FINAL INTEGRATED FEASIBILITY REPORT AND ENVIRONMENTAL IMPACT STATEMENT / ENVIRONMENTAL IMPACT REPORT (EIS/EIR)

APPENDIX K: CULTURAL RESOURCES COORDINATION AND CONSULTATION

EAST SAN PEDRO BAY ECOSYSTEM RESTORATION STUDY Long Beach, California

January 2022







Section 106 Consultation with the State Historic Preservation Officer

Armando Quintero, Director

DEPARTMENT OF PARKS AND RECREATION OFFICE OF HISTORIC PRESERVATION

Julianne Polanco, State Historic Preservation Officer

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August 17, 2021

In reply refer to: COE_2018_0705_002

VIA ELECTRONIC MAIL

Eduardo DeMesa Chief, Planning Division U.S. Army Corps of Engineers, Los Angeles District 915 Wilshire Blvd., Suite 930 Los Angeles, CA 90017-3489

RE: Continuing consultation for the East San Pedro Bay Ecosystem Restoration Feasibility Study, Los Angeles County

Dear Eduardo DeMesa,

The U.S. Army Corps of Engineers (COE) is continuing consultation with the State Historic Preservation Officer (SHPO) to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended) and its implementing regulation at 36 CFR § 800 *et seq*. By letter received on June 24, July 30, 2021, the COE is addressing comments on their delineation of the Area of Potential of Effects (APE) and identification efforts for the above-referenced undertaking. The COE submitted the following document to address comments and support their finding of effect:

- Relevant Portion of the Corps June 23, 2021 Submittal; Eas San Pedro Bay Ecosystem Restoration Study, Long Beach, California
- New Area of Potential Effects Maps and Avoidance Maps; East San Pedro Bay Ecosystem Restoration Study, Long Beach, California (USACE 2021)

The COE initiated consultation with the SHPO by letter issued on June 29, 2018. At that time the COE provided a description of the undertaking, requested comments on the APE, submitted evidence of their identification efforts, and requested participation in a programmatic agreement. At the time, the COE believed identification efforts would need to be deferred, requiring a programmatic agreement. The COE subsequently conducted a presence/absence survey of the entire 900-acre project area, foregoing the need for a programmatic agreement. By letter received on June 24, 2021, the COE proposed to construct of a series of marine-related ecological enhancement features located in San

Eduard DeMesa August 17, 2021 Page 2

Pedro Bay, offshore of the City of Long Beach in Los Angeles County. Project activities include the construction of approximately 121 acres of giant kelp beds by dropping approximately 132,000 tons of quarry stone in the APE along a breakwater and in open water. The project also includes the construction of two open water rocky reefs for non-kelp uses, six nearshore/shallow water rocky reef shoals, and six eelgrass beds to be located adjacent to the nearshore rocky reefs. The APE is defined as the full 900-acre project area, including staging to take place onshore at the Port of Long Beach at Pier T. Efforts to identify historic properties include a records search in 2018, terrestrial pedestrian survey, review of an underwater archaeological remote sensing survey from 1995, review of an underwater study from 2013, an updated (2021) underwater remote sensing survey, and Historical Society and Native American outreach in 2017 and 2019.

The COE requested a Sacred Lands File from the Native American Heritage Commission (NAHC) in 2018 returning negative results and contacted Native American entities listed by the NAHC as having cultural ties to the project area. The COE received a response from the Gabrieleno Band of Mission Indians – Kizh Nation, stating that the waters of the project area hold cultural and religious significance to the Tribe. The Tribe communicated support for the project as its purpose is to improve the ecosystem and water quality and requested to be kept informed as the project developed. The COE received no further responses from Tribes. The COE contacted the Long Beach Heritage Society, Long Beach Historical Society, the Wilmington Historical Society, and the San Pedro Historical Society. The COE received no responses.

Efforts to identify historic properties resulted in three shipwrecks and five features that were suggestive of a shipwreck but were either eroded or buried and could not be positively identified. Beyond the shipwrecks, 20 additional buried debris features were identified. The COE states that the 20 buried debris features do not display enough surface manifestation to determine the nature of the feature; however, that these debris features do not appear to be shipwrecks. Other features were identified as manmade reefs that appear to be composed of pilings and rubble that has fallen off the long beach breakwater or one of the oil extraction platforms within the APE.

The COE concluded that the undertaking would have no effect on historic properties and requested review and comment on their finding of effect. By letter issued July 28, 2021, the SHPO commented on the COE's description of the APE as a 900-acre area containing a discontiguous approximately 200 acres of direct impact area included 12 cultural resources, with all but one (the Queen Mary) on-shore and well outside of the marine construction footprint. The SHPO commented that it was currently unclear how the undertaking could affect historic properties within the 900-acre APE, as it appeared that project activities and their effects are restricted to the discontiguous approximate 200-acres of marine impacts and the onshore staging areas. Clarity was requested on the APE. By letter issued on July 30, 2021, the COE relays the reevaluation of their APE from the originally stated 11,465 acres of potential project area to the current 900-acre area where project activities may occur, plus a 6.5 on-shore paved parking area for staging activities. The COE states that the 12 historic properties discussed in the previous correspondences are no longer in the

Eduard DeMesa August 17, 2021 Page 3

APE. The COE provided updated APE maps reflecting the updated APE for this project. Pursuant to 36 CFR § 800.4(a)(1), I have no further comments on the APE.

On July 28, 2021, the SHPO commented on the COE's statement that the enhancement features will not be constructed within 50 meters of any of the potentially historic properties. Noting the locations of the proposed enhancement features and their spatial relationship to the unevaluated potential historic properties was unclear, the SHPO requested that final locations of project activities, once decided, be mapped, showing the spatial relationship between the project activities and the potential historic properties in the APE, and the conveyance of a copy of this map be submitted to the SHPO along with the measures the COE will take ensure that no historic properties will be affected by the undertaking. In the current communication, the COE relayed that the final locations of the habitat features have not yet been decided, and the COE will use the submitted maps showing the submarine possible historic features in order to ensure avoidance. The COE is also adding commitments to the Environmental Impact Statement which will be added to the plans and specifications for the construction contract:

- No project construction activities shall occur within the avoidance areas marked on the avoidance map.
- Prior to the issuance of a notice to proceed for construction, the COE shall provide a map of the final project enhancement feature locations to the SHPO to demonstrate that all the potential historic features will be avoided.
- In the event human remains are discovered, all ground-disturbing activities shall be halted immediately within the area of the discovery, and a COE archaeologist and the Los Angeles County Coroner will be notified. The coroner will determine whether the remains are of forensic interest. If human remains, funerary objects, sacred objects, or items of cultural patrimony are located on Federal or Tribal lands, the treatment and disposition of such remains will be carried out in compliance with the Native American Graves Protection and Repatriation Act (Public Law 101-601; 25 U.S.C. 3001 et seq.) and EP 1130-2- 540, Chapter 6. If human remains are located on state or private lands, the COE shall follow the steps outlined in 36 CFR 800.13, Post Review Discoveries, and shall notify the City of Long Beach who shall ensure that the process outlined in California Public Resources Code, Section 5097.98 is carried out.
- If previously unknown cultural resources are discovered during the project, all ground-disturbing activities shall immediately cease within fifty meters of the discovery until the Corps has met the requirement of 36 CFR 800.13 regarding post-review discoveries. Work shall not resume in the area surrounding the potential historic property until USACE re-authorizes project construction.

The COE has concluded that the undertaking would have no effect on historic properties as long as the potential historic features as identified by the marine survey and has requested review and comment on their finding of effect for the proposed undertaking. After reviewing

Eduard DeMesa August 17, 2021 Page 4

the letter and supporting documentation, **I do not object** to a finding of *no historic properties affected* for this undertaking pursuant to 36 CFR § 800.4(d)(1).

Be advised that under certain circumstances, **such as unanticipated discovery or a change in project description**, the COE may have additional future responsibilities for this undertaking under 36 CFR § 800 *et seq*. If you require further information, please contact Elizabeth Hodges of my staff at (916) 445-7017 or <u>Elizabeth.Hodges@parks.ca.gov</u>.

Sincerely,

Julianne Polanco State Historic Preservation Officer



July 30, 2021

Ms. Julianne Polanco State Historic Preservation Officer Office of Historic Preservation 1725 23rd Street, Suite 100 Sacramento, California 95816

Dear Ms. Polanco:

The Army Corps of Engineers, Los Angeles District (Corps) is continuing to consult with you regarding the East San Pedro Bay (ESPB) Ecosystem Restoration Feasibility Study (COE_2018_0705_002). The objective of the study is to develop alternatives to restore aquatic habitats historically present in ESPB. By letter dated June 23, 2021, the Corps summarized earlier consultation with your office, provided a brief description of the project, described their historic property identification efforts, transmitted the results of their recent presence/absence marine cultural survey, and provided the Corps' finding that the project would result in *no historic properties affected*. By letter dated July 28, 2021, we received a response from you with concerns about the size of our area of potential effect (APE) and with questions about the proposed habitat enhancement features and their spatial relationship to the unevaluated potential historic properties. A copy of our previous submittal is included for ease of your review (Enclosure 1). This letter responds to your concerns, provides some clarification, and re-transmits the Corps' finding that the undertaking will result in no *historic properties affected*.

The first concern raised by your office is as follows:

• The COE describes the current APE as a 900-acre area containing a discontiguous approximately 200 acres of direct impact area. The COE states that twelve cultural resources have been recorded in the APE, with all but one (the Queen Mary) on shore and well outside of the marine construction footprint. Pursuant to 36 CFR 800.16(y), the APE is the geographic area in which historic properties may be affected by the undertaking, should any historic properties exist. It is currently unclear how the undertaking could affect historic properties within the 900-acre APE, as it appears that project activities and their effects are restricted to the discontiguous approximate 200-acres of marine impacts and the onshore staging areas. Please clarify the APE based upon the geographic area in which the undertaking could have an effect upon historic properties, should any exist, identify any possible historic properties in the APE, evaluate them for

the National Register, and assess the effects of the undertaking upon those properties, should any be identified.

The Corps believes that there is some confusion in our previous letter regarding the APE (11,465 acres) versus the project area (900 acres). Please see map number 3 in the previously submitted Enclosure 2 for a graphic representation of the APE versus project area. In June of 2018 the Corps consulted with your office on the APE and your office stated that the APE "appears to be appropriately defined." Because the entire study area was being considered for potential habitat enhancement features, the APE was defined as the study area. As described in the June 23rd letter, the APE "encompasses the Los Angeles River estuary on the west and Anaheim Bay to the east and Pier T at the Port of Long Beach. The APE includes approximately 18 square miles (11,465 acres)". The project area is approximately 900 square acres.

Between 2018 and now the project has been better defined. The Corps was hesitant to revisit the steps outlined at 36 C.F.R. 800.4(a) and reconsult on the APE; however, the Corps agrees with your recommendation that the 900-acre project area is a far more reasonable APE for the proposed project. By this letter the Corps is re-consulting with your office on the APE. The Corps has determined that the APE includes the 900-acre project area and the 6.5 acre staging area located within the Port of Long Beach at Pier T. The staging area is paved, and no ground disturbing activity would occur here (Enclosure 2). The twelve historic properties discussed in both of our previous letter are all located outside of the APE.

The second concern raised by your office is as follows:

The COE states that additional marine surveys to record and evaluate identified underwater features is not necessary since the enhancement features will not be constructed within 50 meters of any of the potentially historic properties. At this time the locations of the proposed enhancement features and their spatial relationship to the unevaluated potential historic properties is unclear. The SHPO requests that final locations of project activities, once decided, be mapped, showing the spatial relationship between the project activities and the mapped potential historic properties and a copy of this map be submitted to the SHPO along with the measures the COE will take ensure that no historic properties will be affected by the undertaking.

In our previous correspondence, the Corps outlined their good faith effort to identify historic properties in the APE. The Corps has completed a literature search, considered the potential for significant submerged prehistoric sites to be in the 900-acre APE, consulted with six Federally recognized and non-Federally recognized Tribes and four historical societies, and completed a marine survey of the entire 900-acre APE. The Corps has flexibility in where they can place the habitat enhancement features within the 900-acre APE and has committed to avoiding the seven shipwrecks/potential shipwrecks, the 20 buried debris features, and the pilings reef. No habitat enhancement features would be constructed within 50 meters of any of these potentially historic

features. The Corps is requesting concurrence with their finding that as long as these potential historic features are avoided, the project would result in no historic properties affected. Please note, that the previously submitted marine survey report has an image showing habitat enhancement feature locations. These are not correct. This image was produced as a mock-up for the contractor completing the marine survey to show the general size and scope of the proposed project. A statement has been added to the image clarifying that the polygons do not reflect the final location of the proposed enhancement features. The final habitat enhancement feature locations will not be identified until the next stage of the study.

