### Watershed Master Planning

Watershed-based resource management planning, land use classifications, land management in support of water resources, public access and land use, protection and enhancement of environmental resources, cultural and historic resources, educational and interpretive opportunities, and varying levels of water facilities and management operations are some of the numerous elements required in USACE Master Plans. USACE Master Plans require updating from time to time based on a combination of public use needs and opportunities, resource management, public demand for resources, and facility management in relation to land use development.

Stillwater Sciences has in-depth experience developing and implementing watershed-based resource management plans, including Watershed Management Plans, Master Plans, and Integrated Regional Water Management Plans (IRWMP), in coordination with USACE Master Planning efforts. In California, these Watershed Plans and IRWMPs have become planning tools/guidance and/or part of planning/feasibility/environmental documents for the Corps in multiple watersheds across the state. Stillwater environmental scientists, land use planners, and environmental engineers combine their expertise to integrate land use planning with water resource and biological resource planning and recreational use and water management needs.

Our watershed experts integrate an understanding of watershed planning with a keen ear to stakeholder needs and priorities resulting in solid goals, objectives, and metrics for implementation of master planning efforts at the programmatic and project scales. Stillwater brings facilitation expertise in the creation of successful stakeholder-based planning programs in tandem with public outreach teaming partners, where appropriate, to bolster effective and efficient stakeholder input crossing jurisdictional, geographic, and political boundaries.

For more information, please contact Wendy Katagi (wkatagi@stillwatersci.com) or Jody Lando (jblando@stillwatersci.com), call 503.267.9006, or visit www.stillwatersci.com.



## Master Plan Development Services

- > Agency Coordination
- Vision, Purpose and Need, Goals, and Objectives
- Land Use Planning, Zoning, and Land Classifications
- > Recreation Planning
- > Wildlife, Vegetative, and Invasive Species Management
- > Multiple Resource Management
- > Mitigation
- > Water Quality Improvement
- > Flood Risk Management
- > Hydropower Facilities
- > Water Resource Management
- > Fisheries and Fish Passage
- > Dam Removal
- Design and Engineering Suport/ Feasibility Studies
- > Wetland and Lake Rehabilitation
- Multi-species Habitat Conservation Planning
- > Geomorphology
- > Hydrology, Hydraulics, and Sediment Modeling
- Alternative Development and Analyses

## Scoping/Public Involvement Services

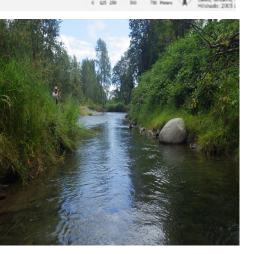
- > Public Involvement Program
- > Outreach
- > Meeting Facilitation
- > Public Review and Comment

#### **NEPA** and **CEQA** Services

- Environmental Assessment/Mitigated Negative Declaration
- > Environmental Impact Statement/Environmental Impact Report
- > Permitting
- Finding of No Significant Impact and Public Notices



# TA CLARA RIVER - HISTORICAL ACTIVE CHANNEL POST active channel bed (proportional time since 1928)



# Selected Projects in Watershed Master Planning

**Upper Santa Ana River Wash Trails Master Plan**, *Upper Santa Ana River, CA, Client: San Bernardino Valley Water Conservation District* 

Development of a master plan with multiple jurisdictions that focused on trail use, resource management protection, water conservation, education, stewardship, and integrated habitat enhancement.

Arroyo Seco Watershed Assessment and Related Arroyo Seco Planning and Implementation Projects, Los Angeles, CA, Clients: Arroyo Seco Foundation, City of Pasadena, Pasadena Water & Power, City of Los Angeles (partner U.S. Army Corps of Engineers)

Established planning goals, objectives, and priorities for watershed planning and implementation. Developed a framwork for future integration of ecosystem restoration, water resource management, recreation, transportation, and energy projects.

San Geronimo Creek Habitat Evaluation and Enhancements, San Geronimo Creek, CA, Clients: Marin County Department of Public Works and California Department of Fish and Wildlife

Development and implementation of a comprehensive, multi-year characterization of stream habitat and watershed conditions to guide future habitat enhancement and erosion control projects.

**Upper Santa Clara River Watershed Synthesis,** Santa Clara River, CA, Clients: Ventura County Watershed Protection District, Los Angeles County Department of Public Works, U.S. Army Corps of Engineers-LA District

Identified management strategies for watershed managers that maintain and restore hydrogeomorphic processes, protect vulnerable floodplain infrastructure and endangered species habitat, and balance flood protection needs with ecologic function throughout the entire watershed.

# Stillwater Sciences

Stillwater Sciences is passionate about watershed science. We approach watershed analysis and restoration with rigorous science, innovation, and a collaborative decision-making process. We strive for simple, integrated solutions to complex and unwieldy environmental problems. Sound interesting? Learn more at www.stillwatersci.com.