

Martin Slough Enhancement Project



Description of Phasing and Restoration Actions

Phase 1: Installed new tide gates to restore estuarine ecosystem function, increase conveyance and partially restore a muted tidal influence.

Phase 2: Construction and enlargement of tidal and freshwater wetlands to increase floodwater storage and provide enhanced fisheries and waterfowl habitat, and enlarge the channel to increase conveyance. Reach 1 and Marsh Plain A.

Phase 3: Creation of a freshwater alcove pond (Pond G) with deep open water and emergent wetland vegetation along banks, realign the NF Tributary to access the new pond and revegetate with natives.

Phase 4: Channel enhancement and wetland and riparian plantings (Reach 2) channel enhancement and creation of salt marsh plain (Marsh Plain B) 70 ft. wide along high flow meander bend. Creation of salt marsh adjacent to a freshwater spring and hydrologically connected to the mainstem (Pond C).

Phase 5: Channel enhancement (Reaches 3,4,5). Creation of one brackish pond with expanded wetlands, containing deep open water, littoral benches and elevated outlet sill that minimizes salinity intrusion (Pond E). Decommission and relocation of PG&E gas lines (location of gas lines not shown here).

Phase 6: Channel enhancement (Reaches 6 and 7). Creation of two topographically complex brackish ponds (Pond D and F) with expanded wetlands and riparian surrounding the ponds. Minor realignment of East Tributary feeding Pond D

PROJECT ELEMENTS

Marsh Planes A & B (0.75 & 2.3 acres) - salt marsh plain 50 ft wide paralleling slough channel and 70 ft wide along abandoned meander.

C (1.7 acres) - salt marsh with low elevation pond connected to springs.

D&E (0.8 & 1.3 acres) - expanded brackish wetlands, containing deep open water, littoral benches and elevated outlet sill that minimizes salinity intrusion during wet season.

F (1.7 acres) - backwater slough with island and deep open water and littoral bench on inside of bend.

G (0.5 acres) - predominantly freshwater alcove pond, Deep open water with emergent vegetation along banks.

North Fork Trib. (0.8 acres) - restored channel with march plain and side channel.

South East Trib. (0.3 acres) - restored channel with small freshwater pond connected to existing tributary.

New channel dimensions - trapezoidal shape with 1:5:1 (H:V) side slopes and bottom elevation ranges from -1.0 - 2.8 ft elev.

Figure 2 Summary of Martin Slough Enhancement Project Components. Reach Number and Pond Name are Circled.