

3.2 South San Francisco Bay Shoreline Study

3.2.1 Introduction

As described in Chapter 1, the SBSP Restoration Project was planned in close coordination with a related but separate project, the South San Francisco Bay Shoreline Study. Section 1.6.1 of this EIS/R identifies a preliminary list of potential actions that could reasonably be expected to occur under the Shoreline Study within four geographic areas:

- Ravenswood Ponds and San Mateo County;
- Alviso Ponds and Santa Clara County;
- Alameda County Cargill Ponds; and
- Eden Landing.

As stated in Section 1.6.1, the Shoreline Study alternatives are currently being developed and will be addressed in separate project-level EIS/Rs for each of the four geographic areas as part of Interim Feasibility Studies. This EIS/R does not provide program- or project-level coverage of the Shoreline Study. Since the SBSP Restoration Project EIS/R presents information for geographic areas that are within the Shoreline Study area, the SBSP Restoration Project EIS/R will be incorporated by reference in the future project-level EIS/Rs that will be prepared for the Interim Feasibility Studies. The Corps has not committed to implementing any Shoreline Study potential actions at this time. The Shoreline Study alternatives will be determined for each Interim Feasibility Study through the Corps's plan formulation process.

The Corps has developed a list of preliminary potential actions (see Section 1.6.1 of this EIS/R) consisting of flood control improvements, ecosystem restoration, and recreation features that could be implemented within the Shoreline Study area boundaries. The following discussion generally characterizes the potential impacts that may result from implementation of these preliminary potential actions. This EIS/R is not intended to provide sufficient information about the potential effects of the Shoreline Study pursuant to NEPA and CEQA. The intent of Section 3.2 of this EIS/R is to provide full public disclosure regarding a separate but closely related project that will undergo its own separate environmental review. The presentation of the Shoreline Study potential impacts in this section is deliberately brief. Since discussion of the potential Shoreline Study impacts is speculative given the limited information that is available, potential impacts are presented in a list format and essentially point out expected similarities between the potential Shoreline Study actions and the SBSP Restoration Project components. The Shoreline Study potential impacts are addressed separately in this section and not in the issue-specific sections of Chapter 3.

3.2.2 Potential Impacts Identified for the Shoreline Study Potential Actions

The preliminary list of potential actions that could reasonably be expected to occur under the Shoreline Study (identified in Section 1.6.1 of this EIS/R and in Table 3.2-1 below) would generally be similar to the type of actions proposed under Alternatives B and C of the SBSP Restoration Project. While these

actions may occur under the Shoreline Study, the Corps has not committed to implementing any Shoreline Study potential actions at this time. The Shoreline Study alternatives will be determined through the Corps's plan formulation process. The Shoreline Study potential actions will be evaluated in separate, subsequent project-level EIS/Rs.

A comparison of the actions reasonably expected to occur under the Shoreline Study and the actions proposed under the SBSP Restoration Project (Alternatives B and C) is presented in Table 3.2-1. As shown, both projects are expected to involve flood protection improvements, ecological restoration, and recreation and public access.

Minor differences in the proposed actions of the two projects are related to flood protection improvements. The Shoreline Study could include a broader array of flood protection actions that are not proposed under the SBSP Restoration Project, such as relocation of homes and businesses in flood-prone areas and construction of floodwalls.

Table 3.2-1 Comparison of Potential Actions Under the Shoreline Study and Actions Proposed by the SBSP Restoration Project

| TYPES OF ACTIVITIES | SHORELINE STUDY | SBSP RESTORATION PROJECT |
|---|-----------------|--------------------------|
| Flood Protection | | |
| Relocate homes/businesses in flood-prone areas | √ | No |
| Create flood management plan ¹ | √ | No |
| Increase channel capacity to improve conveyance (Channel/hydrodynamic modification/sediment dredging) | √ | √ |
| Construct flood control levees, setback levees | √ | √ |
| Construct/improve inboard salt pond levees | √ | √ |
| Construct new or modified stormwater management facilities | √ | √ |
| Construct managed ponds and tidal ponds as detention basins or floodplain ² | √ | √ |
| Breach levees along tidal creeks | √ | √ |
| Construct flood walls | √ | No |
| Install erosion control measures (e.g., rip rap) | √ | √ |
| Ecosystem Restoration | | |
| Measures to Improve Managed Pond Habitat | | |
| Create new, or reconfigure, managed ponds | √ | √ |
| Reinforce salt pond levees | √ | √ |
| Replace and install water control structures | √ | √ |
| Construct internal pond levees | √ | √ |
| Construct internal islands | √ | √ |
| Grade pond bottoms | √ | √ |
| Recommend water management plan ¹ | √ | No |

