CALIFORNIA COASTAL COMMISSION
455 MARKET STREET, SUITE 300
SAN FRANCISCO, CA 94105-2219
FAX (415) 904-5400
TDD (415) 597-5885

F11a

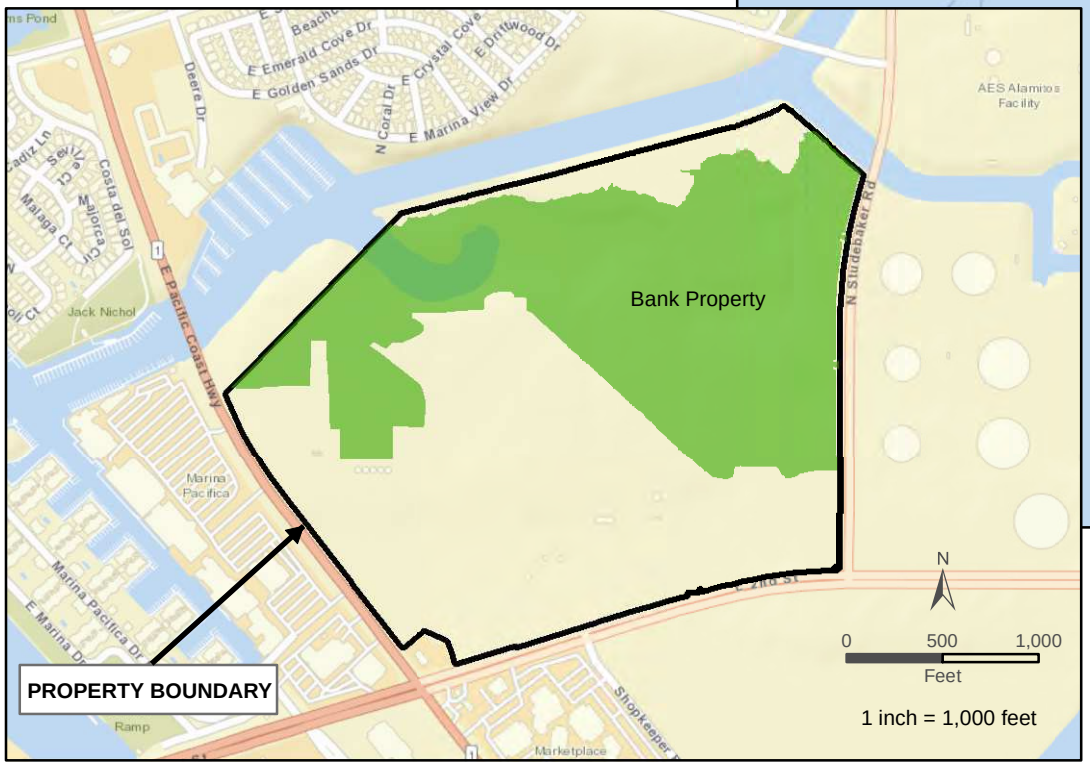
Upper Los Cerritos Mitigation Bank (LCW, LLC)

February 12, 2021

EXHIBITS

Table of Contents

EXHIBIT 1



UPPER LCW MITIGATION BANK
BANK ENABLING INSTRUMENT

General Vicinity Map

GLENN LUKOS ASSOCIATES

X:\0363-THE REST\1032-02MITI\BEI_Exhibits\Exhibit A1.mxd

EXHIBIT 2

Legend

- Project Boundary

Historical Wetlands and Streams

- Dune
- Salt/Unvegetated Flat
- Ocean
- Beach
- Open Water
- River Island/Bar
- Vegetated Wetland
- Vegetated, Woody
- Subtidal Water
- River/Stream
- Vegetated, Upland
- Gully
- Intertidal Flat

http://www.caltsheets.org/socal/

N

0 750 1,500 3,000

Feet

1 inch = 1,500 feet

Coordinate System: State Plane 5 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: November 15, 2016

