

EAST SAN PEDRO BAY ECOSYSTEM RESTORATION FEASIBILITY STUDY

Community Scoping Meeting - Thursday, April 7th, 2016, Bixby Park Community Center

Introduction

Long Beach has worked with the U.S. Army Corps of Engineers (Army Corps) since 2010 to advance a feasibility study to restore the East San Pedro Bay. This study is known officially as the East San Pedro Bay Ecosystem Restoration Study (Study), or **Bay Restoration Study**. The East San Pedro Bay Ecosystem Restoration Study is believed to be the first open ocean ecosystem restoration Study to be conducted by the Army Corps under their new feasibility study guidelines.

Objectives

The purpose of the East San Pedro Bay Ecosystem Restoration Study is to estimate the National Ecosystem Restoration (NER) benefits associated with the restoration of ecosystem habitats as well as to evaluate the impacts of these restoration options on offshore and nearshore resources. The final recommendations of the study will form the basis of a plan to restore and improve the aquatic ecosystem structure and function for increased habitat biodiversity within East San Pedro Bay. The Study's objectives are to develop alternatives that:

1. Restore aquatic habitat such as kelp, rocky reef, coastal wetlands and other types of sufficient quality and quantity to support diverse resident and migratory species , and
2. Improve water circulation sufficient to support and sustain aquatic habitat within East San Pedro Bay.

The project area (Fig. 1) includes the East San Pedro Bay from the Port of Long Beach, extending south to Seal Beach. The broader study area includes Palos Verdes to the north and extends to Huntington Beach in the south. Information about the habitat and ecosystem in the entire study area will be analyzed and considered to formulate the final plan. However, only physical modifications inside the project area will be considered.



Figure 1 – Project Area

The scope of the study will be defined in accordance with criteria and guidance applicable to USACE feasibility studies. For a list of applicable guidelines, please refer to Section 5 of the Project Management Plan (PMP), available upon request. Scope management is one of the most critical activities performed by the Project Delivery Team to produce a product that meets the sponsor's needs while remaining on schedule and within budget. Any change that has significant impact on cost, scope, or schedule as determined by the Project Managers will be approved by the sponsor.

Restoration Goals

The East San Pedro Bay Ecosystem Restoration Study seeks to restore degraded habitat. Habitat that was historically present in San Pedro Bay, including coastal wetlands associated with the historic mouth of the Los Angeles River, kelp, seagrass, and rocky reef, has been lost, degraded and reduced due to development of infrastructure in the 19th and 20th centuries.

The most significant alterations come from the development of the Port of Long Beach complex, Long Beach Breakwater, and channelization of the mouth of the Los Angeles River. Infrastructure development along and off the coast of East San Pedro Bay either directly eliminated habitat through construction such as draining of wetlands or dredging of channels, or resulted in altered conditions such as creating barriers to tidal circulation or introducing concentrated stormwater discharge that affect the viability of complex, diverse habitats.

Without coastal wetlands functions needed to sustain healthy populations of marine species, a decline in populations or diversity of species has likely taken place within East San Pedro Bay. Therefore, further analysis to determine more specific impacts to species types and population impacts will be undertaken as part this Study.

For a more detailed description of the problems, opportunities, and objectives, please see Section 2 of the Project Management Plan.

Restoration Constraints

Measures and alternatives proposed by the Study will not reduce maritime operational capacity in the East San Pedro Bay that is currently available to the Port of Long Beach, United States Navy, and THUMS oil islands. Study measures will not increase shoreline erosion, wave related damages, and coastal flooding to existing residences, public infrastructure, marinas, other structures, and recreational beaches. The Study will also seek to minimize impacts to flood risk management operations on the Los Angeles River, and incorporate sea level rise adaptations.

Study Background

This Study, formerly known as the Long Beach Breakwater Study, has not been called that since 2010. Upon completion of the Federal Long Beach Breakwater Reconnaissance Report in June 2010, an official determination of "federal interest" was made to continue on to an Ecosystem Restoration Feasibility Study. The Reconnaissance Report also recommended changing the study name to the East San Pedro Bay Ecosystem Restoration Study to more accurately reflect the desired ecosystem restoration improvements to the bay, with a focus beyond the Long Beach Breakwater.