Regarding your request for measures that the Corps would take to ensure that the potential historic features are avoided, a point of clarification is necessary. Your July 28 letter refers to the Corps' permit. The undertaking, if approved, would be constructed by the Corps. Construction of the enhancement features would be completed by Corps employees or Corps contractors; therefore, the Corps is able to ensure that the potential historic features are avoided. The avoidance maps and the following commitments are being added to the Environmental Impact Statement which in turn will be added to the plans and specifications for the construction contract:

- ✓ No project construction activities shall occur within the avoidance areas marked on the Figure below.
- ✓ Prior to the issuance of a notice to proceed for construction, the Corps shall provide a map of the final project enhancement feature locations to the California State Historic Preservation Office to demonstrate that all the potential historic features have been avoided.
- ✓ In the event human remains are discovered, all ground-disturbing activities shall be halted immediately within the area of the discovery, and a USACE archaeologist and the Los Angeles County Coroner must be notified. The coroner will determine whether the remains are of forensic interest. If human remains, funerary objects, sacred objects, or items of cultural patrimony are located on Federal or Tribal lands, the treatment and disposition of such remains will be carried out in compliance with the Native American Graves Protection and Repatriation Act (Public Law 101-601; 25 U.S.C. 3001 et seq.) and EP 1130-2-540, Chapter 6. If human remains are located on state or private lands, the Corps shall follow the steps outlined in 36 CFR 800.13, post review discoveries and shall notify the City of Long Beach who shall ensure that the process outlined in California Public Resources Code, Section 5097.98 are carried out
- ✓ If previously unknown cultural resources are discovered during the project, all ground-disturbing activities shall immediately cease within fifty meters of the discovery until the Corps has met the requirement of 36 CFR 800.13 regarding post-review discoveries. Work shall not resume in the area surrounding the potential historic property until USACE re-authorizes project construction.

The Corps has completed a presence/absence survey of the entire APE and is avoiding any features that could potentially be a historic property. The staging area is a pier within the second busiest port in the United States and the rock and sand would be brought in from existing quarries and borrow areas. For these reasons the Corps has determined that the undertaking would result in *no historic properties affected*. New maps have been included in Enclosure 2 but no other items have changed. If you have specific questions or if we can provide any clarification about this request or any other concerns, please contact Ms. Danielle Storey, Archaeologist, at (213) 452 3855 or at Danielle.L.Storey@usace.army.mil.

Sincerely,

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)

Enclosure 1

Relevant Portion of the Corps June 23, 2021 Submittal

Material Omitted

Material Provided Elsewhere in the Appendix

Enclosure 2

New Area of Potential Effect Maps and Avoidance Maps



Avoidance Maps Omitted

Confidential

Material On-File at the Los Angeles District Office

From:	Storey, Danielle L CIV USARMY CESPL (USA)
То:	Hodges, Elizabeth@Parks
Subject:	New map for East San Pedro Bay Consultation File (COE_2018_0705_002)
Date:	Wednesday, January 26, 2022 4:38:00 PM
Attachments:	ESPB with Surfside Borrow in APE.pdf
	SHPO ESPB 106 consultation Effects edd highlighted.pdf
	COE 2018 0705 002 East San Pedro Bay 2021 07 28.pdf
	SHPO letter response to 7282021 letter edd.pdf
	COE 2018 0705 002 East San Pedro Bay 2 2021 08 17.pdf
	Enclosure two reconsult.pdf

Hi Liz,

I am contacting you about a slight correction to my previous consultations for the East San Pedro Bay (ESPB) Project. I have attached our previous letters to refresh your memory. If you remember, we had originally defined the area of potential effect (APE) as the whole study area (11,500 acres) but then on the recommendation of your office we modified the APE to just include the 900-acre area where the project could conceivably be constructed. The final constructed project would only be about 200 discontinuous acres within the 900 acre block.

I was working on the ESPB NEPA document this week and I realized that I should have included the Surfside/Sunset Borrow Area in the revised APE map. While the Surfside/Sunset Borrow Area was specifically discussed in our consultation letter as being the material source for the eel grass beds and the Corps considered it as part of their effect finding (see highlighted letter), I inadvertently left the borrow area off the revised map in my rush to get it to you. Just as a reminder, the Surfside/Sunset Borrow Area is an established borrow area that is regularly used as a materials source by the Corps, the Navy, and various Orange County Cities. It has been in use since at least 1964. I was hoping you could add this email and new map to your records so the correct APE is documented in your files. The PDF called "ESPB with Surfside Borrow in APE" is the Corps' APE. The "Enclosure two reconsult" was the last map we sent you where I left off the borrow area. Apologies for my oversight.

Danielle Storey Archaeologist USACE Los Angeles District Danielle.L.Storey@usace.army.mil Office: (213) 452-3855 Mobile: (213) 308-0437



Source: Esrl, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

3 Miles

0.75 1.5

0

Armando Quintero, Director

DEPARTMENT OF PARKS AND RECREATION OFFICE OF HISTORIC PRESERVATION

Julianne Polanco, State Historic Preservation Officer

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July 28, 2021

In reply refer to: COE_2018_0705_002

VIA ELECTRONIC MAIL

Eduardo DeMesa Chief, Planning Division U.S. Army Corps of Engineers, Los Angeles District 915 Wilshire Blvd., Suite 930 Los Angeles, CA 90017-3489

RE: Section 106 consultation for the East San Pedro Bay Ecosystem Restoration Feasibility Study, Los Angeles County

Dear Eduardo DeMesa,

The U.S. Army Corps of Engineers (COE) is initiating consultation with the State Historic Preservation Officer (SHPO) to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended) and its implementing regulation at 36 CFR § 800 *et seq*. By letter received on June 24, 2021, the COE is seeking comments on their identification efforts and finding of effect for the above-referenced undertaking. The COE submitted the following document to support their finding of effect:

- Draft Integrated Feasibility Report and Environmental Impact Statement/Environmental Impact Report (EIS/EIR); Appendix K: Cultural Resources; East San Pedro Bay Ecosystem Restoration Study; Long Beach, California (no author 2019)
- Presence/Absence Survey for Potential Shipwrecks and/or Historic Features in support of the Ecosystem Restoration Feasibility Study; East San Pedro Bay, Orange County CA (Merkel & Associates, Inc. 2021)

The COE initiated consultation with the SHPO by letter issued on June 29, 2018. At that time the COE provided a description of the undertaking requested comments on the Area of Potential Effects, submitted evidence of their identification efforts, and requested participation in a programmatic agreement. At the time, the COE believed identification efforts would need to be deferred, requiring a programmatic agreement. Since that time,

Eduard DeMesa July 28, 2021 Page 2

the COE has undertaken a presence/absence survey of the entire 900-acre project area and has decided the development of a programmatic agreement is no longer appropriate.

By letter received on June 24, 2021, the COE is proposing to issue a permit supporting the construction of a series of marine-related ecological enhancement features located in San Pedro Bay, offshore of the City of Long Beach in Los Angeles County. Project activities include the construction of approximately 121 acres of giant kelp beds by dropping approximately 132,000 tons of quarry stone in the APE to support kelp bed establishment along a breakwater and in open water. The project also includes the construction of two open water rocky reefs for non-kelp uses, the construction of six nearshore/shallow water rocky reef shoals, and six eelgrass beds to be located adjacent to the nearshore rocky reefs. The APE is defined as the full 900-acre project area, including staging to take place onshore at the Port of Long Beach at Pier T. Efforts to identify historic properties include a records search in 2018, pedestrian survey, review of an underwater archaeological remote sensing survey in 1995, review of an underwater study from 2013, an updated underwater remote sensing survey in 2021, and Historical Society and Native American outreach in 2017 and 2019.

The COE requested a Sacred Lands File from the Native American Heritage Commission (NAHC) in 2018 returning negative results. The COE contacted Native American entities listed by the NAHC as having cultural ties to the project area. The COE received a response from the Gabrieleno Band of Mission Indians – Kizh Nation, stating that the waters of the project area hold cultural and religious significance to the Tribe. The Tribe communicated support for the project as it intends to improve the ecosystem and water quality and requested to be kept informed as the project developed. The COE received no further responses.

The COE contacted the Long Beach Heritage Society, Long Beach Historical Society, the Wilmington Historical Society, and the San Pedro Historical Society. The COE received no responses.

Efforts to identify historic properties resulted in three shipwrecks and five features that were suggestive of a shipwreck but were either eroded or buried and could not be positively identified. Beyond the shipwrecks, 20 additional buried debris features were identified. The COE states that the 20 buried debris features do not display enough surface manifestation to determine the nature of the feature; however, that these debris features do not appear to be shipwrecks. Other features were identified as manmade reefs that appear to be composed of pilings and rubble that has fallen off the long beach breakwater or one of the oil extraction platforms within the APE.

The COE has concluded that issuing a permit would have no effect on historic properties and has requested review and comment on their finding of effect for the proposed undertaking. After reviewing the letter and supporting documentation, I have the following comments: Eduard DeMesa July 28, 2021 Page 3

- The COE describes the current APE as a 900-acre area containing a discontiguous approximately 200 acres of direct impact area. The COE states that twelve cultural resources have been recorded in the APE, with all but one (the Queen Mary) on shore and well outside of the marine construction footprint. Pursuant to 36 CFR 800.16(y), the APE is the geographic area in which historic properties may be affected by the undertaking, should any historic properties exist. It is currently unclear how the undertaking could affect historic properties within the 900-acre APE, as it appears that project activities and their effects are restricted to the discontiguous approximate 200-acres of marine impacts and the onshore staging areas. Please clarify the APE based upon the geographic area in which the undertaking could have an effect upon historic properties, should any exist, identify any possible historic properties in the APE, evaluate them for the National Register, and assess the effects of the undertaking upon those properties, should any be identified.
- The COE states that additional marine surveys to record and evaluate identified underwater features is not necessary since the enhancement features will not be constructed within 50 meters of any of the potentially historic properties. At this time the locations of the proposed enhancement features and their spatial relationship to the unevaluated potential historic properties is unclear. The SHPO requests that final locations of project activities, once decided, be mapped, showing the spatial relationship between the project activities and the mapped potential historic properties and a copy of this map be submitted to the SHPO along with the measures the COE will take ensure that no historic properties will be affected by the undertaking.

As it appears that the COE's identification efforts are incomplete, I cannot comment on the COE's finding of effect at this time. If you require further information, please contact Elizabeth Hodges of my staff at (916) 445-7017 or <u>Elizabeth.Hodges@parks.ca.gov</u>.

Sincerely,

Julianne Polanco State Historic Preservation Officer

Armando Quintero, Director

DEPARTMENT OF PARKS AND RECREATION OFFICE OF HISTORIC PRESERVATION

Julianne Polanco, State Historic Preservation Officer

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July 24, 2021

In reply refer to: COE_2021_

VIA ELECTRONIC MAIL

Regulatory Division U.S. Army Corps of Engineers, Los Angeles District 915 Wilshire Blvd., Suite 930 Los Angeles, CA 90017-3489

RE: Section 106 consultation for the East San Pedro Bay Ecosystem Restoration Feasibility Study, Los Angeles County

Dear Eduardo DeMesa,

The U.S. Army Corps of Engineers (COE) is initiating consultation with the State Historic Preservation Officer (SHPO) to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended) and its implementing regulation at 36 CFR § 800 *et seq*. By letter received on June 24, 2021, the COE is seeking comments on their identification efforts and finding of effect for the above-referenced undertaking.

Your submission is currently under review. Comments should be expected by July 28, 2021. If you require further information, please contact Elizabeth Hodges of my staff at (916) 445-7017 or <u>Elizabeth.Hodges@parks.ca.gov</u>.

Sincerely,

Julianne Polanco State Historic Preservation Officer



June 23, 2021

Ms. Julianne Polanco State Historic Preservation Officer Office of Historic Preservation 1725 23rd Street, Suite 100 Sacramento, California 95816

Dear Ms. Polanco:

The Army Corps of Engineers, Los Angeles District (Corps) is continuing to consult with you regarding the East San Pedro Bay (ESPB) Ecosystem Restoration Feasibility Study (COE_2018_0705_002). The objective of the study is to develop alternatives to restore aquatic habitats historically present in ESPB. We first sent you a letter dated June 29, 2018 where we provided a description of the ESPB Study, sought your comment on the area of potential effect (APE), transmitted the results of our initial historic property identification efforts (record search and tribal consultation) and requested your participation in a programmatic agreement. At the time of our 2018 letter, the Corps believed that we would have to defer cultural resource surveys until we had final engineering designs and knew the exact location of the proposed aquatic habitat features. Since our 2018 letter, the Corps has undertaken a presence/absence survey of the entire 900-acre project area where the aquatic habitat features may be constructed. A programmatic agreement is no longer necessary. This letter provides a brief description of the project, describes our historic property identification efforts, transmits the results of our recent presence/absence marine cultural survey, and provides the Corps' finding that the project would result in no historic properties affected.