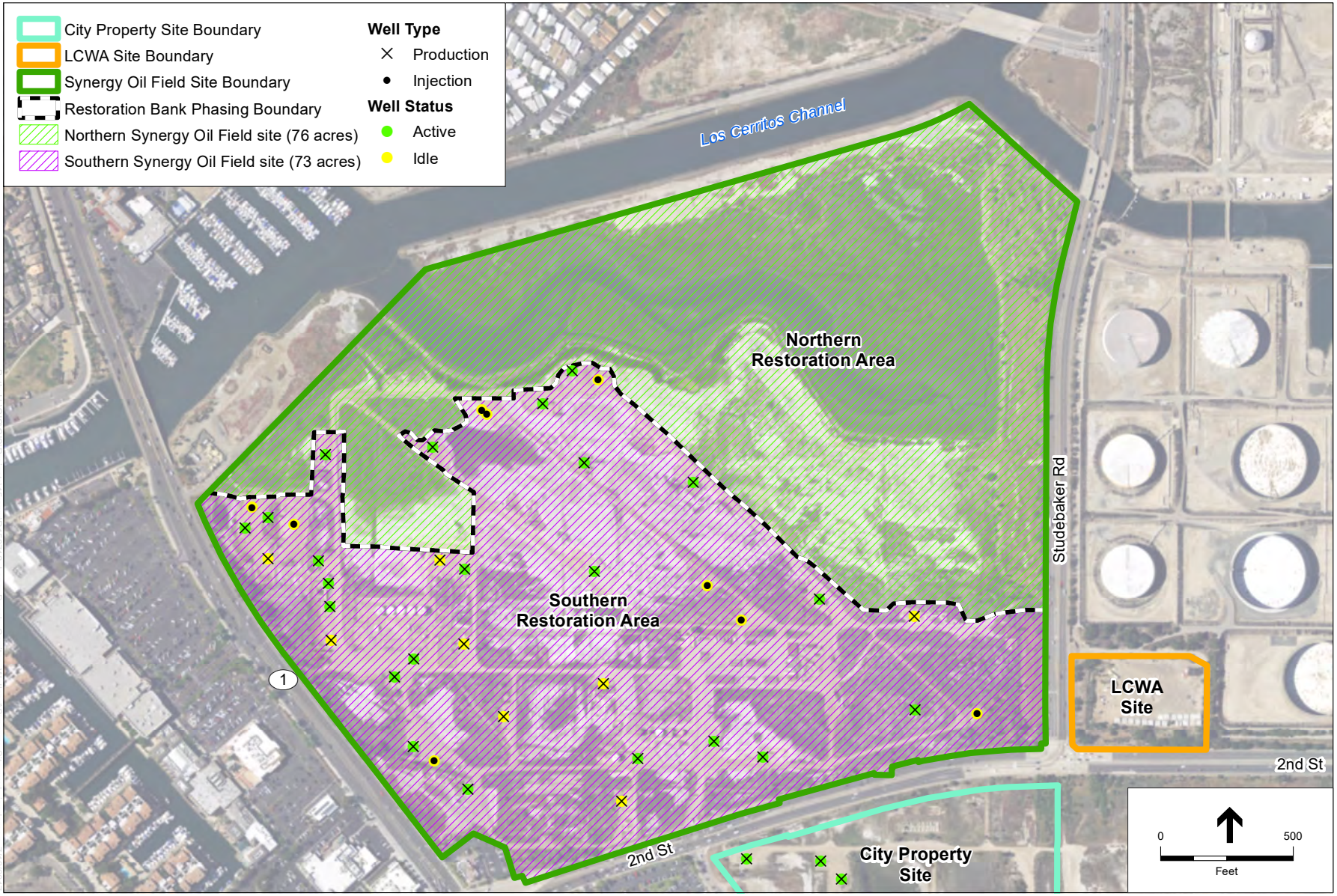
UPPER LCW WETLANDS MITGATION BANK

Southern California Coast T-Sheets (1851-1889)

GLENN LUKOS ASSOCIATES

X:\0363-THE REST\1032-02MITI\Report_RestorationPlan\February 2017\Exhibit 6ATSheet.mxd

