



CHORRO FLATS: CHORRO CREEK AND FLOODPLAIN RESTORATION

Summary: PWA was retained to identify causes and develop management options for the decline in Morro Bay's aquatic habitat. The project has received a number of awards in recognition of its benefits to the riparian habitat and contribution to the long-term health of the Bay

Date: 1987-1996

Location: Monterey County

Client: Coastal San Luis Resource Conservation District and California State Coastal Conservancy

Morro Bay is one of the most valuable estuarine resources along the south-central California coast. It serves as a stop-over point and winter home for numerous bird species and supports a population of steelhead trout. The U.S. Natural Resources Conservation Service (NRCS) was growing increasingly concerned about the decline in the Bay's aquatic habitat. PWA was retained to identify causes for the decline and to develop management options to control it.

PWA combined an expansive data collection program with a geomorphic assessment of historic maps and photos to determine that excess sediment production from the watershed was accelerating the loss of Bay tidal waters and reducing the aquatic habitat. The team developed a plan to trap sediment on Chorro Creek, upstream of the Bay. 100-acres of former agricultural land was acquired along the creek and restored to a riparian floodplain; dense native vegetation was used to reduce overland flow velocities and trap excess sediment. This allowed the creek channel to reestablish its historical alignment within the floodplain.

PWA led a team of biologists, engineers and planners to prepare conceptual designs, acquire permits, garner public support, prepare final design documents and assist the client with project implementation. Construction was carried out in two phases; the first (emergency) phase followed a major watershed fire in 1994; the final phase was completed in 1997. The project performed successfully during the large floods of 1995 and 1997-98 when it trapped several hundred thousand tons of sediment that would have previously impacted Morro Bay. The project has received a number of awards in recognition of its benefits to the riparian habitat and contribution to the long-term health of Morro Bay



1986 pre-project:
Riparian forest eliminated; channel constricted by levee



2002 post project:
Channel restored to original location; riparian forest re-establishing