Project Description

The proposed undertaking involves construction of a series of marine-related ecological enhancement features within ESPB off the coast of the City of Long Beach, Los Angeles County, California. Specific proposed enhancement features include: (a) a series of "kelp bed" rocky reefs designed to support kelp beds along a breakwater and in open water (121 acres); (b) two open water rocky reefs which are not intended to support kelp beds (29 acres); (c) six nearshore/shallow water rocky reef shoals (20 acres), and (d) six eelgrass beds (30 acres). The eelgrass beds would be located adjacent to the nearshore rocky reefs. Total project features would entail approximately 200 acres. The exact locations for these features have not been determined but they would be placed within a defined 900-acre project area. Staging and access for construction would be located within the Port of Long Beach at Pier T. The staging area is paved, and no ground disturbing activity would occur here.

a. Kelp Beds. Approximately 121 acres of giant kelp beds would be restored in the breakwater and open water zones. Each individual kelp bed would be roughly five acres. To construct these kelp reefs, approximately 132,000 tons of quarry stone (from an existing quarry) would be brought to the project area and deposited from barges in a random manner to achieve 20% total bottom coverage of substrate with only one layer of stone thickness.

b. Open water rocky reefs. Approximately 29 acres of rocky reef habitat would be created. The open water reefs would be made up of individual rock groupings, roughly 100 feet in diameter, spaced apart within a circular area. This distribution will offer a variety of habitats for different species by providing alternating rocky reefs and sandy bottom in a concentrated area. Each individual rock grouping would vary in height between 3 feet to 12 feet above the seabed. As with the kelp beds, the rocky reef would be constructed of quarry stone from an existing quarry and would be deposited by barge.

b. Nearshore rocky reef shoals. Approximately 20 acres of near shore rock reef would be created in the nearshore. Each reef footprint is conceptually designed as a rectangle roughly 1,000' long by 175' wide, running parallel to the shoreline in about 20 feet of water. They would be roughly 4' to 14' in vertical height. The construction of the nearshore rocky reefs would be accomplished by a barge and crane with appropriate support vessels.

c. Eelgrass beds. Approximately five eelgrass beds comprised of 30 acres would be established behind the rocky reef shoals in the nearshore zone. Up to 100,000 cubic yards of dredged sand material obtained from an existing borrow area known as the Surfside/Sunset Borrow Area would be deposited on the leeward side of the nearshore rocky reefs to provide a suitable substrate and elevation for establishing eelgrass within this sheltered area.

Area of Potential Effects

In June of 2018 in the early stages of the study, the Corps, in consultation with your office defined the area of potential effects (APE) as the ESPB study area. The study area/APE includes the entire ESPB from the Long Beach shoreline to offshore of the Middle Breakwater. It encompasses the Los Angeles River estuary on the west and Anaheim Bay to the east and Pier T at the Port of Long Beach. The APE includes approximately 18 square miles (11,465 acres). At the time that the APE was determined, the entire study area was being considered for habitat enhancement features. The Corps has now selected its preferred alternative (the undertaking). With a construction footprint of 200 discontiguous acres, the direct impact area of the preferred alternative is significantly smaller than the APE. All the project features would be confined to a 900-acre area, hereafter referred to as the project area (Enclosure 2).

Historic Property Identification Efforts

As previously discussed in our 2018 letter, the Corps contracted with RECON Environmental, Inc. to conduct a record search of the entire APE and a one-mile buffer through the South Central Coastal Information Center (Enclosure 3). Information from the record search was used to ensure that impacts to known historic properties would be avoided. Twelve cultural resources have been recorded in the APE but none of these resources are close to the proposed enhancement features. All twelve of the recorded resources are historic era sites, and except for the Queen Mary, they are all located on the shore, well outside of the marine construction footprint.

Also as discussed in our 2018 letter, the Corps requested a sacred lands search from the Native American Heritage Commission (NAHC). The results were negative; however, the NAHC stated that the area is sensitive for cultural resources and provided a list of non-Federally recognized tribes who are culturally affiliated with the area. Letters requesting assistance identifying any known traditional cultural properties were sent to the tribes on November 17, 2017. Follow up letters were sent on December 12, 2019 providing a project description and seeking their comments. The Gabrieleno Band of Mission Indians - Kizh Nation (Kizh Nation)

responded to the Corps' consultation letters. They are supportive of efforts to improve the ecosystem within ESPB. No project specific concerns were raised but the importance or the water and the villages that were once located near ESPB were discussed.

In addition to the tribes, the Corps invited the Historical Society of Long Beach, the Wilmington Historical Society, the Long Beach Heritage, and the San Pedro Bay Historical Society to consult on the undertaking via letters dated December 12, 2019. None of the historical societies responded to the Corps invitation to consult.

As part of our good faith effort to identify historic properties, the Corps has considered the potential for significant submerged prehistoric sites to be impacted by the project. A 1995 underwater archeological remote sensing survey of the channel that runs between the middle breakwater and Long Beach breakwaters at the southwestern edge of the APE provided relevant data for the larger ESPB project (Enclosure 4). The report observed that, prior to warming of the ice sheets and rising sea levels 18,000 years ago, human habitation may have occurred on the exposed continental shelf. However, because the high energy wave environment of the San Pedro shelf likely washed away any intact deposits, submerged archaeological sites would only exist in protected areas of high alluvium or where intervening landforms such as reefs or rocky headlands would have lessened erosive forces. The ESPB enhancement features would be placed in the sandy nearshore where high energy wave activity would have destroyed remnant sites or along the outlet of the San Gabriel River where high energy river deposits would have destroyed any prehistoric habitation sites.

A more recent study undertaken by the Bureau of Ocean Energy Management, *Inventory* and Analysis of Coastal and Submerged Archaeological Site Occurrence on the Pacific Outer Continental Shelf (Enclosure 4) also investigated the possibility of such sites existing on the Pacific Ocean Continental Shelf. Consistent with the 1994 remote sensing survey, the 2013 study posits that submerged archaeological sites or isolates could only remain in low wave or protected areas or in unconsolidated sediments.

In 2021, the Corps retained Merkel & Associates Inc. (M&A) to conduct a presence/absence survey for potential shipwrecks and/or historic features in the 900-acre project area (Enclosure 5). M&A conducted the survey using interferometric sidescan sonar (ISS) and a remotely operated vehicle (ROV) The interferometric sidescan sonar provided an acoustic backscatter image of the seafloor concurrent with collecting high-density swath bathymetric data. Following the sidescan survey, the survey team deployed an ROV to inspect some of the debris items.

While the survey identified 164 items on the sea floor only a small subset of these items was suggestive of a historic era resource. The overwhelming majority of the surface features appear to be general marine debris. Of the possible historic era features, M&A identified three shipwrecks and five features that were suggestive of a shipwreck but were either eroded or buried and could not be positively identified. Beyond the shipwrecks, M&A found evidence of 20 additional buried debris features. These buried debris features are problematic in that there is not enough surface manifestation to determine what the feature is; however, these debris features do not appear to be shipwrecks. Other features that were identified were manmade reefs that appear to be composed of pilings and rubble that has fallen off the long beach breakwater or one of the oil extraction platforms within ESPB.

In accordance with 36 CFR 800.4(b)(1), the Corps has determined that the above constitutes a reasonable and good faith effort to identify historic properties. The Corps has some flexibility in where they can place the habitat enhancement features within the 900-acre project area and

has committed to avoid placing these features in the areas where the seven shipwrecks/potential shipwrecks, the 20 buried debris features, and the pilings reef were identified. No enhancement features would be constructed within 50 meters of any of these potentially historic features. The provided maps show the areas that would be avoided (Enclosure 2). Additional marine surveys to record and evaluate these features are not necessary since the enhancement features would not overlap these areas. Beyond the cultural resource issue, the Corps cannot place rock on shipwrecks or other unknown features due to the liability of damaging a hull and causing oil, gasoline, or another toxic substance into the ocean.

Finding of Effect

The area where the habitat enhancement features would be placed is within high energy nearshore where wave activity would have destroyed remnant sites or along the outlet of the San Gabriel River where high energy river deposits would have destroyed any remnant prehistoric sites. The Corps has completed a presence/absence survey of the 900-acre project area and is avoiding any features that could potentially be significant historic properties. The staging area is a pier within the second busiest port in the United States and the rock and sand would be brought in from existing quarries and borrow areas. For these reasons the Corps has determined that the undertaking would result in *no historic properties affected*. At this time, the Corps invites your comments on the historic property identification efforts and your agreement with our finding of effect. The Corps is concurrently notifying the Gabrieleno Band of Mission Indians – Kizh Nation, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Gabrielino Tongva Indians of California Tribal Council, Gabrielino-Tongva Tribe, the Soboba Band of Luiseno Indians, and the four historical societies discussed above of our finding of effect and requesting their comment.

If you have specific questions or if we can provide any clarification about this request or any other concerns, please contact Ms. Danielle Storey, Archaeologist, at (213) 452 3855 or at Danielle.L.Storey@usace.army.mil.

Sincerely,

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)

Enclosure 3

Previous Consultation Letters

Material Omitted

Material Provided Elsewhere in the Appendix

Enclosure 4 Maps

Enclosure 2

Part 1: APE and Project Area Maps







Enclosure 2

Part 2: Avoidance Maps

Avoidance Maps Omitted

Confidential

Material On-File at the Los Angeles District Office

Enclosure 5 Record Search

Material Omitted

Confidential

Material On-File at the Los Angeles District Office
Enclosure 6

Potential for Submerged Prehistoric Archaeological Site within the Project Area

EAST SAN PEDRO BAY ECOSYSTEM RESTORATION STUDY Long Beach, California

TECHNICAL SYNTHESIS REPORT

UNDERWATER REMOTE SENSING SURVEY OF PROPOSED DREDGE AREA, QUEENSGATE CHANNEL, LONG BEACH HARBOR, LOS ANGELES COUNTY, CALIFORNIA

Contract No. DACW09-94-D-0014 Delivery Order No. 0008, dated February, 1994

Report Prepared for:

Statistical Research Inc. Tucson, Arizona

and the

US Army Corps of Engineers, LA District Environmental Planning Division

July 29, 1995

MACFARLANE ARCHAEOLOGICAL CONSULTANTS 7290 Marmota Street Ventura, California 93003-6845 (805) 659-2657 Material Omitted

Confidential

Material On-File at the Los Angeles District Office

Inventory and Analysis of Coastal and Submerged Archaeological Site Occurrence on the Pacific Outer Continental Shelf



U.S. Department of the Interior Bureau of Ocean Energy Management Pacific OCS Region



Material Omitted

Confidential

Material On-File at the Los Angeles District Office

Lisa Ann L. Mangat, Director

DEPARTMENT OF PARKS AND RECREATION OFFICE OF HISTORIC PRESERVATION

Julianne Polanco, State Historic Preservation Officer

 1725 23rd Street, Suite 100,
 Sacramento,
 CA 95816-7100

 Telephone:
 (916) 445-7000
 FAX:
 (916) 445-7053

 calshpo.ohp@parks.ca.gov
 www.ohp.parks.ca.gov

July 31, 2018

In reply refer to: COE_2018_0705_002

Mr. Eduardo T. De Mesa Chief, Planning Division U.S. Army Corps of Engineers Los Angeles District 915 Wilshire Boulevard, Suite 930 Los Angeles, CA 90017

Subject: Section 106 Consultation for the East San Pedro Bay Ecosystem Restoration Study, Los Angeles County, California

Dear Mr. De Mesa:

The California State Historic Preservation Officer (SHPO) received a letter from the U.S. Army Corps of Engineers (COE) on July 05, 2018 initiating consultation on the East San Pedro Bay Ecosystem Restoration Study. The COE is consulting with the SHPO in order to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended) and its implementing regulations at 36 CFR Part 800.

The COE, in partnership with the City of Los Angeles (City), is proposing to study and evaluate opportunities for restoring ecosystem function and increasing habitat biodiversity with the East San Pedro Bay (ESPB) in Los Angeles County, California. The ESPB Ecosystem Restoration Study (Study) will investigate alternatives to restoring the ecosystem within ESPB, and is being conducted under the authority of the COE's General Investigations Program. The study, including a range of alternatives, will culminate in an Integrated Feasibility Report (IFR). Additional design and compliance activities will only occur after Congress has approved and funded the recommended alternative, which will not happen until 2019 or later.

The COE has defined the Area of Potential Effects (APE) as the entire study area, which includes the East San Pedro Bay in the City of Long Beach, California and is approximately 18 square-miles in size. The APE also includes a buffer of residential and commercial development around the bay to include any visual, auditory, and atmospheric effects from the proposed project, and also includes any temporary construction or staging areas that may be needed.

Mr. De Mesa July 31, 2018 Page 2

Historic property identification efforts conducted thus far have included a records search through the South Central Coastal Information Center of the APE and a one-mile buffer. Twelve historic resources have been previously recorded in the APE, including two historic properties: the Queen Mary (P-19-180734) and the Long Beach Village Riviera (P-19-178693). The APE may also contain previously unrecorded shipwrecks and prehistoric sites.

The COE contacted the Native American Heritage Commission (NAHC) and the potentially interested contacts provided the NAHC. A Sacred Lands File search of the APE was negative, but the NAHC indicated that the area is sensitive for cultural resources. No comments have been received to date from the five potentially interested tribal contacts. The COE has indicated that they will send another letter inviting the tribes to consult after the final array of project alternatives is identified.

The COE is requesting the SHPO's review and comment on their APE. The COE is also proposing to develop a Programmatic Agreement (PA) in order to conduct phased identification and evaluation of historic properties to fulfill their Section 106 requirements. A PA is needed because additional identification efforts cannot be completed until after the project is approved. The SHPO offers the following comments:

- Pursuant to 36 CFR 800.4(a)(1), the COE's APE appears to be appropriately defined and I have no comments at this time.
- I agree that development of a PA is appropriate in order to conduct phased identification efforts for this undertaking, pursuant to 800.14(b).