EXHIBIT 3



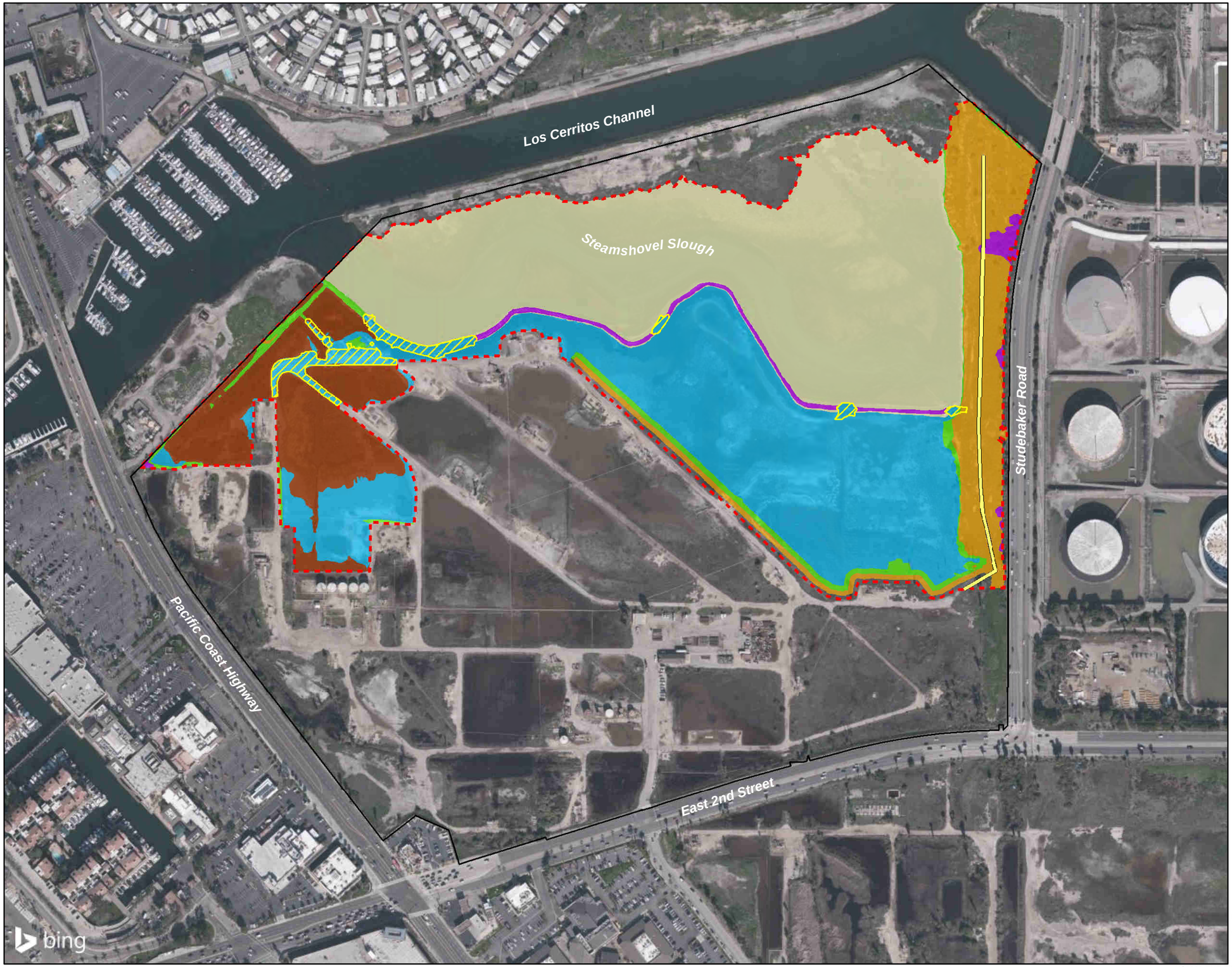
SOURCE: ESRI; City of Long Beach 2015

Long Beach Cerritos Wetland . 150712

Figure 2-4

Synergy Oil Field Site

EXHIBIT 4



- Property
- Bank Property
- Berm/Road Removal
- Coastal Salt Marsh [Steamshovel Slough] Preservation (Tidal – 29.71 ac.)
- Coastal Salt Marsh Re-establishment (Tidal – 20.66 ac.)
- Coastal Salt Marsh Rehabilitation (Tidal – 7.25 ac.)
- Transitional Habitat Re-establishment (Buffer – 1.80 ac.)
- Mulefat Scrub Enhancement (Buffer – 1.04 ac.)
- Saltbush/Goldenbush Establishment (Buffer– 7.44 ac.)
- Trail

