East San Pedro Bay Ecosystem Restoration Feasibility Study
Long Beach, CA
Community Update
21 June 2018
► Background - Study Overview & Formulation
  • Study Area, Goal & Objective
  • Constraints, Opportunity Zones, & Measures

► Progress Over the Last Year
  • Preliminary Alternatives, Wave Modeling, Hydrodynamic Modeling, Conceptual Cost Estimates, Schedule Assessment, HEM, CEICA

► Next Steps
  • Final Array, IFR/EIS-R, Public Outreach
Goal
Restore and improve aquatic ecosystem structure and function for increased habitat biodiversity and ecosystem value within the project area.

Objective
Restore aquatic habitat such as kelp, rocky reef, coastal wetlands and other types historically present in San Pedro Bay of sufficient quality and quantity to support diverse resident and migratory species.
Constraints and Considerations

► Do not reduce maritime operational capacity for the port, the U.S. Navy, THUMS energy islands.

► Minimize impacts to known major utilities or navigation channels and anchorages.

► Avoid increases in shoreline erosion, wave related damages, and coastal flooding to existing residences, public infrastructure, marinas, existing jetties, other structures, and recreational beaches.

► Minimize impact to flood risk management operations on LA River.

► Minimize vulnerability of coastal areas to accelerating sea level rise.
Preliminary Working Alternatives

- Preliminary alternatives (groups of measures) developed for each opportunity zone
- Baseline scenarios developed for use in coastal and hydrodynamic models
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Progress to date

► Wave Modeling

- Determine wave energy, depth, and substrate i.e. parameters for habitat types
- Assess surface wave effects on infrastructure, navigation, recreation, and circulation
- Results were input into the hydrodynamic modeling
Progress to date

- Hydrodynamic Modeling
  - 3-D visualization of sediment transport and water quality
  - Results were input into the habitat evaluation model
Habitat Evaluation Modeling (HEM)

- HEM is the tool that determines benefits of each measure
- Outputs from the model represented as number of habitat units and used in the Cost Effectiveness/Incremental Cost Analysis model (CE/ICA)
- Developed by subject matter experts
► Conceptual Cost Estimates

• Cost estimate for each measure or individual restoration feature.
• Measures serve as building blocks for each study alternative.
• Results are input into the CE/ICA model

► Cost Effectiveness/ Incremental Cost Analysis (CE/ICA)

• Balances the results of the cost estimates and habitat benefits for cost effective solutions for habitat restoration
Final Array of Alternatives

- Will include 3-5 best buy plans as determined through Army Corps modeling efforts, with a request from the City to include locally preferred alternatives to meet local project objectives including options for possible breakwater modifications.
Next Steps

► Draft Integrated Feasibility Report (IFR)
  • Includes final array of Alternatives
  • Will identify a Tentatively Selected Plan (TSP)
  • Draft Environmental Impact Statement (EIS)
  • Draft Environmental Impact Report (EIR)
    ▶ Includes Supporting Documents
  • Released for concurrent public and agency review period Late 2018

► Public Outreach/Comment
  • Public meeting to present Draft IFR late 2018
Timeline

Drafts Complete

- Wave Modeling
- Hydro Modeling
- Habitat Modeling
- Concept Est.

Next Steps for 2018

- CE/ICA
- Final Array
- Draft IFR
- Public Comments