Table 3.2-1 Comparison of Potential Actions Under the Shoreline Study and Actions Proposed by the SBSP Restoration Project (Continued)

| TYPES OF ACTIVITIES | SHORELINE STUDY | SBSP RESTORATION PROJECT |
|--|-----------------|--------------------------|
| <i>Measures to Establish Tidal Marsh Habitat and Associated Tidal Habitats</i> | | |
| Plant native vegetation | √ | √ |
| Recommend land use management plan ¹ | √ | No |
| Remove non-native plant species through physical, chemical, or mechanical techniques | √ | √ |
| Remove or break up gypsum deposits where necessary | √ | √ |
| Breach levees | √ | √ |
| Install ditch blocks | √ | √ |
| Lower levees | √ | √ |
| Import and place sediment/dredged material | √ | √ |
| Excavate starter channels | √ | √ |
| Construct berms | √ | √ |
| Create high marsh/transition areas | √ | √ |
| Restore habitat on adjacent upland areas | √ | √ |
| Cover contaminated sediment | √ | √ |
| Conduct aeration to increase dissolved oxygen in the ponds | √ | √ |
| Conduct management measures for water quantity and quality (e.g., water depth, salinity, dissolved oxygen) | √ | √ |
| Conduct predator management measures | √ | √ |
| Recreation | | |
| Install information signage and kiosks (including interpretive signs and displays) | √ | √ |
| Construct multi-purpose trails and access points | √ | √ |
| Install safety features such as lighting and signage | √ | √ |
| Install appropriate surfacing and drainage improvements to accommodate new access and recreation facilities | √ | √ |
| Install ADA-compliant public access features | √ | √ |
| Install non-motorized boat launch sites | √ | √ |
| Construct viewing platforms | √ | √ |
| Notes: ¹ Management plans are identified by the Corps as non-structural measures. The Corps recommends local agencies develop, fund, and implement specific measures to address flooding, water, and land use. As management plans do not involve physical changes to the environment, no environmental evaluation of these components would be required. Local agencies would be required to conduct their own environmental analysis upon determination of the specific projects that would be proposed. ² SBSP Restoration Project uses ponds as offline (off-channel) detention basins and floodplain. No online (in-channel) detention basins proposed. <i>Source:</i> USACE 2004, USACE 2006, William R. DeJager, US Army Corps of Engineers, 2006. | | |

Because of the similarity in the type of activities proposed for the two projects, many of the environmental impacts are expected to be similar. The environmental impacts identified for Alternatives

B and C for the SBSP Restoration Project in Sections 3.3 through 3.17 would be applicable to the preliminary potential actions identified for the Shoreline Study. Where there are differences in the potential actions of the Shoreline Study that may result in potential impacts not covered by the SBSP Restoration Project, these impacts are discussed generally in this section.

Potential Effects Associated with Relocating Homes/Businesses in Flood-Prone Areas

The Shoreline Study potential actions may include relocation of homes and businesses in flood-prone areas. This potential action is not proposed as part of the SBSP Restoration Project and thus is not considered in Chapter 3 of this EIS/R. Impacts which may result from this Shoreline Study potential action are presented below. It is uncertain whether relocation of homes and businesses will be incorporated into the Shoreline Study alternatives. If relocation is proposed as part of the Shoreline Study alternatives, these potential impacts will be fully evaluated in a separate project-level EIS/R that will be prepared for the Shoreline Study:

- Reduction in long-term flooding impacts on homes/businesses;
- Potential impacts to special-status and common plant and wildlife species;
- Potential disturbance of known and unknown cultural resources;
- Potential land use conflicts;
- Potential impacts on recreation and public access;
- Potential increase in open space, with potential for localized increases in wildlife habitat and/or recreational opportunities;
- Potential socioeconomic impacts on communities that have dense populations of low-income and minority households;
- Potential disruption of businesses;
- Potential increase in traffic volumes both in the short term and in the long term and degradation of traffic levels on roadways and intersections;
- Potential increase in noise;
- Potential increase in air pollutant emissions;
- Potential effects on existing utilities; and/or
- Potential alteration of visual character of the affected areas.

Potential Effects Associated with Constructing Flood Walls

The Shoreline Study potential actions may include construction of flood walls. This potential action is not proposed as part of the SBSP Restoration Project and thus is not considered in Chapter 3 of this EIS/R. Impacts which may result from this Shoreline Study potential action are presented below. It is uncertain whether flood walls will be proposed by the Shoreline Study alternatives. If they are, these

potential impacts will be fully evaluated in the separate project-level EIS/Rs that will be prepared for the Shoreline Study Interim Feasibility Studies:

- Reduction in long-term flooding impacts to adjacent uses;
- Potential impacts to sensitive habitats;
- Potential construction-related loss of or disturbance to special status and common plant and wildlife species;
- Potential construction-related loss of or disturbance to nesting pond associated birds;
- Potential obstruction of wildlife movements;
- Potential disturbance of known and unknown cultural resources;
- Potential land use conflicts;
- Potential impacts on recreation and public access;
- Potential socioeconomic impacts on communities that have dense populations of low-income and minority households;
- Potential construction-related impacts associated with increase in traffic, noise, and dust;
- Potential impacts on existing utilities; and/or
- Potential alteration of visual character of the affected areas.

