

# Watershed Operations

April 2009

### Introduction

The Stemple Creek Watershed project will improve water quality in Stemple Creek and the Estero de San Antonio.



Stemple Creek flows from east to west into the Estero de San Antonio and ultimately flows into Bodega Bay and the Pacific Ocean.

Funded through the American Recovery and Reinvestment Act (ARRA) of 2009, this project is part of the Obama Administration's plan to modernize the nation's infrastructure, jump-start the economy, and create jobs. NRCS is using Recovery Act dollars to update aging flood control structures, protect and maintain water supplies, improve water quality, reduce soil erosion, enhance fish and wildlife habitat. and restore wetlands. NRCS acquires easements and restores floodplains to safeguard lives and property in areas along streams and rivers that have experienced flooding.



# Water Quality Improvement Along Lower Stemple Creek, California

#### **Project Description**

- Location: Marin and Sonoma Counties, 6th Congressional District
- Federal Funding: \$275,000
- **Sponsor Funding:** \$65,000

The project will improve management of dairy manure nutrients. Proper management will improve the quality of surface waters, protect stream banks, protect rangeland, and improve habitat for the endangered California freshwater shrimp and the California tiger salamander. Water quality protection practices will be implemented on more than 1,100 acres used for confined animal and rangeland operations.

#### Partners

- USDA, Natural Resources Conservation Service
- Marin County Resource Conservation District
- Southern Sonoma County Resource Conservation District

### **Benefits**

The project involves manure management on 380 acres and fencing out cattle along 8,000 feet of streambanks. Once completed, rangeland quality will improve and provide protection of threatened and endangered species. Overall health of the project area will improve, as will aesthetics for the community. The project will also provide public health and safety improvements.



Riparian fencing and buffers help to minimize erosion and protect water quality.

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#### **Economic Opportunities**

Stemple Creek flows westward through the watershed to the Estero de San Antonio, a United Nations Educational, Scientific and Cultural Organization Estuary of International Significance. The estuary is critical breeding habitat for California's ocean fisheries and is included in the Gulf of the Farallones National Marine Sanctuary. The total population of the project area is approximately 8,350.

#### **Statewide Perspective**

The Stemple Creek watershed encompasses about 51 square miles in Marin and Sonoma counties, almost all of which is in agricultural production. There are 370 farms, dairies, and livestock ranches. Nearby cities include Petaluma, Cotati, and Rohnert Park, all within 5 miles of the eastern end of the watershed, and Santa Rosa, about 10 miles north. Nearly all of the land in the watershed is privately owned.

### **For More Information**

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Riparian buffer along a stream in the Stemple Creek watershed.



Dairy calves grazing on pasture in the Stemple Creek watershed.

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