I look forward to continuing consultation with the COE for this undertaking under 36 CFR Part 800. For more information or if you have any questions, please contact Koren Tippett, Archaeologist, at (916) 445-7017 or koren.tippett@parks.ca.gov.

Sincerely,

Julianne Polanco State Historic Preservation Officer



DEPARTMENT OF THE ARMY LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS 915 WILSHIRE BOULEVARD, SUITE 930 LOS ANGELES, CALIFORNIA 90017

June 29, 2018

Planning Division

Ms. Julianne Polanco State Historic Preservation Officer Office of Historic Preservation 1725 23rd Street, Suite 100 Sacramento, California 95816

SUBJECT: Section 106 of the National Historic Preservation Act consultation for the proposed East San Pedro Bay Ecosystem Restoration Study

Dear Ms. Polanco:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) is partnering with the City of Los Angeles (City) to study and evaluate opportunities for restoring ecosystem function and increasing habitat biodiversity within East San Pedro Bay (ESPB) in Los Angeles County, California. We are consulting with you in accordance with Title 36 Code of Federal Regulation Part 800 (36 C.F.R. 800), implementing Section 106 of the National Historic Preservation Act (NHPA). At this time, we are consulting with you on the area of potential effects (APE) established for the proposed undertaking. We are also notifying you of our intent to develop a programmatic agreement (PA) to document a phased inventory and evaluation process for the Corps to fulfill our responsibilities under Section 106 of the NHPA for this project.

Description of the Undertaking

The East San Pedro Bay Ecosystem Restoration Study (study) is investigating alternatives to restore the complex aquatic ecosystem that was historically present within East San Pedro Bay but has been degraded by port construction, river channelization, construction of the Middle and Long Beach breakwaters, and other contributors to current conditions. A primary objective of the study is to restore aquatic habitat such as kelp, rocky reef, coastal wetlands, and other habitat types to support diverse resident and migratory species within ESPB. Another goal is to improve water circulation to benefit aquatic habitat within East San Pedro Bay.

Specific measures that are being considered include: construction of rocky reefs, rock/sand intertidal zone habitat, sandy bottom habitat, eelgrass beds, oyster beds, kelp beds, sandy islands, and coastal wetlands, underwater contouring, and modifications to the Long Beach Breakwater (lowering, notching, shortening, removal), which has previously been determined ineligible for listing on the National Register of Historic Places (NRHP). More than 100 combinations of the measures in various configurations have been modelled. The Corps, with the assistance of the City and partner resource agencies, is close to narrowing the range of alternatives down to the final array that will be evaluated in detail. The final array will likely vary widely in the scope,

spatial extent, and intensity of structural habitat improvements. Maps exemplifying the disparity between two possible alternatives have been enclosed to illustrate the nature of the alternatives being considered.

This Feasibility Study is being conducted under the authority of the Corps' General Investigations program. The study will culminate in the completion of an Integrated Feasibility Report (Integrated Feasibility Report), which will incorporate the Environmental Impact Statement/Environmental Impact Report (EIS/EIR). A draft IFR will be circulated for public and agency review as early as November 2018, but the results of the study will not be presented to Congress until February 2021. The alternatives described in the final IFR will be limited to feasibility level design, which typically lacks the detail necessary to accurately define the areas of ground disturbance. In the case of this study, the IFR will identify the types of measures to be implemented, but the exact location of those measures within the bay will not be specified.

Construction level design and additional environmental compliance activities would not be completed until future design phases, which are contingent on the recommended alternative ultimately being approved and funded by Congress for design and construction. The final design would not be developed until 2019 or later, so cultural resource inventory cannot be completed until after that time. General Investigation feasibility studies require identification and evaluation efforts to occur after the environmental analysis is completed due to the statutory review and Congressional approval process. Thus, the Corps proposes to develop a programmatic agreement (PA) pursuant to 36 CFR 800.14(b) in order to fulfill its responsibilities under Section 106 of the National Historic Preservation Act (NHPA). The PA would guide the process of identifying and evaluating historic properties and resolving any potential adverse effects.

APE

The Corps' project area ("area of potential effects") is defined to coincide with the Project Area specified in the study. The APE is generally defined as the East San Pedro Bay in the City of Long Beach, California. The footprint where structural improvements would be constructed includes the area from the Long Beach shoreline to offshore of the Middle Breakwater. It encompasses the Los Angeles River estuary on the west and Anaheim Bay to the east, as illustrated on the enclosed map. The boundary of the APE, although irregular, has been drawn to include a buffer of residential and commercial development around the bay to encompass the extent of any visual, auditory, and atmospheric impacts. The Corps anticipates that any temporary construction or staging areas would be located in paved parking areas or on sandy beaches within the APE boundary. The APE includes approximately 18 sq. miles (11,465 acres) in size.

Known Cultural Resources

RECON Environmental, Inc. has conducted a record search of the APE and a one-mile buffer through the South Central Coastal Information Center to determine if there are historic properties within the APE. A total of 249 cultural resources have been recorded within the one-mile buffer area. Most are historic buildings, but 13 are prehistoric cultural resources. Of the 249 resources

within the buffer, 12 historic resources are located within the APE, including 5 buildings (Long Beach Harbor Light, 1 restaurant, 3 apartment buildings), 1 historic district and a set of utilities (Naval Weapons Station Seal Beach), 1 ocean liner (Queen Mary), 1 airplane (Hughes Flying Boat/The Spruce Goose), and 3 structures (Shoreline Looff Carousel, Long Beach Breakwater, and Middle Breakwater). The Hughes Flying Boat/the Spruce Goose was recorded within the APE; however, it has since been moved out of the APE. The group of Naval Weapons Station Seal Beach Morale, Welfare, and Recreation buildings (P-30-176841) have been recorded but are not over fifty years old and do not qualify for listing on the NRHP, so this resource was not counted in the total.

Two of the twelve cultural resources are listed on the NRHP, but the remaining ten cultural resources have been recommended or determined not to qualify for listing on the NRHP. The Queen Mary (P-19-180734) is listed on the NRHP and qualified under Criterion A as significant in the area of recreation and social history as the last example of a North Atlantic passenger liner from the 1930s. It is also important in its role in World War II as a troop ship. It is located in the western portion of the APE. The Long Beach Village Riviera (P-19-178693) is a fifteen-story apartment building listed on the NRHP under Criterion C as an outstanding example of a Chateauesque style luxury apartment building. It was designed by Richard King and completed in 1929. It is located in the northwestern portion of the APE. Neither of these properties is within the area of direct effects identified for any of the potential alternatives.

The City of Long Beach has made a preliminary review of the local historic resources within the APE. They have identified that the Marine Stadium is outside the APE, but they have requested that effects to it be considered in the study because the stadium is sensitive to sea levels and tides

The APE may contain underwater shipwrecks and prehistoric sites that have not been discovered yet. The results of the record search did not list any underwater prehistoric resources or historic shipwrecks. However, a cultural resources report for the Los Angeles-Long Beach Harbor Areas by Weinman and Stickel (1978) indicated that shipwrecks are present in the harbor but have not been accurately recorded and documented. They list three shipwrecks as examples of what may be found underwater (Danube, Ada Hancock and Silver Strand). The Danube was lost on December 24, 1838 and may be a ship that was built in San Gabriel Mission. It was suggested that it is likely buried. The Ada Hancock sunk on April 27, 1863. It was a smaller ship built by Phineas Banning and used to unload larger vessels offshore. The Silver Strand was a former San Diego-Coronado ferry built in 1927 and sunk in 1970. Its location is well known. Given past improvements to the harbor, such as dredging to deepen the channel and construction of artificial islands, the possibility of intact underwater historic and prehistoric cultural resources is considered low.

A sacred lands search was requested from the Native American Heritage Commission (NAHC). The NAHC indicated that the results were negative; however, the area is sensitive for cultural resources. The NAHC also provided a list of five tribal members culturally affiliated to the project area who may have specific knowledge of sacred lands. Letters were sent introducing the project to the tribes on December 12, 2017 and requesting their comments. No comments

have been received to date. An additional letter inviting the tribes to consult regarding the project will be sent as soon as the final array of alternatives is identified.

Finding

At this time, the Corps is requesting your review and agreement with our definition of the APE. We are also proposing to develop a programmatic agreement to fulfill our NHPA responsibilities. We look forward to collaborating with you on the development of this PA and will provide a draft for your review in the near future. We appreciate your consideration of our request. If you have specific questions, concerns, or want any clarification about this request, please contact Mr. Travis Bone at (602) 230-6969 or via e-mail at Travis.S.Bone@usace.army.mil.

Sincerely,

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)



April 2018



April 2018

Hi Travis,

I haven't received the hard copy yet so it will likely get logged in later this week. I can add the revised map to submittal package, no need to send another letter.

Happy 4th to you as well!

Cheers, Koren

Koren Tippett, M.A. Associate State Archaeologist California Office of Historic Preservation 1725 23rd Street, Suite 100 Sacramento, CA 95816-7100 (916) 445-7017 Koren.Tippett@parks.ca.gov

-----Original Message-----From: Bone, Travis S CIV USARMY CESPL (US) <Travis.S.Bone@usace.army.mil> Sent: Tuesday, July 3, 2018 2:20 PM To: Tippett, Koren@Parks <Koren.Tippett@parks.ca.gov> Subject: RE: East San Pedro Bay Ecosystem Restoration Project (UNCLASSIFIED)

Hi Koren,

Happy 4th!

After much delay, here is the letter defining the project APE and requesting to pursue a PA on this project. I think the hard copy should be getting to you about now.

The final APE map didn't go out with the hardcopy letter. After waiting weeks to make sure I had the latest and greatest details, we just heard from the City/Port that their preferred staging area is on Pier T. This means we have a tiny polygon outside the larger APE/study area. I got word through that the map needed to be tweaked, but the letter got signed and out the door before I could add language about the small staging area on Pier T. Is it possible to add this small separate polygon to your consideration of the APE, or do we need to resubmit a new letter? I am enclosing a revised APE map at two scales plus a close-up of the Pier T staging area that one of our engineers made.

Thanks for your help,

Travis

-----Original Message-----From: Tippett, Koren@Parks [mailto:Koren.Tippett@parks.ca.gov] Sent: Tuesday, March 27, 2018 3:48 PM To: Bone, Travis S CIV USARMY CESPL (US) <Travis.S.Bone@usace.army.mil> Subject: [Non-DoD Source] RE: East San Pedro Bay Ecosystem Restoration Project (UNCLASSIFIED)



Section 106 Consultation with Federally and Non-Federally Recognized Tribes

June 23, 2021

Mr. Charles Alvarez Chairperson Gabrielino-Tongva Tribe 23454 Vanowen Street West Hills, CA, 91307

Dear Chairperson Alvarez:

The Army Corps of Engineers, Los Angeles District (Corps) is continuing to consult with you regarding the East San Pedro Bay (ESPB) Ecosystem Restoration Feasibility Study. The objective of the study is to develop alternatives to restore aquatic habitats historically present in ESPB. We first sent you a letter dated November 17, 2017 where we invited you to provide early input on the project as it was being developed and requested your assistance identifying any known traditional cultural properties (TCP's) or other cultural resources within the study area that might be affected by the proposed project (Enclosure 1). On December 12, 2019 we sent you a follow up letter where we provided a project description of the selected alternative (200 acres) and sought your comments (Enclosure 1). At the time of our 2019 letter, the Corps believed that we would have to defer historic property identification efforts (cultural resource surveys) until we had final engineering designs and knew the exact location of the proposed aquatic habitat features. Since our 2019 letter, the Corps has undertaken a presence/absence survey of the entire 900-acre project area where the aquatic habitat features may be constructed. A programmatic agreement is no longer necessary. This letter provides a brief description of the project, describes our historic property identification efforts, transmits the results of our recent presence/absence marine cultural survey, and provides the Corps' finding that the project would result in no historic properties affected for your review and comment.

Project Description

The proposed undertaking involves construction of a series of marine-related ecological enhancement features within ESPB off the coast of the City of Long Beach, Los Angeles County, California. Specific proposed enhancement features include: (a) a series of "kelp bed" rocky reefs designed to support kelp beds along a breakwater and in open water (121 acres); (b) two open water rocky reefs which are not intended to support kelp beds (29 acres); (c) six nearshore/shallow water rocky reef shoals (20 acres), and (d) six eelgrass beds (30 acres). The eelgrass beds would be located adjacent to the nearshore rocky reefs. Total project features would entail approximately 200 acres. The exact locations for these features have not been determined but they would be placed within a defined 900-acre project area. Staging and access for construction would be located within the Port of Long Beach at Pier T. The staging area is paved, and no ground disturbing activity would occur here.

a. Kelp Beds. Approximately 121 acres of giant kelp beds would be restored in the breakwater and open water zones. Each individual kelp bed would be roughly five acres. To construct these kelp reefs, approximately 132,000 tons of quarry stone (from an existing quarry) would be

brought to the project area and deposited from barges in a random manner to achieve 20% total bottom coverage of substrate with only one layer of stone thickness.

b. Open water rocky reefs. Approximately 29 acres of rocky reef habitat would be created. The open water reefs would be made up of individual rock groupings, roughly 100 feet in diameter, spaced apart within a circular area. This distribution will offer a variety of habitats for different species by providing alternating rocky reefs and sandy bottom in a concentrated area. Each individual rock grouping would vary in height between 3 feet to 12 feet above the seabed. As with the kelp beds, the rocky reef would be constructed of quarry stone from an existing quarry and would be deposited by barge.

b. Nearshore rocky reef shoals. Approximately 20 acres of near shore rock reef would be created in the nearshore. Each reef footprint is conceptually designed as a rectangle roughly 1,000' long by 175' wide, running parallel to the shoreline in about 20 feet of water. They would be roughly 4' to 14' in vertical height. The construction of the nearshore rocky reefs would be accomplished by a barge and crane with appropriate support vessels.

c. Eelgrass beds. Approximately five eelgrass beds comprised of 30 acres would be established behind the rocky reef shoals in the nearshore zone. Up to 100,000 cubic yards of dredged sand material obtained from an existing borrow area known as the Surfside/Sunset Borrow Area would be deposited on the leeward side of the nearshore rocky reefs to provide a suitable substrate and elevation for establishing eelgrass within this sheltered area.

