is the policy that identifies the allowed uses and protection for wetlands and Section 30240 is the policy that identifies the allowed uses and protection of ESHA. Both of these policies allow impacts to these types of habitat for the purpose of restoration if no less environmentally damaging alternative is feasible. However, the type and aerial extent of the impacts to the respective habitats must be identified and fully mitigated. The type and amount of mitigation is determined on a case by case basis and includes consideration of the proposed development, the type and quality of the wetland or ESHA habitat being impacted, and whether the impact is temporary or permanent. The Commission has previously found that mitigation for wetlands at a 4:1 ratio and for terrestrial ESHA at 3:1 ratio is appropriate under the Coastal Act. These ratios may be increased or decreased depending on the respective circumstances of the proposed project and site.



Figure 1. Exhibit 5D from the February 3, 2017 Biological Technical Report showing the Pumpkin Patch Site and the depressed area in the south-east corner of the site.



Figure 2. Exhibit 4 from the May 3, 2017 GLA ESHA Memorandum showing the Pumpkin Patch Site and the location of southern tarplant in green in the south-east corner of the site.

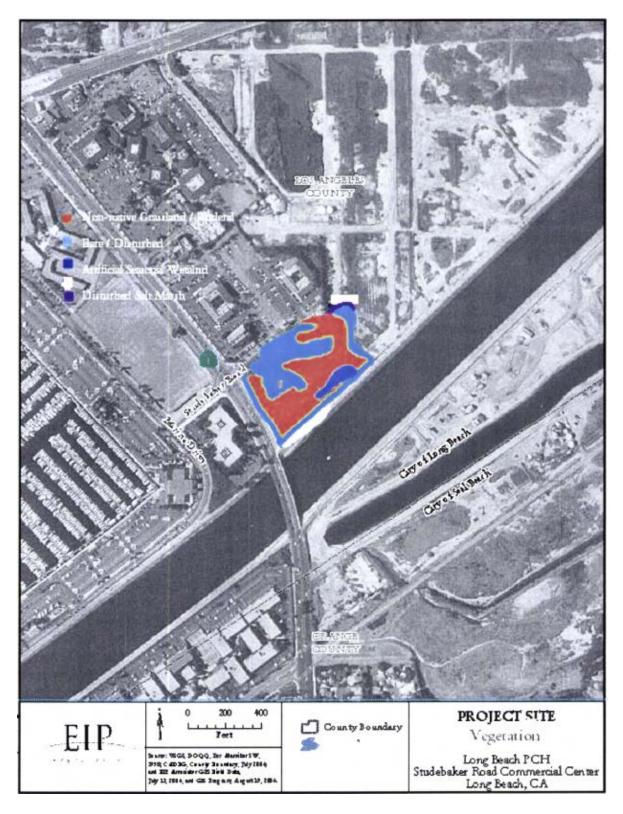


Figure 3. Exhibit from the May 24, 2005 EIP Associates Technical Memo showing the Pumpkin Patch Site with the area they identify as the "artificial seasonal wetland" colored bright blue.





Figure 4. Photos of the south-east corner of the Pumpkin Patch. Top photo – view looking north of the depressed area. Bottom photo – Close up showing soil cracks, sand spurry, and southern tarplant.