N

0 175 350 700

Feet

1 inch = 350 feet

Coordinate System: State Plane 5 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: k. Kartunen, GLA
Date Prepared: March 23, 2020

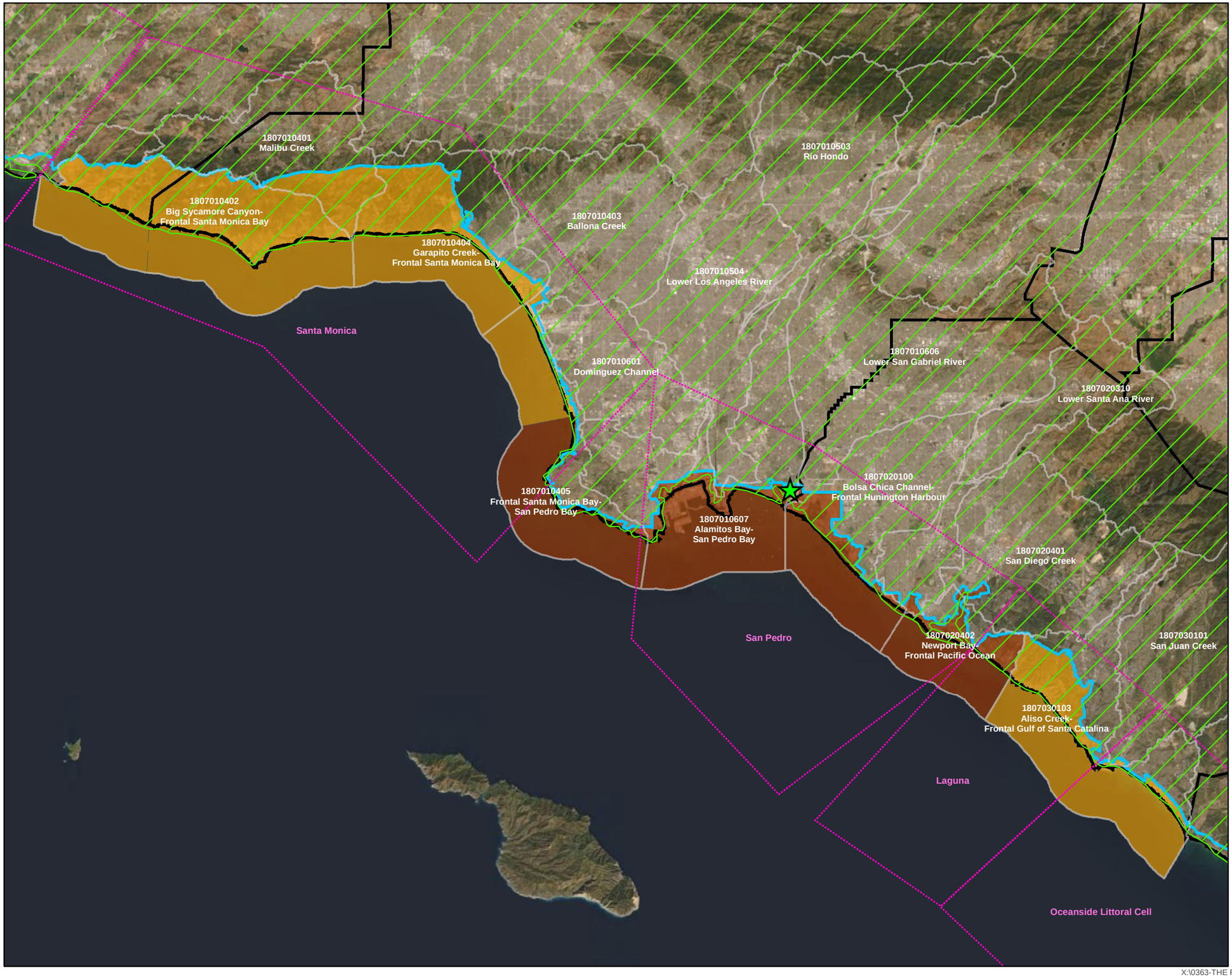
UPPER LOS CERRITOS WETLANDS MITIGATION BANK

Synergy Oil Field - Proposed Restoration

GLENN LUKOS ASSOCIATES

X:\0363-THE REST\1032-02MITI\Report_Development Plan\REV5\Exhibit 7 ProposedRestoration.mxd