Area of Potential Effects

In June of 2018 in the early stages of the study, the Corps, in consultation with the State Historic Preservation Officer, defined the area of potential effects (APE) as the ESPB study area. The study area/APE includes the entire ESPB from the Long Beach shoreline to offshore of the Middle Breakwater. It encompasses the Los Angeles River estuary on the west and Anaheim Bay to the east and Pier T at the Port of Long Beach. The APE includes approximately 18 square miles (11,465 acres). At the time that the APE was determined, the entire study area was being considered for habitat enhancement features. The Corps has now selected its preferred alternative (the undertaking). With a construction footprint of 200 discontiguous acres, the direct impact area of the preferred alternative is significantly smaller than the APE. All the project features would be confined to a 900-acre area, hereafter referred to as the project area (Enclosure 2).

Historic Property Identification Efforts

Early in the study, the Corps contracted with RECON Environmental, Inc. conduct a record search of the entire APE and a one-mile buffer through the South Central Coastal Information Center (Enclosure 3). Information from the record search was used to ensure that impacts to known historic properties would be avoided. Twelve cultural resources have been recorded in the APE but none of these resources are close to the proposed enhancement features. All twelve of the recorded resources are historic era sites, and except for the Queen Mary they are all located on the shore, well outside of the marine construction footprint.

As part of our good faith effort to identify historic properties, the Corps has considered the potential for significant submerged prehistoric sites to be impacted by the project. A 1995 underwater archeological remote sensing survey of the channel that runs between the middle breakwater and Long Beach breakwaters at the southwestern edge of the APE provided

relevant data for the larger ESPB project (Enclosure 4). The report observed that, prior to warming of the ice sheets and rising sea levels 18,000 years ago, human habitation may have occurred on the exposed continental shelf. However, because the high energy wave environment of the San Pedro shelf likely washed away any intact deposits, submerged archaeological sites would only exist in protected areas of high alluvium or where intervening landforms such as reefs or rocky headlands would have lessened erosive forces. The ESPB enhancement features would be placed in the sandy, unprotected nearshore where high energy wave activity would have destroyed remnant sites or along the outlet of the San Gabriel River where high energy river deposits would have destroyed any remnant prehistoric sites.

A more recent study undertaken by the Bureau of Ocean Energy Management, *Inventory* and Analysis of Coastal and Submerged Archaeological Site Occurrence on the Pacific Outer Continental Shelf (Enclosure 4) also investigated the possibility of such sites existing on the Pacific Ocean Continental Shelf. Consistent with the 1994 remote sensing survey, the 2013 study posits that submerged archaeological sites or isolates could only remain in low wave or protected areas or in unconsolidated sediments.

In 2021, the Corps retained Merkel & Associates Inc. (M&A) to conduct a presence/absence survey for potential shipwrecks and/or historic features in the 900-acre project area (Enclosure 5). M&A conducted the survey using interferometric sidescan sonar (ISS) and a remotely operated vehicle (ROV) The interferometric sidescan sonar provided an acoustic backscatter image of the seafloor concurrent with collecting high-density swath bathymetric data. Following the sidescan survey, the survey team deployed an ROV to inspect some of the debris items.

While the survey identified 164 items on the sea floor only a small subset of these items was suggestive of a historic era resource. The overwhelming majority of the surface features appear to be general marine debris. Of the possible historic era features, M&A identified three shipwrecks and five features that were suggestive of a shipwreck but were either eroded or buried and could not be positively identified. Beyond the shipwrecks, M&A found evidence of 20 additional buried debris features. These buried debris features are problematic in that there is not enough surface manifestation to determine what the feature is; however, these debris features do not appear to be shipwrecks. Other features that were identified were manmade reefs that appear to be composed of pilings and rubble that has fallen off the long beach breakwater or one of the oil extraction platforms within ESPB.

In accordance with 36 CFR 800.4(b)(1), the Corps has determined that the above constitutes a reasonable and good faith effort to identify historic properties. The Corps has some flexibility in where they can place the habitat enhancement features within the 900-acre project area and has committed to avoid placing these features in the areas where the seven shipwrecks/potential shipwrecks, the 20 buried debris features, and the pilings reef were identified. No enhancement features would be constructed within 50 meters of any of these potentially historic features (Enclosure 2). Additional marine surveys to record and evaluate are not necessary since the enhancement features would not overlap these areas. Beyond the cultural resource issue, the Corps cannot place rock on shipwrecks or other unknown features due to the liability of damaging a hull and causing oil, gasoline, or another toxic substance into the ocean.

Finding of Effect

The area where the habitat enhancement features would be placed is within high energy nearshore where wave activity would have destroyed remnant sites or along the outlet of the

San Gabriel River where high energy river deposits would have destroyed any remnant prehistoric sites. The Corps has completed a presence/absence survey of the 900-acre project area and is avoiding any features that could potentially be significant historic properties. The staging area is a pier within the second busiest port in the United States and the rock and sand would be brought in from existing quarries and borrow areas. For these reasons the Corps has determined that the undertaking would result in *no historic properties affected*. At this time, the Corps invites your comments on historic property identification efforts and our finding of effect.

If you have specific questions or if we can provide any clarification about this request or any other concerns, please contact Ms. Danielle Storey, Archaeologist, at (213) 452 3855 or at Danielle.L.Storey@usace.army.mil.

Sincerely,

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)

June 23, 2021

Mr. Robert Dorame Chairperson Gabrielino Tongva Indians of California Tribal Council P.O. Box 490 Bellflower, CA, 90707

Dear Chairperson Dorame:

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brought to the project area and deposited from barges in a random manner to achieve 20% total bottom coverage of substrate with only one layer of stone thickness.

b. Open water rocky reefs. Approximately 29 acres of rocky reef habitat would be created. The open water reefs would be made up of individual rock groupings, roughly 100 feet in diameter, spaced apart within a circular area. This distribution will offer a variety of habitats for different species by providing alternating rocky reefs and sandy bottom in a concentrated area. Each individual rock grouping would vary in height between 3 feet to 12 feet above the seabed. As with the kelp beds, the rocky reef would be constructed of quarry stone from an existing quarry and would be deposited by barge.

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c. Eelgrass beds. Approximately five eelgrass beds comprised of 30 acres would be established behind the rocky reef shoals in the nearshore zone. Up to 100,000 cubic yards of dredged sand material obtained from an existing borrow area known as the Surfside/Sunset Borrow Area would be deposited on the leeward side of the nearshore rocky reefs to provide a suitable substrate and elevation for establishing eelgrass within this sheltered area.

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If you have specific questions or if we can provide any clarification about this request or any other concerns, please contact Ms. Danielle Storey, Archaeologist, at (213) 452 3855 or at Danielle.L.Storey@usace.army.mil.

Sincerely,

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)

June 23, 2021

Sandonne Goad Chairperson Gabrielino /Tongva Nation 106 1/2 Judge John Aiso Street #231 Los Angeles, CA, 90012

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Sincerely,

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Enclosure(s)

June 23, 2021

Anthony Morales Gabrieleno/Tongva San Gabriel Band of Mission Indians Chairperson P.O. Box 693 San Gabriel, California 91778

Dear Mr. Morales:

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Enclosure(s)

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In June of 2018 in the early stages of the study, the Corps, in consultation with the State Historic Preservation Officer, defined the area of potential effects (APE) as the ESPB study area. The study area/APE includes the entire ESPB from the Long Beach shoreline to offshore of the Middle Breakwater. It encompasses the Los Angeles River estuary on the west and Anaheim Bay to the east and Pier T at the Port of Long Beach. The APE includes approximately 18 square miles (11,465 acres). At the time that the APE was determined, the entire study area was being considered for habitat enhancement features. The Corps has now selected its preferred alternative (the undertaking). With a construction footprint of 200 discontiguous acres, the direct impact area of the preferred alternative is significantly smaller than the APE. All the project features would be confined to a 900-acre area, hereafter referred to as the project area (Enclosure 2).

Historic Property Identification Efforts

Early in the study, the Corps contracted with RECON Environmental, Inc. conduct a record search of the entire APE and a one-mile buffer through the South Central Coastal Information Center (Enclosure 3). Information from the record search was used to ensure that impacts to known historic properties would be avoided. Twelve cultural resources have been recorded in the APE but none of these resources are close to the proposed enhancement features. All twelve of the recorded resources are historic era sites, and except for the Queen Mary they are all located on the shore, well outside of the marine construction footprint.

As part of our good faith effort to identify historic properties, the Corps has considered the potential for significant submerged prehistoric sites to be impacted by the project. A 1995 underwater archeological remote sensing survey of the channel that runs between the middle breakwater and Long Beach breakwaters at the southwestern edge of the APE provided

relevant data for the larger ESPB project (Enclosure 4). The report observed that, prior to warming of the ice sheets and rising sea levels 18,000 years ago, human habitation may have occurred on the exposed continental shelf. However, because the high energy wave environment of the San Pedro shelf likely washed away any intact deposits, submerged archaeological sites would only exist in protected areas of high alluvium or where intervening landforms such as reefs or rocky headlands would have lessened erosive forces. The ESPB enhancement features would be placed in the sandy, unprotected nearshore where high energy wave activity would have destroyed remnant sites or along the outlet of the San Gabriel River where high energy river deposits would have destroyed any remnant prehistoric sites.

A more recent study undertaken by the Bureau of Ocean Energy Management, *Inventory* and Analysis of Coastal and Submerged Archaeological Site Occurrence on the Pacific Outer Continental Shelf (Enclosure 4) also investigated the possibility of such sites existing on the Pacific Ocean Continental Shelf. Consistent with the 1994 remote sensing survey, the 2013 study posits that submerged archaeological sites or isolates could only remain in low wave or protected areas or in unconsolidated sediments.

In 2021, the Corps retained Merkel & Associates Inc. (M&A) to conduct a presence/absence survey for potential shipwrecks and/or historic features in the 900-acre project area (Enclosure 5). M&A conducted the survey using interferometric sidescan sonar (ISS) and a remotely operated vehicle (ROV) The interferometric sidescan sonar provided an acoustic backscatter image of the seafloor concurrent with collecting high-density swath bathymetric data. Following the sidescan survey, the survey team deployed an ROV to inspect some of the debris items.

While the survey identified 164 items on the sea floor only a small subset of these items was suggestive of a historic era resource. The overwhelming majority of the surface features appear to be general marine debris. Of the possible historic era features, M&A identified three shipwrecks and five features that were suggestive of a shipwreck but were either eroded or buried and could not be positively identified. Beyond the shipwrecks, M&A found evidence of 20 additional buried debris features. These buried debris features are problematic in that there is not enough surface manifestation to determine what the feature is; however, these debris features do not appear to be shipwrecks. Other features that were identified were manmade reefs that appear to be composed of pilings and rubble that has fallen off the long beach breakwater or one of the oil extraction platforms within ESPB.

In accordance with 36 CFR 800.4(b)(1), the Corps has determined that the above constitutes a reasonable and good faith effort to identify historic properties. The Corps has some flexibility in where they can place the habitat enhancement features within the 900-acre project area and has committed to avoid placing these features in the areas where the seven shipwrecks/potential shipwrecks, the 20 buried debris features, and the pilings reef were identified. No enhancement features would be constructed within 50 meters of any of these potentially historic features (Enclosure 2). Additional marine surveys to record and evaluate are not necessary since the enhancement features would not overlap these areas. Beyond the cultural resource issue, the Corps cannot place rock on shipwrecks or other unknown features due to the liability of damaging a hull and causing oil, gasoline, or another toxic substance into the ocean.

Finding of Effect

The area where the habitat enhancement features would be placed is within high energy nearshore where wave activity would have destroyed remnant sites or along the outlet of the
San Gabriel River where high energy river deposits would have destroyed any remnant prehistoric sites. The Corps has completed a presence/absence survey of the 900-acre project area and is avoiding any features that could potentially be significant historic properties. The staging area is a pier within the second busiest port in the United States and the rock and sand would be brought in from existing quarries and borrow areas. For these reasons the Corps has determined that the undertaking would result in *no historic properties affected*. At this time, the Corps invites your comments on historic property identification efforts and our finding of effect.

If you have specific questions or if we can provide any clarification about this request or any other concerns, please contact Ms. Danielle Storey, Archaeologist, at (213) 452 3855 or at Danielle.L.Storey@usace.army.mil.

