



STREAMSIDE FENCING



When the California Men’s Colony (CMC) wastewater treatment plant experienced systemic problems resulting in sewage and other pollutant discharge into Chorro Creek, the CA Regional Water Quality Control Board responded with substantial fines as well as measures to reduce future problems. Chorro Creek is one of the main tributaries to the Morro Bay State and National Estuary. Rather than seeing those fines go into a statewide cleanup fund, the Morro Bay National Estuary Program (MBNEP) worked with CMC and the Water Board to direct these funds to local projects, including the creation of a Riparian Fencing Program.

The MBNEP initiated the Riparian Fencing Program in 2005. The riparian zone, a small but ecologically significant region between land and stream, is home to a wide range of biodiversity and significantly influences the aquatic ecosystem. Since the fencing project’s inception, the MBNEP has installed approximately 70,000 feet of streamside fencing in the Chorro Valley watershed, the equivalent of roughly 13.4 miles of fence, protecting water quality on seven creeks.

THE NATIONAL ESTUARY PROGRAM IN ACTION

Morro Bay National Estuary Program

The Chorro Valley drains the northern two-thirds of the Morro Bay Estuary watershed. Cattle ranching is the single largest land use in this valley and traditional ranching practices allowed cattle open access to creek channels and the riparian corridor for their primary source of water and shade. This practice can cause accelerated erosion from denuded stream banks and a reduction in vegetated canopy that offers food and shelter for fish and wildlife. The cattle can further degrade water quality by directly contributing nutrients

and pathogens to the creek. Riparian fencing addresses each of these problems and also results in a buffer of dense vegetation adjacent to the creek that can serve as a filter strip to reduce inputs of silt, nutrients, and pathogens from adjacent grazing areas during storm events.

Water quality data from the Estuary Program’s long-term monitoring shows consistently elevated levels of pathogen indicators (fecal coliform and e. coli) below open grazing areas. A paired watershed study con-

ducted by the Central Coast Regional Water Quality Control Board and California Polytechnic State University had already demonstrated benefits to vegetation and stream temperature from riparian fencing. The MBNEP was able to use these data to identify and prioritize potential riparian fencing projects.

Working closely with ranchers and landowners on both public and private land and being receptive to their needs has been an important factor in the success of the project. The MBNEP



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ADAPTIVE



COLLABORATIVE

attributes the project's effectiveness to the positive response of landowners and their communication with other property owners in the watershed. By working on publicly owned land first, then moving into carefully selected privately held lands, MBNEP effectively demonstrated a willingness to collaborate with and respond to the needs of the land managers. Formerly reticent landowners are now approaching the MBNEP to participate in the program.

Landowners that participate are asked to provide 10% of the cost, as well as to commit to maintaining the fences for 10 years and allowing access for habitat and water quality monitoring. The Estuary Program has worked with other funding sources and partners to maximize the benefit of these projects. Ongoing monitoring is underway to track the effectiveness

of each fencing project and inform future efforts. Early data suggests that pathogen levels are improving downstream of these riparian fencing projects.

Visit www.mbnep.org to learn more about this and other MBNEP efforts.

EPA's National Estuary Program (NEP) is a unique and successful coastal watershed-based program established in 1987 under the Clean Water Act Amendments. The NEP involves the public and collaborates with partners to protect, restore, and maintain the water quality and ecological integrity of 28 estuaries of national significance located in 18 coastal states and Puerto Rico.

For more information about the NEP go to www.epa.gov/owow/estuaries.