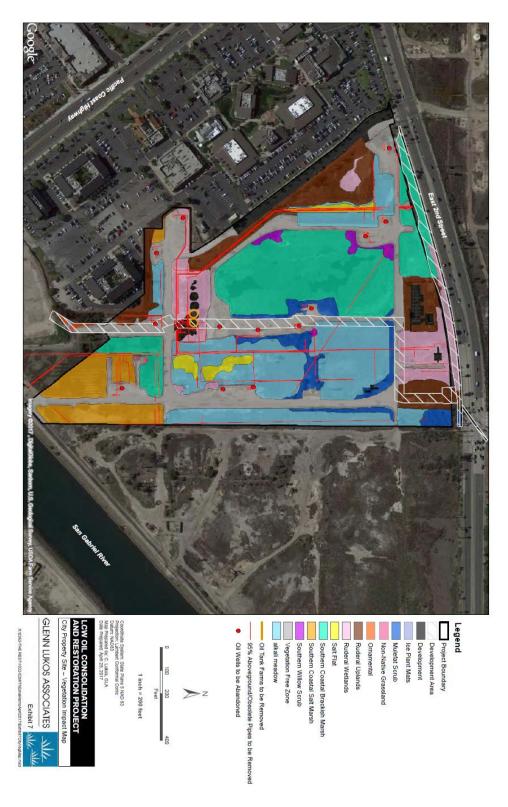


Figure 5. Exhibit 7 of the May 3, 2017 GLA ESHA memo showing the mapped vegetation on the Long Beach City Property Site as well as the old location of the proposed pipe route shown as diagonal white lines and a white border.



Figure 6. Exhibit 6 of the May 3, 2017 GLA ESHA memo showing the mapped southern tarplant population in green on the Long Beach City Property Site as well as the old location of the proposed pipe route shown as diagonal white lines and a white border.

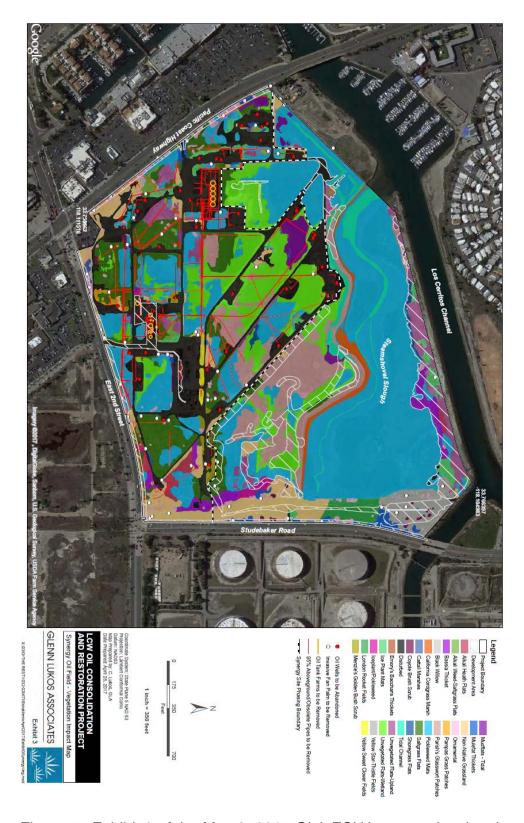


Figure 7. Exhibit 3 of the May 3, 2017 GLA ESHA memo showing the mapped vegetation on the Synergy Oil Field and the proposed development/restoration depicted with diagonal white lines and a white border.

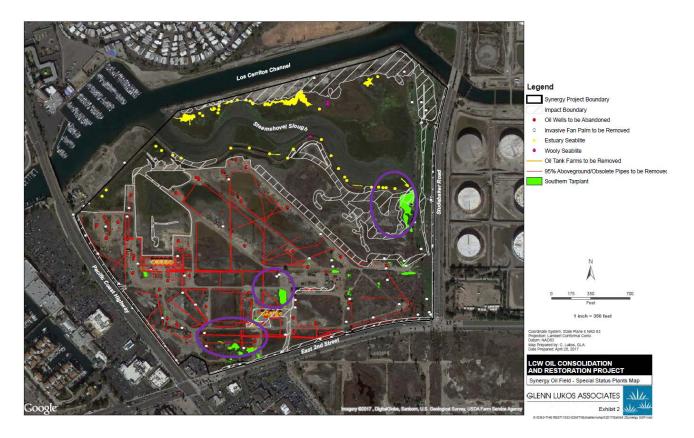


Figure 8. Exhibit 2 of the May 3, 2017 GLA ESHA memo showing the mapped estuary seabite in yellow and the southern tarplant in green on the Synergy Oil Field. The purple circles mark the southern tarplant populations that are ESHA. The proposed development/restoration is depicted with diagonal white lines and a white border.