Sincerely,

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)



June 23, 2021

Mr. Joseph Ontiveros Cultural Resource Department Soboba Band of Luiseno Indians P.O. BOX 487 San Jacinto, California 92581

Dear Mr. Ontiveros:

The Army Corps of Engineers, Los Angeles District (Corps) is continuing to consult with you regarding the East San Pedro Bay (ESPB) Ecosystem Restoration Feasibility Study. The objective of the study is to develop alternatives to restore aquatic habitats historically present in ESPB. We first sent you a letter dated December 12, 2019 where we provided a project description of the selected alternative (200 acres) and sought your comments (Enclosure 1). At the time of our 2019 letter, the Corps believed that we would have to defer historic property identification efforts (cultural resource surveys) until we had final engineering designs and knew the exact location of the proposed aquatic habitat features. Since our 2019 letter, the Corps has undertaken a presence/absence survey of the entire 900-acre project area where the aquatic habitat features may be constructed. A programmatic agreement is no longer necessary. This letter provides a brief description of the project, describes our historic property identification efforts, transmits the results of our recent presence/absence marine cultural survey, and provides the Corps' finding that the project would result in no historic properties affected for your review and comment.

Project Description

The proposed undertaking involves construction of a series of marine-related ecological enhancement features within ESPB off the coast of the City of Long Beach, Los Angeles County, California. Specific proposed enhancement features include: (a) a series of "kelp bed" rocky reefs designed to support kelp beds along a breakwater and in open water (121 acres); (b) two open water rocky reefs which are not intended to support kelp beds (29 acres); (c) six nearshore/shallow water rocky reef shoals (20 acres), and (d) six eelgrass beds (30 acres). The eelgrass beds would be located adjacent to the nearshore rocky reefs. Total project features would entail approximately 200 acres. The exact locations for these features have not been determined but they would be placed within a defined 900-acre project area. Staging and access for construction would be located within the Port of Long Beach at Pier T. The staging area is paved, and no ground disturbing activity would occur here.

a. Kelp Beds. Approximately 121 acres of giant kelp beds would be restored in the breakwater and open water zones. Each individual kelp bed would be roughly five acres. To construct these kelp reefs, approximately 132,000 tons of quarry stone (from an existing quarry) would be brought to the project area and deposited from barges in a random manner to achieve 20% total bottom coverage of substrate with only one layer of stone thickness.

b. Open water rocky reefs. Approximately 29 acres of rocky reef habitat would be created. The open water reefs would be made up of individual rock groupings, roughly 100 feet in diameter, spaced apart within a circular area. This distribution will offer a variety of habitats for different species by providing alternating rocky reefs and sandy bottom in a concentrated area. Each individual rock grouping would vary in height between 3 feet to 12 feet above the seabed. As with the kelp beds, the rocky reef would be constructed of quarry stone from an existing quarry and would be deposited by barge.

b. Nearshore rocky reef shoals. Approximately 20 acres of near shore rock reef would be created in the nearshore. Each reef footprint is conceptually designed as a rectangle roughly 1,000' long by 175' wide, running parallel to the shoreline in about 20 feet of water. They would be roughly 4' to 14' in vertical height. The construction of the nearshore rocky reefs would be accomplished by a barge and crane with appropriate support vessels.

c. Eelgrass beds. Approximately five eelgrass beds comprised of 30 acres would be established behind the rocky reef shoals in the nearshore zone. Up to 100,000 cubic yards of dredged sand material obtained from an existing borrow area known as the Surfside/Sunset Borrow Area would be deposited on the leeward side of the nearshore rocky reefs to provide a suitable substrate and elevation for establishing eelgrass within this sheltered area.

Area of Potential Effects

In June of 2018 in the early stages of the study, the Corps, in consultation with the State Historic Preservation Officer, defined the area of potential effects (APE) as the ESPB study area. The study area/APE includes the entire ESPB from the Long Beach shoreline to offshore of the Middle Breakwater. It encompasses the Los Angeles River estuary on the west and Anaheim Bay to the east and Pier T at the Port of Long Beach. The APE includes approximately 18 square miles (11,465 acres). At the time that the APE was determined, the entire study area was being considered for habitat enhancement features. The Corps has now selected its preferred alternative (the undertaking). With a construction footprint of 200 discontiguous acres, the direct impact area of the preferred alternative is significantly smaller than the APE. All the project features would be confined to a 900-acre area, hereafter referred to as the project area (Enclosure 2).

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As part of our good faith effort to identify historic properties, the Corps has considered the potential for significant submerged prehistoric sites to be impacted by the project. A 1995 underwater archeological remote sensing survey of the channel that runs between the middle breakwater and Long Beach breakwaters at the southwestern edge of the APE provided relevant data for the larger ESPB project (Enclosure 4). The report observed that, prior to warming of the ice sheets and rising sea levels 18,000 years ago, human habitation may have occurred on the exposed continental shelf. However, because the high energy wave

environment of the San Pedro shelf likely washed away any intact deposits, submerged archaeological sites would only exist in protected areas of high alluvium or where intervening landforms such as reefs or rocky headlands would have lessened erosive forces. The ESPB enhancement features would be placed in the sandy, unprotected nearshore where high energy wave activity would have destroyed remnant sites or along the outlet of the San Gabriel River where high energy river deposits would have destroyed any remnant prehistoric sites.

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In accordance with 36 CFR 800.4(b)(1), the Corps has determined that the above constitutes a reasonable and good faith effort to identify historic properties. The Corps has some flexibility in where they can place the habitat enhancement features within the 900-acre project area and has committed to avoid placing these features in the areas where the seven shipwrecks/potential shipwrecks, the 20 buried debris features, and the pilings reef were identified. No enhancement features would be constructed within 50 meters of any of these potentially historic features (Enclosure 2). Additional marine surveys to record and evaluate are not necessary since the enhancement features would not overlap these areas. Beyond the cultural resource issue, the Corps cannot place rock on shipwrecks or other unknown features due to the liability of damaging a hull and causing oil, gasoline, or another toxic substance into the ocean.

Finding of Effect

The area where the habitat enhancement features would be placed is within high energy nearshore where wave activity would have destroyed remnant sites or along the outlet of the San Gabriel River where high energy river deposits would have destroyed any remnant prehistoric sites. The Corps has completed a presence/absence survey of the 900-acre project area and is avoiding any features that could potentially be significant historic properties. The

staging area is a pier within the second busiest port in the United States and the rock and sand would be brought in from existing quarries and borrow areas. For these reasons the Corps has determined that the undertaking would result in *no historic properties affected*. At this time, the Corps invites your comments on historic property identification efforts and our finding of effect.

If you have specific questions or if we can provide any clarification about this request or any other concerns, please contact Ms. Danielle Storey, Archaeologist, at (213) 452 3855 or at Danielle.L.Storey@usace.army.mil.

Sincerely,

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)

Enclosure 1 Previous Consultation Letters

Material Omitted

Material Provided Elsewhere in the Appendix

Enclosure 2 Maps

Enclosure 2

Part 1: APE and Project Area Maps







Enclosure 2

Part 2: Avoidance Maps

Avoidance Maps Omitted

Confidential

Material On-File at the Los Angeles District Office

Enclosure 3 Record Search

Material Omitted

Confidential

Material On-File at the Los Angeles District Office

Enclosure 4

Potential for Submerged Prehistoric Archaeological Site within the Project Area

TECHNICAL SYNTHESIS REPORT

UNDERWATER REMOTE SENSING SURVEY OF PROPOSED DREDGE AREA, QUEENSGATE CHANNEL, LONG BEACH HARBOR, LOS ANGELES COUNTY, CALIFORNIA

Contract No. DACW09-94-D-0014 Delivery Order No. 0008, dated February, 1994

Report Prepared for:

Statistical Research Inc. Tucson, Arizona

and the

US Army Corps of Engineers, LA District Environmental Planning Division

July 29, 1995

MACFARLANE ARCHAEOLOGICAL CONSULTANTS 7290 Marmota Street Ventura, California 93003-6845 (805) 659-2657 Material Omitted

Confidential

Material On-File at the Los Angeles District Office

Inventory and Analysis of Coastal and Submerged Archaeological Site Occurrence on the Pacific Outer Continental Shelf



U.S. Department of the Interior Bureau of Ocean Energy Management Pacific OCS Region



Material Omitted

Confidential

Material On-File at the Los Angeles District Office

Enclosure 5

2021 PRESENCE/ABSENCE SURVEY FOR POTENTIAL SHIPWRECKS AND/OR HISTORIC FEATURES

PRESENCE/ABSENCE SURVEY FOR POTENTIAL SHIPWRECKS AND/OR HISTORIC FEATURES IN SUPPORT OF THE ECOSYSTEM RESTORATION FEASIBILITY STUDY EAST SAN PEDRO BAY, ORANGE COUNTY CA

Prepared for:

U.S. Army Corps of Engineers Los Angeles District

Attn: Ms Danielle Storey 915 Wilshire Blvd, Room 930 Los Angeles, CA 90017

and

Recon Environmental, Inc.

Attn: Ms. Susy Morales 3111 Camino del Rio North, Suite 600 San Diego, CA 92108

Prepared by:

Merkel & Associates, Inc. 5434 Ruffin Road San Diego, CA 92123 Phone: (858) 560-5465

Under

Contract: W912PL-14-D-0054 Task Order 11 Mod 1 Recon Environmental, Inc.

May 2021

Material Omitted

Confidential

Material On-File at the Los Angeles District Office



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT 915 WILSHIRE BOULEVARD, SUITE 930 LOS ANGELES, CALIFORNIA 90017-3489

December 12, 2019

Ms. Sandonne Goad Chairperson Gabielino/Tongva Nation 106 ½ Judge John Aiso Street, #231 Los Angeles, California 90012

Dear Chairwoman Goad:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) and the City of Long Beach are studying potential habitat restoration actions for the proposed East San Pedro Bay Ecosystem Restoration Feasibility Study. The objective of the study is to restore aquatic habitat such as kelp, rocky reef, and other types historically present in San Pedro Bay of sufficient quality and quantity to support diverse resident and migratory species within East San Pedro Bay. We previously sent you a letter dated November 17, 2017 introducing the project and inviting you to consult on the project in accordance with Section 106 of the National Historic Preservation Act (NHPA). The Corps has now identified a tentatively selected plan (TSP) as the preferred action alternative and is seeking any comments you may have on this specific alternative.

The proposed project would construct several types of ecosystem restoration features within the East San Pedro Bay (ESPB) that have been generally described, but the precise locations of those features within the bay have not yet been precisely identified. All proposed project activities would occur underwater within the bay, and none of the constructed features would be visible above the surface. The TSP would generally include the following measures, although exact locations for each feature have not been identified:

- a. 24 kelp beds totaling approximately 121 acres would be restored. Sixty plus acres would be restored in 5-acre patches placed at irregular intervals along the Long Beach breakwater, expanding existing kelp forests growing on submerged breakwater rock. Another 60+ acres of kelp habitat would be restored on newly created reefs in the open water off the eastern end of the breakwater. To construct these reefs, quarry stone would be transported and deposited from barges in a random manner to achieve 20% total bottom coverage of substrate with only one layer of stone thickness.
- b. 6 nearshore rocky reef shoals (approximately 20 acres) would be placed in shallow ~15' MLLW waters to allow intertidal zone kelp and algae species other than giant kelp to thrive. Crest elevation of these submerged reefs will vary in depth from -3 to -10 feet MLLW. They would be roughly 4' to 14' in vertical height. The shoals

would be created by first depositing a base of stone at the site, then placing fine cap material to obtain sufficient interlocking and depth profiles. The placement of material would be conducted to avoid or minimize any direct or indirect impacts to existing eelgrass or other resources within the limits of the nearshore placement area.

- c. 6 eelgrass beds (approximately 30 acres) would be established behind the 6 rocky reef shoals in the nearshore zone. Additional sediment would also be placed leeward of the rocky shoal to optimize ideal conditions and depth. The rocky shoals would provide the calm, shallow conditions eelgrass requires by stabilizing the bathymetry of the nearshore environment. Donor eelgrass for the transplants of eelgrass would be derived from pre-approved eelgrass donor beds.
- d. 2 open water rocky reefs (approximately 29 acres) would be created to augment existing rocky reef habitat near Island Chaffee oil island. The two rocky reef patches would be placed adjacent to each other. Construction of open water rocky reef would be similar to the nearshore rocky reef.
- e. A staging area for construction activities would be located within the Port of Long Beach at Pier T and would consist of 2.4 acres with approximately 600 feet of water access. The staging area is currently paved, and no ground disturbing activity would occur here.

A Sacred Lands File check provided by the Native American Heritage Commission (NAHC) yielded negative results. The Corps sent a letter to the contacts identified by the Native American Heritage Commission requesting information about any cultural resources known to be in the area but has not received any information about resources located within the project area. A records search conducted by RECON Environmental, Inc. at the South Central Coastal Information Center indicated twelve (12) recorded cultural resource sites within the broad study area, but none are located within the smaller footprint of the proposed TSP.