Federal budget constraints prevented the Army Corps from receiving federal funding to begin the Feasibility Study in 2010. In 2012, the Army Corps revised feasibility study guidelines to the current SMART Planning approach, which follows the "3x3x3" guidelines to complete the Study and with 3 tiers of Vertical Team (Headquarters-Division-District) approval. With public interest in the Study still strong, the Long Beach City Council budgeted \$1.5 million in City Tidelands funding for the City's portion of Study costs, and voted to contribute \$750,000 of City Tidelands funding to the Army Corps for a portion of federal Study costs. Because this funding approach deviated from the traditional 50/50 cost share model

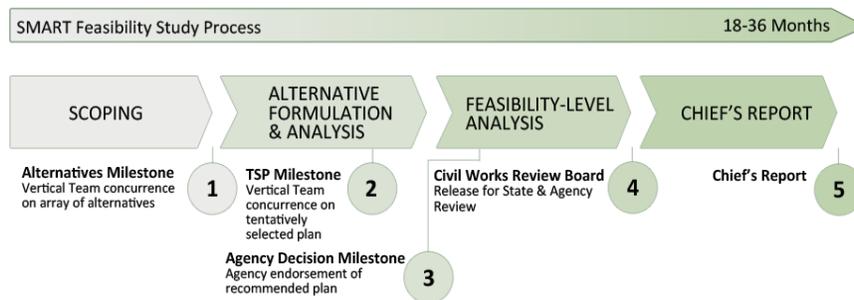
that called for the local sponsor, the City, and the Army Corps to spend equally and concurrently, reviews at the highest levels of the Army Corps were required. After years of negotiations, an amendment to the original Federal Cost Share Agreement was adopted in January 2016 to allow the Study to begin.

Feasibility Study Process

The Army Corps’ planning process is a structured approach that involves six steps applied iteratively:

- Step 1: Identify problems and opportunities;
- Step 2: Inventory and forecast conditions;
- Step 3: Formulate alternative plans;
- Step 4: Evaluate alternative plans;
- Step 5: Compare alternative plans;
- Step 6: Select a plan.

Combined, these six steps will be completed over the course of the feasibility study process, illustrated below:



The Project Manager and Planning Lead will be responsible for conducting day-to-day operational control of the study. As illustrated above, the SMART Feasibility Study Process outlines a 36-month study timeline. To comply with this timeline, a focused array of alternatives will need to be identified and approved by the USACE by the Alternatives Milestone, which will take place about six months from the beginning of the study. The Tentatively Selected Plan will need to be identified approximately one year later. Concurrent reviews will take place following this milestone and will need to be resolved prior to the Agency Decision Milestone eight months later. Following this milestone, a feasibility-level design phase will be conducted and final report submitted in advance of the Civil Works Review Board (CWRB) meeting to be held approximately July 2018. The remaining six months will be needed to complete the Chief’s Report, which will close out the feasibility study in January 2019. Table 1 (below) outlines this schedule.

TABLE 1- MILESTONE SCHEDULE

Milestone	Approximate Date	Approximate Duration
Alternatives Milestone	Jul 2016	6 months
Tentatively Selected Plan	Jul 2017	12 months
Agency Decision Milestone	Mar 2018	8 months
Civil Works Review Board	Jul 2018	4 months
Chief's Report	Jan 2019	6 months

Next Steps

As of April 2016, the PDT is preparing for the Army Corps' first major planning milestone, the Alternatives Milestone, which is scheduled to take place in July 2016. To develop a Focused Array of Alternatives, the PDT must accomplish several major tasks.

In addition to establishing the problems, opportunities, objectives and constraints, the team will first establish baseline conditions using existing data. The team will also compile restoration measures or actions such as constructing rocky reef habitats, building sandy islands, establishing a kelp bed, etc. These measures will come from a variety of sources, including past and current public meetings, discussions with stakeholders, subject matter experts, and the Study team.

The measures will be screened using set criteria from Army Corps guidance. The measures must **effectively** achieve planning objectives, **efficiently** provide cost effective net habitat benefits, be **implementable** from a technical, environmental and economical perspective, and be **satisfactory** or socially acceptable by key stakeholders who will have an opportunity to provide feedback at public meetings.

Measures developed as a part of this process will be combined to form the Focused Array of Alternatives. These Alternatives will be evaluated and screened using criteria that ensure Study objectives are met. The Corps plan formulation process has specific guidance to ensure each step of a feasibility study meets stringent criteria before proceeding to the next step. Once a Focused Array of Alternatives that vary in scope and scale have been agreed upon, the City & Army Corps team will present them to Corps Headquarters for approval to proceed to the next milestone.

Following the Alternatives Milestone, the plan formulation process will include more intensive evaluation. The team will develop a quantitative ecological model to determine how much habitat the alternative plans are likely to create. These habitat units will then be entered into a cost-benefit analysis model and narrowed down through process known as Cost Effectiveness/Incremental Cost Analysis. City staff has been working alongside the Army Corps to develop these analyses and ensure their validity.

Public Meetings

The next opportunity for public comment will be on April 18 from 3:30– 6:30 p.m. This follow up meeting is intended to be a participatory workshop to elicit viewpoints on various habitat restoration measures, including breakwater modifications, with key stakeholder groups including residents, ports, marine biologists and surfers. The public's input will provide valuable insights into the measures screening and alternatives formulation steps.

April 18, 2016 @ 3:30-6:30 p.m.
Seaport Marina Hotel
6400 E. Pacific Coast Hwy, Long Beach, CA 90803