Steps to revisiting long-term viability of western pond turtle in coastal San Diego County.

By Chris Brown and Robert N. Fisher

In 2003-5, USGS examined the status of western pond turtle (WPT) in the MSCP region of coastal San Diego County. This study determined the population at Sycuan Peak Ecological Reserve to be the healthiest population in the MSCP region, yet it was still not recruiting. In 2009, USGS began restoration efforts for WPT at SPER which included removal of nonnative aquatic species combined with headstarting juvenile WPT in collaboration with the San Diego Zoo. Since nonnative species removal began, wild hatched juveniles have been observed in 2010, 2011, and 2013. Combined with successful translocation of headstarted juveniles, the WPT population at SPER has experienced the greatest pulse of recruitment in over a decade. Through monitoring this population, USGS has also determined steps required for long-term management of this species in a reservoir/water-delivery driven system with greatly fluctuating seasonal flow. Expanding on this program, USGS has examined potential conserved lands outside of the MSCP region to determine the presence of, and threats to, WPT elsewhere in San Diego County. These efforts have reaffirmed the presence of WPT in two coastal north county locations and examined the status and threats of two populations in upper watershed locations in Pine Valley Creek and West Fork San Luis Rey. Additionally, several potential WPT locations in southern California were surveyed for WPT to support a genetics study designed to determine range wide and intra-watershed genetic structure of the WPT for the south coast ecoregion. This study has identified potentially four separate management units within San Diego County south of MCB Camp Pendleton. Combining these studies, we are gaining an understanding of where it is practical to manage for WPT in coastal San Diego County.