EXHIBIT 5



Bank Property

County Line

Coastal Zone Boundary

HUC 10

Primary Service Area

Secondary Service Area

Littoral Cells*

Southern California Ecoregion**

*ArcGIS Online Feature Service by: CESPL
**Source: USFWS Ecosystem Regions

N

0 3.5 7 14

Miles

1 inch = 7 miles

UPPER LOS CERRITOS WETLANDS MITIGATION BANK

Service Area Map (HUC 10)

GLENN LUKOS ASSOCIATES

X:\0363-THE REST\1032-02MITI\1032-2_GIS\Service Area GIS\REV3\1032-2 ServiceAreaREV3.mxd

Table 2 below outlines ecological Performance Standards for this Bank.

TABLE 2
ECOLOGICAL PERFORMANCE STANDARDS

Performance Standards	Monitoring Method	Year 1	Year 2	Year 3	Year 4	Year 5
VEGETATION						
a) Dominance of Hydrophytes (percentage of total native species)						
Steamshovel Slough	Quadrats	≥91%	≥91%	≥91%	≥91%	≥91%
Coastal Salt Marsh Restoration	Quadrats	≥86%	≥86%	≥86%	≥86%	≥86%
Transitional Buffer	Quadrats	≥50%	≥50%	≥50%	≥50%	≥50%
Non-transitional Buffer	Quadrats	N/A	N/A	N/A	N/A	N/A
b) Native Plant Coverage (absolute cover)						
Steamshovel Slough	Quadrats	≥91%	≥91%	≥91%	≥91%	≥91%
Coastal Salt Marsh Restoration	Quadrats	≥30%	≥40%	≥60%	≥70%	≥86%
Transitional Buffer	Quadrats	≥30%	≥40%	≥60%	≥80%	≥91%
Non-transitional Buffer	Point-Intercept	≥30%	≥40%	≥60%	≥80%	≥80% shrub cover
c) Non-Native Plant Coverage/Invasive Plant Species Coverage (absolute cover)						
Steamshovel Slough	Quadrats	≤2% Non-Native 0% Invasive	≤2% Non-Native 0% Invasive	≤2% Non-Native 0% Invasive	≤2% Non-Native 0% Invasive	≤2% Non-Native 0% Invasive
Coastal Salt Marsh Restoration	Quadrats	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive
Transitional Buffer	Quadrats	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive*
Non-transitional Buffer	Point-Intercept	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive	≤5% Non-Native 0% Invasive*
d) Plant Species Richness (number of species)						
Steamshovel Slough	Quadrats	11	11	11	11	11
Coastal Salt Marsh Restoration	Quadrats	N/A	N/A	8	N/A	10
Transitional Buffer	Quadrats	8	8	8	8	8
Non-transitional Buffers	Point-Intercept	16	16	16	16	16
e) Wetland Delineation						
Steamshovel Slough	Mapping	N/A	N/A	10% of baseline	N/A	10% of baseline
Coastal Salt Marsh Restoration	Mapping	N/A	N/A	10% of baseline	N/A	10% of baseline
Transitional Buffer	Mapping		N/A	10% of baseline	N/A	10% of baseline

