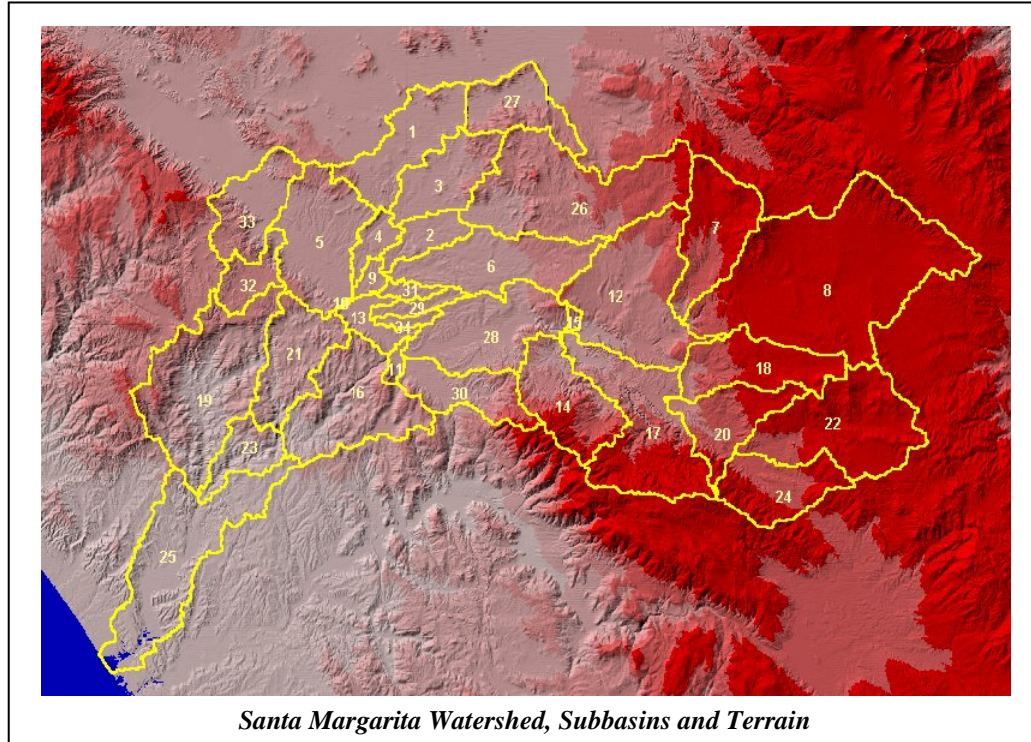


## Santa Margarita Watershed Study

---



Flooding of the Santa Margarita River at the Camp Pendleton Marine Corps Base, California, in 1993 caused unprecedented damage to government property and transported an extraordinary amount of sediment to the Base. The flooding highlighted the need for a comprehensive hydrologic, hydraulic and environmental study of the Santa Margarita River, which flows through the Base. The U.S. Army Corps of Engineers, Los Angeles District, retained WEST Consultants to conduct the hydrologic, hydraulic, and sediment transport analyses of the Santa Margarita watershed. ArcView Spatial Analyst and 3-D Analyst were used to define the watershed, subbasins and physical characteristics such as slope, soil type, and vegetative cover for the sediment yield analysis. The ArcView extension AV-RAS was used to plot floodplains from the water surface elevations computed in HEC-RAS. The end-result was a set of hydrologic, hydraulic and sediment transport analytical models that address water resource and sedimentation issues on the Santa Margarita River.

**Project Owner:**

*U.S. Army Corps of Engineers  
Los Angeles District  
911 Wilshire Boulevard  
Los Angeles, CA 90017-3401  
Contact: Dr. James Chien  
(213) 452-3571*

**Completion Date:**

*July 2000*