Numerous ships have sunk in and around San Pedro Bay over the past 150 years. The NOAA navigation charts indicate the presence of wrecks and obstructions in the general vicinity of some proposed restoration measures. It is possible that there are submerged cultural resources in the areas where restoration features might be constructed, but the exact location of proposed features has not been identified. Given the expense and complexity of underwater inventories, the Corps proposes to defer identification (cultural resource surveys) and evaluations of eligibility until final engineering design has been completed and the exact location of proposed measures have been mapped. If historic properties are found during future inventories, the Corps' preferred resolution would be to shift the location of the habitat measure to avoid adverse effects to historic properties. The Corps will develop a Programmatic Agreement with the State Historic Preservation Officer and other interested parties to guide future inventory and otherwise define how the Corps will fulfill our NHPA responsibilities.

The proposed project would construct ecosystem restoration features within the East San Pedro Bay that have been generally described but not specifically located. There are no known cultural resources within the project area, but future inventory would be conducted to determine whether unidentified historic properties are present within the footprint of the proposed restoration measures. The purpose of this letter is to solicit any comments you have on the tentatively selected plan and to invite you to participate in developing the proposed PA. Your valuable input is very much appreciated. At this time, the Corps is respectfully requesting that you provide your comments on this matter within 30 days from the date of this letter. The Corps appreciates your consideration of this request.

If you have specific questions about this request or have any other concerns, please contact Mr. Travis Bone at (602) 230-6969 or via e-mail at Travis.S.Bone@usace.army.mil.

Sincerely,

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)



December 12, 2019

Mr. Anthony Morales Chairperson Gabieleno/Tongva San Gabriel Band of Mission Indians P.O. Box 693 San Gabriel, California 91778

Dear Chairman Morales:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) and the City of Long Beach are studying potential habitat restoration actions for the proposed East San Pedro Bay Ecosystem Restoration Feasibility Study. The objective of the study is to restore aquatic habitat such as kelp, rocky reef, and other types historically present in San Pedro Bay of sufficient quality and quantity to support diverse resident and migratory species within East San Pedro Bay. We previously sent you a letter dated November 17, 2017 introducing the project and inviting you to consult on the project in accordance with Section 106 of the National Historic Preservation Act (NHPA). The Corps has now identified a tentatively selected plan (TSP) as the preferred action alternative and is seeking any comments you may have on this specific alternative.

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- b. 6 nearshore rocky reef shoals (approximately 20 acres) would be placed in shallow ~15' MLLW waters to allow intertidal zone kelp and algae species other than giant kelp to thrive. Crest elevation of these submerged reefs will vary in depth from -3 to -10 feet MLLW. They would be roughly 4' to 14' in vertical height. The shoals

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Enclosure(s)



December 12, 2019

Mr. Robert Dorame Chairperson Gabielino Tongva Indians of California Tribal Council P.O. Box 490 Bellflower, California 90707

Dear Chairman Dorame:

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Numerous ships have sunk in and around San Pedro Bay over the past 150 years. The NOAA navigation charts indicate the presence of wrecks and obstructions in the general vicinity of some proposed restoration measures. It is possible that there are submerged cultural resources in the areas where restoration features might be constructed, but the exact location of proposed features has not been identified. Given the expense and complexity of underwater inventories, the Corps proposes to defer identification (cultural resource surveys) and evaluations of eligibility until final engineering design has been completed and the exact location of proposed measures have been mapped. If historic properties are found during future inventories, the Corps' preferred resolution would be to shift the location of the habitat measure to avoid adverse effects to historic properties. The Corps will develop a Programmatic Agreement with the State Historic Preservation Officer and other interested parties to guide future inventory and otherwise define how the Corps will fulfill our NHPA responsibilities.

The proposed project would construct ecosystem restoration features within the East San Pedro Bay that have been generally described but not specifically located. There are no known cultural resources within the project area, but future inventory would be conducted to determine whether unidentified historic properties are present within the footprint of the proposed restoration measures. The purpose of this letter is to solicit any comments you have on the tentatively selected plan and to invite you to participate in developing the proposed PA. Your valuable input is very much appreciated. At this time, the Corps is respectfully requesting that you provide your comments on this matter within 30 days from the date of this letter. The Corps appreciates your consideration of this request.

If you have specific questions about this request or have any other concerns, please contact Mr. Travis Bone at (602) 230-6969 or via e-mail at Travis.S.Bone@usace.army.mil.

Sincerely,

Eduard T. De Mesa Chief, Planning Division

Enclosure(s)



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT 915 WILSHIRE BOULEVARD, SUITE 930 LOS ANGELES, CALIFORNIA 90017-3489

December 12, 2019

Mr. Charles Alvarez Gabielino-Tongva Tribe 23454 Vanowen Street West Hills, California 91307

Dear Mr. Alvarez:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) and the City of Long Beach are studying potential habitat restoration actions for the proposed East San Pedro Bay Ecosystem Restoration Feasibility Study. The objective of the study is to restore aquatic habitat such as kelp, rocky reef, and other types historically present in San Pedro Bay of sufficient quality and quantity to support diverse resident and migratory species within East San Pedro Bay. We previously sent you a letter dated November 17, 2017 introducing the project and inviting you to consult on the project in accordance with Section 106 of the National Historic Preservation Act (NHPA). The Corps has now identified a tentatively selected plan (TSP) as the preferred action alternative and is seeking any comments you may have on this specific alternative.

The proposed project would construct several types of ecosystem restoration features within the East San Pedro Bay (ESPB) that have been generally described, but the precise locations of those features within the bay have not yet been precisely identified. All proposed project activities would occur underwater within the bay, and none of the constructed features would be visible above the surface. The TSP would generally include the following measures, although exact locations for each feature have not been identified:

- a. 24 kelp beds totaling approximately 121 acres would be restored. Sixty plus acres would be restored in 5-acre patches placed at irregular intervals along the Long Beach breakwater, expanding existing kelp forests growing on submerged breakwater rock. Another 60+ acres of kelp habitat would be restored on newly created reefs in the open water off the eastern end of the breakwater. To construct these reefs, quarry stone would be transported and deposited from barges in a random manner to achieve 20% total bottom coverage of substrate with only one layer of stone thickness.
- b. 6 nearshore rocky reef shoals (approximately 20 acres) would be placed in shallow ~15' MLLW waters to allow intertidal zone kelp and algae species other than giant kelp to thrive. Crest elevation of these submerged reefs will vary in depth from -3 to -10 feet MLLW. They would be roughly 4' to 14' in vertical height. The shoals

would be created by first depositing a base of stone at the site, then placing fine cap material to obtain sufficient interlocking and depth profiles. The placement of material would be conducted to avoid or minimize any direct or indirect impacts to existing eelgrass or other resources within the limits of the nearshore placement area.

- c. 6 eelgrass beds (approximately 30 acres) would be established behind the 6 rocky reef shoals in the nearshore zone. Additional sediment would also be placed leeward of the rocky shoal to optimize ideal conditions and depth. The rocky shoals would provide the calm, shallow conditions eelgrass requires by stabilizing the bathymetry of the nearshore environment. Donor eelgrass for the transplants of eelgrass would be derived from pre-approved eelgrass donor beds.
- d. 2 open water rocky reefs (approximately 29 acres) would be created to augment existing rocky reef habitat near Island Chaffee oil island. The two rocky reef patches would be placed adjacent to each other. Construction of open water rocky reef would be similar to the nearshore rocky reef.
- e. A staging area for construction activities would be located within the Port of Long Beach at Pier T and would consist of 2.4 acres with approximately 600 feet of water access. The staging area is currently paved, and no ground disturbing activity would occur here.

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If you have specific questions about this request or have any other concerns, please contact Mr. Travis Bone at (602) 230-6969 or via e-mail at Travis.S.Bone@usace.army.mil.

Sincerel

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)


DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT 915 WILSHIRE BOULEVARD, SUITE 930 LOS ANGELES, CALIFORNIA 90017-3489

December 12, 2019

Mr. Andrew Salas Chairperson Gabieleno Band of Mission Indians – Kizh Nation P.O. Box 393 Covina, California 91723

Dear Chairman Salas:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) and the City of Long Beach are studying potential habitat restoration actions for the proposed East San Pedro Bay Ecosystem Restoration Feasibility Study. The objective of the study is to restore aquatic habitat such as kelp, rocky reef, and other types historically present in San Pedro Bay of sufficient quality and quantity to support diverse resident and migratory species within East San Pedro Bay. We previously sent you a letter dated November 17, 2017 introducing the project and inviting you to consult on the project in accordance with Section 106 of the National Historic Preservation Act (NHPA). The Corps has now identified a tentatively selected plan (TSP) as the preferred action alternative and is seeking any comments you may have on this specific alternative.

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Sincerely,

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)

Conceptual Map of TSP Restoration Features





DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT 915 WILSHIRE BOULEVARD, SUITE 930 LOS ANGELES, CALIFORNIA 90017-3489

December 12, 2019

Mr. Joseph Ontiveros Cultural Resource Director Soboba Band of Luiseño Indians P.O. Box 487 San Jacinto, California 92581

Dear Mr. Ontiveros:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) and the City of Long Beach are studying potential habitat restoration actions for the proposed East San Pedro Bay Ecosystem Restoration Feasibility Study. The objective of the study is to restore aquatic habitat such as kelp, rocky reef, and other types historically present in San Pedro Bay of sufficient quality and quantity to support diverse resident and migratory species within East San Pedro Bay. The Corps previously sent a letter introducing the study to all the tribal contacts provided by the NAHC. You were not included on that list, but the Port of Long Beach (POLB) recently informed us that you have requested them to consult with you on activities conducted within the Port. This project is located outside the POLB but is within San Pedro Bay, so you may have an interest in it. The Corps has identified a tentatively selected plan (TSP) as the preferred action alternative and is seeking any comments you may have on this specific alternative in accordance with Section 106 of the National Historic Preservation Act (NHPA).

The proposed project would construct several types of ecosystem restoration features within the East San Pedro Bay (ESPB) that have been generally described, but the precise locations of those features within the bay have not yet been precisely identified. All proposed project activities would occur underwater within the bay, and none of the constructed features would be visible above the surface. The TSP would generally include the following measures, although exact locations for each feature have not been identified:

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Sincerely,

Edualdo T. De Mesa Chief, Planning Division

Enclosure(s)

Conceptual Map of TSP Restoration Features





DEPARTMENT OF THE ARMY LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS 915 WILSHIRE BOULEVARD, SUITE 930 LOS ANGELES, CALIFORNIA 90017

November 17, 2017

Planning Division

Mr. Andrew Salas Chairperson Gabrieleño Band of Mission Indians-Kizh Nation P.O. Box 393 Covina, California 91723

Dear Mr. Salas:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) is preparing an Environmental Impact Statement (EIS) and cultural resource documentation for the proposed East San Pedro Bay Ecosystem Restoration Feasibility Study off-shore of the City of Long Beach, Los Angeles County, California. The purpose of the study is to evaluate opportunities for providing ecosystem restoration opportunities and other off-shore improvements with the goal to restore and improve aquatic ecosystem structure and function for increased habitat biodiversity such as kelp, rocky reef, coastal wetlands, resident and migratory marine species, and to improve water circulation sufficient to support and sustain aquatic habitat within East San Pedro Bay.

A final set of alternatives has not yet been identified. However, a study area has been defined within which the various alternative measures would occur. All of the possible improvements that have been suggested to date are located off-shore and under water. No activities have been planned on-shore. The alternatives would likely include various combinations of lowering or partially removing the Long Beach Breakwater, constructing rocky reefs, submerged reefs, and/or sandy islands, establishing kelp forests, eelgrass beds, oyster beds, and wetlands, and constructing a training wall for Los Angeles River flows.

The Corps requested a Sacred Lands File search and a Native American contact list from the Native American Heritage Commission (NAHC) based on the identified study area. The NAHC response dated July 28, 2016 indicated that there are no known cultural resources within the study area.

The purpose of this letter is to invite you to provide early input on the project and to request your assistance to the Corps with identifying any known traditional cultural properties (TCP's) or other cultural resources within the study area that might be affected by the proposed project. This will not be your only opportunity to comment on the proposed project, and a subsequent invitation to consult and comment on this project will be sent to you once a final set of alternatives has been developed.

Please review the enclosed map and respond with comments at your earliest convenience. If you have specific questions or any clarification about this request or any other concerns, please contact Travis Bone at (602) 230-6969 or via e-mail at Travis.S.Bone@usace.army.mil.

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Eduardo T. De Mesa Chief, Planning Division

Enclosure



DEPARTMENT OF THE ARMY LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS 915 WILSHIRE BOULEVARD, SUITE 930 LOS ANGELES, CALIFORNIA 90017

November 17, 2017

Planning Division

Mr. Anthony Morales Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians P.O. Box 693 San Gabriel, California 91778

Dear Mr. Morales:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) is preparing an Environmental Impact Statement (EIS) and cultural resource documentation for the proposed East San Pedro Bay Ecosystem Restoration Feasibility Study off-shore of the City of Long Beach, Los Angeles County, California. The purpose of the study is to evaluate opportunities for providing ecosystem restoration opportunities and other off-shore improvements with the goal to restore and improve aquatic ecosystem structure and function for increased habitat biodiversity such as kelp, rocky reef, coastal wetlands, resident and migratory marine species, and to improve water circulation sufficient to support and sustain aquatic habitat within East San Pedro Bay.