Non-transitional Buffers		Mapping	N/A	N/A	10% of baseline	N/A	10% of baseline
FAUNAL (percentage relative to Steamshovel Slough reference standard)							
Steamshovel Slough							
a)	Infaunal and Macro-Epifaunal Species Richness	Core Sampling	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline
b)	Infaunal and Macro-Epifaunal Community Species Density	Core Sampling	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline
c)	Marine Bird Diversity	Quarterly Bird Surveys	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline
d)	Marine Bird Density	Quarterly Bird Surveys	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline	within one st. deviation of baseline
e)	Belding's Savannah Sparrow Abundance	Annual Survey	N/A	N/A	N/A	N/A	≥95% of baseline
f)	Fish Species Abundance & Diversity	Beach Seine	≥95% of baseline	≥95% of baseline	≥95% of baseline	≥95% of baseline	≥95% of baseline
Coastal Salt Marsh Restoration							
a)	Infaunal and Macro-Epifaunal Species Richness	Core Sampling	≥30% of baseline	≥40% of baseline	≥50% of baseline	≥60% of baseline	≥80% of baseline
b)	Infaunal and Macro-Epifaunal Community Species Density	Core Sampling	≥30% of baseline	≥40% of baseline	≥50% of baseline	≥60% of baseline	≥80% of baseline
c)	Marine Bird Diversity	Quarterly Bird Surveys	N/A	N/A	N/A	N/A	Presence of one member of the following guilds: waterfowl, wading/marsh birds, small shorebirds, large shorebirds, aerial foragers, and gulls
d)	Marine Bird Density	Quarterly Bird Surveys	≥30% of baseline	≥40% of baseline	≥50% of baseline	≥60% of baseline	≥80% of baseline
e)	Fish Species Abundance & Diversity	Beach Seine	≥30% of baseline	≥40% of baseline	≥50% of baseline	≥60% of baseline	≥80% of baseline

PHYSICAL & WATER QUALITY							
Steamshovel Slough							
a)	Tidal Range – Water Level Survey	Water level measurement via tide gauge	100% of Los Cerritos Channel	N/A	N/A	N/A	100% of Los Cerritos Channel
b)	Sediment Surface Elevations	Topographic Survey	+/- .6 inches of baseline	+/- 6 inches of baseline	+/- 6 inches of baseline	+/- 6 inches of baseline	+/- 6 inches of baseline
c)	Water Quality – Dissolved Oxygen and Water Temperature	Continuous measurement via data sonde	Daily DO ≥5 mg/l, no measurement ≥ 3 mg/L ≤82˚F	Daily DO ≥5 mg/l, no measurement ≥ 3 mg/L ≤82˚F	Daily DO ≥5 mg/l, no measurement ≥ 3 mg/L ≤82˚F	Daily DO ≥5 mg/l, no measurement ≥ 3 mg/L ≤82˚F	Daily DO ≥5 mg/l, no measurement ≥ 3 mg/L ≤82˚F
Coastal Salt Marsh Restoration							
a)	Tidal Range – Water Level Survey	Water level measurement via tide gauge	100% of Los Cerritos Channel	N/A	N/A	N/A	100% of Los Cerritos Channel
b)	Sediment Surface Elevations	Topographic Survey	+/- 6 inches of baseline/as-built	+/- 6 inches of baseline/as-built	+/- 6 inches of baseline/as-built	+/- 6 inches of baseline/as-built	+/- 6 inches of baseline/as-built
c)	Water Quality – Dissolved Oxygen and Water Temperature	Continuous measurement via data sonde	Daily DO ≥5 mg/l, no measurement ≥ 3 mg/L ≤82˚F	Daily DO ≥5 mg/l, no measurement ≥ 3 mg/L ≤82˚F	Daily DO ≥5 mg/l, no measurement ≥ 3 mg/L ≤82˚F	Daily DO ≥5 mg/l, no measurement ≥ 3 mg/L ≤82˚F	Daily DO ≥5 mg/l, no measurement ≥ 3 mg/L ≤82˚F

D. CRAM Monitoring and Performance Standards

1. CRAM Monitoring

CRAM assessments will be conducted during years 3 and 5 to compare to the baseline CRAM. The most current version of CRAM should be used to assess the condition of the site during each monitoring period to ensure consistency of scoring. However, the original version of CRAM may be consulted to explain any scoring changes that may have occurred due to changes in the CRAM methodology. Permanent photo-documentation stations were established during the baseline CRAM and will be used for future CRAM assessments. CRAM assessments will be conducted during the growing season, generally March through September, and will follow CRAM guidelines. Scores will be uploaded to eCRAM. CRAM assessment locations within Steamshovel Slough are depicted as Exhibit 4.

2. CRAM Performance Standards

Scores for the Steamshovel Slough are not expected to increase based on the activities being performed (i.e., trash removal) and the CRAM scoring methodology, but were considered when projecting scores for the AAs subject to restoration activities. The Assessment Areas (AAs) associated with the restored marsh habitats are