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Enclosure



DEPARTMENT OF THE ARMY LOS ANGELES DISTRICT, U.S. ARMY CORPS OF ENGINEERS 915 WILSHIRE BOULEVARD, SUITE 930 LOS ANGELES, CALIFORNIA 90017

November 17, 2017

Planning Division

Ms. Linda Candelaria Co-Chairperson Gabrieleno-Tongva Tribe 1999 Avenue of the Stars, Suite 1100 Los Angeles, California 90067

Dear Ms. Candelaria:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) is preparing an Environmental Impact Statement (EIS) and cultural resource documentation for the proposed East San Pedro Bay Ecosystem Restoration Feasibility Study off-shore of the City of Long Beach, Los Angeles County, California. The purpose of the study is to evaluate opportunities for providing ecosystem restoration opportunities and other off-shore improvements with the goal to restore and improve aquatic ecosystem structure and function for increased habitat biodiversity such as kelp, rocky reef, coastal wetlands, resident and migratory marine species, and to improve water circulation sufficient to support and sustain aquatic habitat within East San Pedro Bay.

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November 17, 2017

Planning Division

Ms. Sandonne Goad Chairperson Gabrieleno/Tongva Nation 106 ½ Judge John Aiso Street, #231 Los Angeles, California 90012

Dear Ms. Goad:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) is preparing an Environmental Impact Statement (EIS) and cultural resource documentation for the proposed East San Pedro Bay Ecosystem Restoration Feasibility Study off-shore of the City of Long Beach, Los Angeles County, California. The purpose of the study is to evaluate opportunities for providing ecosystem restoration opportunities and other off-shore improvements with the goal to restore and improve aquatic ecosystem structure and function for increased habitat biodiversity such as kelp, rocky reef, coastal wetlands, resident and migratory marine species, and to improve water circulation sufficient to support and sustain aquatic habitat within East San Pedro Bay.

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November 17, 2017

Planning Division

Mr. Robert F. Dorame Chairperson Gabrieleno Tongva Indians of California Tribal Council P.O. Box 490 Bellflower, California 90707

Dear Mr. Dorame:

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Eduardo T. De Mesa Chief, Planning Division

Enclosure

Section 106 Consultation with Other Consulting Parties



June 23, 2021

Wilmington Historical Society 309 W Opp Street Wilmington, California 90744

To Whom It May Concern:

The Army Corps of Engineers, Los Angeles District (Corps) is continuing to consult with you regarding the East San Pedro Bay (ESPB) Ecosystem Restoration Feasibility Study. The objective of the study is to develop alternatives to restore aquatic habitats historically present in ESPB. We first sent you a letter dated December 12, 2019 where we provided a project description of the selected alternative (200 acres) and sought your comments (Enclosure 1) in accordance with Section 106 of the National Historic Preservation Act. At the time of our 2019 letter, the Corps believed that we would have to defer historic property identification efforts (cultural resource surveys) until we had final engineering designs and knew the exact location of the proposed aquatic habitat features. Since our 2019 letter, the Corps has undertaken a presence/absence survey of the entire 900-acre project area where the aquatic habitat features may be constructed. A programmatic agreement is no longer necessary. This letter provides a brief description of the project, describes our historic property identification efforts, transmits the results of our recent presence/absence marine cultural survey, and provides the Corps' finding that the project would result in no historic properties affected for your review and comment.

Project Description

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Enclosure(s)



June 23, 2021

Long Beach Heritage P.O. Box 92521 Long Beach, California 90809

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As part of our good faith effort to identify historic properties, the Corps has considered the potential for significant submerged prehistoric sites to be impacted by the project. A 1995 underwater archeological remote sensing survey of the channel that runs between the middle breakwater and Long Beach breakwaters at the southwestern edge of the APE provided relevant data for the larger ESPB project (Enclosure 4). The report observed that, prior to warming of the ice sheets and rising sea levels 18,000 years ago, human habitation may have occurred on the exposed continental shelf. However, because the high energy wave environment of the San Pedro shelf likely washed away any intact deposits, submerged archaeological sites would only exist in protected areas of high alluvium or where intervening

landforms such as reefs or rocky headlands would have lessened erosive forces. The ESPB enhancement features would be placed in the sandy, unprotected nearshore where high energy wave activity would have destroyed remnant sites or along the outlet of the San Gabriel River where high energy river deposits would have destroyed any remnant prehistoric sites.

A more recent study undertaken by the Bureau of Ocean Energy Management, *Inventory* and Analysis of Coastal and Submerged Archaeological Site Occurrence on the Pacific Outer Continental Shelf (Enclosure 4) also investigated the possibility of such sites existing on the Pacific Ocean Continental Shelf. Consistent with the 1994 remote sensing survey, the 2013 study posits that submerged archaeological sites or isolates could only remain in low wave or protected areas or in unconsolidated sediments.

In 2021, the Corps retained Merkel & Associates Inc. (M&A) to conduct a presence/absence survey for potential shipwrecks and/or historic features in the 900-acre project area (Enclosure 5). M&A conducted the survey using interferometric sidescan sonar (ISS) and a remotely operated vehicle (ROV) The interferometric sidescan sonar provided an acoustic backscatter image of the seafloor concurrent with collecting high-density swath bathymetric data. Following the sidescan survey, the survey team deployed an ROV to inspect some of the debris items.

While the survey identified 164 items on the sea floor only a small subset of these items was suggestive of a historic era resource. The overwhelming majority of the surface features appear to be general marine debris. Of the possible historic era features, M&A identified three shipwrecks and five features that were suggestive of a shipwreck but were either eroded or buried and could not be positively identified. Beyond the shipwrecks, M&A found evidence of 20 additional buried debris features. These buried debris features are problematic in that there is not enough surface manifestation to determine what the feature is; however, these debris features do not appear to be shipwrecks. Other features that were identified were manmade reefs that appear to be composed of pilings and rubble that has fallen off the long beach breakwater or one of the oil extraction platforms within ESPB.

In accordance with 36 CFR 800.4(b)(1), the Corps has determined that the above constitutes a reasonable and good faith effort to identify historic properties. The Corps has some flexibility in where they can place the habitat enhancement features within the 900-acre project area and has committed to avoid placing these features in the areas where the seven shipwrecks/potential shipwrecks, the 20 buried debris features, and the pilings reef were identified. No enhancement features would be constructed within 50 meters of any of these potentially historic features (Enclosure 2). Additional marine surveys to record and evaluate are not necessary since the enhancement features would not overlap these areas. Beyond the cultural resource issue, the Corps cannot place rock on shipwrecks or other unknown features due to the liability of damaging a hull and causing oil, gasoline, or another toxic substance into the ocean.

Finding of Effect

The area where the habitat enhancement features would be placed is within high energy nearshore where wave activity would have destroyed remnant sites or along the outlet of the San Gabriel River where high energy river deposits would have destroyed any remnant prehistoric sites. The Corps has completed a presence/absence survey of the 900-acre project area and is avoiding any features that could potentially be significant historic properties. The staging area is a pier within the second busiest port in the United States and the rock and sand would be brought in from existing quarries and borrow areas. For these reasons the Corps has

determined that the undertaking would result in *no historic properties affected*. At this time, the Corps invites your comments on historic property identification efforts and our finding of effect.

If you have specific questions or if we can provide any clarification about this request or any other concerns, please contact Ms. Danielle Storey, Archaeologist, at (213) 452 3855 or at Danielle.L.Storey@usace.army.mil.

Sincerely,

Eduardo T. De Mesa Chief, Planning Division

Enclosure(s)



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT 915 WILSHIRE BOULEVARD, SUITE 930 LOS ANGELES, CALIFORNIA 90017-3489

December 12, 2019

Historical Society of Long Beach 4260 Atlantic Avenue Long Beach, California 90807

To Whom It May Concern:

The U.S. Army Corps of Engineers, Los Angeles District (Corps) and the City of Long Beach are studying potential habitat restoration actions for the proposed East San Pedro Bay Ecosystem Restoration Feasibility Study. The objective of the study is to restore aquatic habitat such as kelp, rocky reef, and other types historically present in San Pedro Bay of sufficient quality and quantity to support diverse resident and migratory species within East San Pedro Bay. The Corps has identified a tentatively selected plan (TSP) as the preferred action alternative and is seeking any comments you may have on this specific alternative in accordance with Section 106 of the National Historic Preservation Act (NHPA).

The proposed project would construct several types of ecosystem restoration features within the East San Pedro Bay (ESPB) that have been generally described, but the precise locations of those features within the bay have not yet been precisely identified. All proposed project activities would occur underwater within the bay, and none of the constructed features would be visible above the surface. The TSP would generally include the following measures:

- a. 24 kelp beds totaling approximately 121 acres would be restored. Sixty plus acres would be restored in 5-acre patches placed at irregular intervals along the Long Beach breakwater, expanding existing kelp forests growing on submerged breakwater rock. Another 60+ acres of kelp habitat would be restored on newly created reefs in the open water off the eastern end of the breakwater. To construct these reefs, quarry stone would be transported and deposited from barges in a random manner to achieve 20% total bottom coverage of substrate with only one layer of stone thickness.
- b. 6 nearshore rocky reef shoals (approximately 20 acres) would be placed in shallow ~15' MLLW waters to allow intertidal zone kelp and algae species other than giant kelp to thrive. Crest elevation of these submerged reefs will vary in depth from -3 to -10 feet MLLW. They would be roughly 4' to 14' in vertical height. The shoals would be created by first depositing a base of stone at the site, then placing fine cap material to obtain sufficient interlocking and depth profiles. The placement of material would be conducted to avoid or minimize any direct or indirect impacts to existing eelgrass or other resources within the limits of the nearshore placement area.
- c. 6 eelgrass beds (approximately 30 acres) would be established behind the 6 rocky reef shoals in the nearshore zone. Additional sediment would also be placed leeward of the rocky shoal to optimize ideal conditions and depth. The rocky shoals would provide the calm, shallow conditions eelgrass requires by stabilizing the bathymetry of the nearshore
environment. Donor eelgrass for the transplants of eelgrass would be derived from preapproved eelgrass donor beds.

- d. 2 open water rocky reefs (approximately 29 acres) would be created to augment existing rocky reef habitat near Island Chaffee oil island. The two rocky reef patches would be placed adjacent to each other. Construction of open water rocky reef would be similar to the nearshore rocky reef.
- e. A staging area for construction activities would be located within the Port of Long Beach at Pier T and would consist of 2.4 acres with approximately 600 feet of water access. The staging area is currently paved, and no ground disturbing activity would occur here.

Numerous ships have sunk in and around San Pedro Bay over the past 150 years. The NOAA navigation charts indicate the presence of wrecks and obstructions in the general vicinity of some proposed restoration measures. It is possible that there are submerged cultural resources in the areas where restoration features might be constructed, but the exact location of proposed features has not been identified. Given the expense and complexity of underwater inventories, the Corps proposes to defer identification (cultural resource surveys) and evaluations of eligibility until final engineering design has been completed and the exact location of proposed measures has been mapped. If historic properties are found during future inventories, the Corps' preferred resolution would be to shift the location of the restoration feature to avoid adverse effects to historic properties. The Corps will develop a Programmatic Agreement with the State Historic Preservation Officer and other interested parties to guide future inventory and otherwise define how the Corps will fulfill our NHPA responsibilities.

The proposed project would construct ecosystem restoration features within the ESPB that can be generally described but have not been specifically located. There are no known cultural resources within the project area, but future inventory would be conducted to determine whether unidentified historic properties are present within the footprint of the proposed restoration measures. The purpose of this letter is to solicit any comments you have on the tentatively selected plan and to invite you to participate in developing the proposed PA. Your valuable input is very much appreciated. At this time, the Corps is respectfully requesting that you provide your comments on this matter within 30 days from the date of this letter. The Corps appreciates your consideration of this request.

If you have specific questions about this request or have any other concerns, please contact Mr. Travis Bone at (602) 230-6969 or via e-mail at Travis.S.Bone@usace.army.mil.

Sincerely,

Eduardo T. De Mesa Chief, Planning Division



DEPARTMENT OF THE ARMY U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT 915 WILSHIRE BOULEVARD, SUITE 930 LOS ANGELES, CALIFORNIA 90017-3489

December 12, 2019

Wilmington Historical Society 309 W. Opp Street Wilmington, California 90744

To Whom It May Concern:

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The proposed project would construct several types of ecosystem restoration features within the East San Pedro Bay (ESPB) that have been generally described, but the precise locations of those features within the bay have not yet been precisely identified. All proposed project activities would occur underwater within the bay, and none of the constructed features would be visible above the surface. The TSP would generally include the following measures:

- a. 24 kelp beds totaling approximately 121 acres would be restored. Sixty plus acres would be restored in 5-acre patches placed at irregular intervals along the Long Beach breakwater, expanding existing kelp forests growing on submerged breakwater rock. Another 60+ acres of kelp habitat would be restored on newly created reefs in the open water off the eastern end of the breakwater. To construct these reefs, quarry stone would be transported and deposited from barges in a random manner to achieve 20% total bottom coverage of substrate with only one layer of stone thickness.
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December 12, 2019

Long Beach Heritage P.O. Box 92521 Long Beach, California 90809

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December 12, 2019

San Pedro Bay Historical Society P.O. Box 1568 San Pedro, California 90733-1568

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