#### 3.7 SAN MATEO WATERSHED MANAGEMENT AREA

#### Overview

San Mateo County is located on a broad peninsula south of the City and County of San Francisco, bordered on the east by San Francisco Bay and on the west by the Pacific Ocean (Figure III-5). The County, which includes 20 cities and 17 unincorporated communities, covers about 450 square miles; according to the U.S. Census Bureau, the 2008 population estimate is about 712,700 people. The County is separated into the eastern and western corridors by the San Mateo Range, which runs north/south through the county on its western side. To the east of the range lies the flat, more densely urbanized and industrial area along San Francisco Bay, where the large majority of the population is concentrated. Approximately 50% of the western part of the county is in parklands and open space (including 11 state parks and 12 state beaches), with the rest in agricultural and urban use, the latter primarily concentrated in the northern part of the County in Daly City and Pacifica and around Half Moon Bay about a third of the way down the San Mateo coast. About 26 percent (74,300 acres) of the county's total 285,000 acres is considered urbanized. The San Francisco Bay Regional Board has jurisdiction over all of eastern San Mateo County and all of western San Mateo except the small portion of the coast south of the Pescadero-Butano Creeks Watershed.

# **Watershed Descriptions**

San Mateo County encompasses a wide variety of habitats including estuarine, marine, oak woodland, redwood forest, coastal scrub and oak savannah. There are numerous species of wildlife present, especially along the San Francisco Bay shoreline, San Bruno Mountain in Daly City, Fitzgerald Marine Reserve on the coast, and the forests on the Montara Mountain block. Several creeks discharge to the San Francisco Bay including San Mateo Creek, Laurel Creek, and San Francisquito Creek (the border with Santa Clara County). On the coastside there are a number of significant coastal watershed areas including San Pedro Creek, Pilarcitos Creek, San Gregorio Creek and Pescadero-Butano Creeks.

The County is home to several endangered species including the San Francisco garter snake and the San Bruno elfin butterfly, both of which are endemic to San Mateo County. The endangered California clapper rail is also found on the shores of San Francisco Bay, in the cities of Belmont and San Mateo. The endangered wildflower Hickman's potentilla is found near the Pacific Ocean on the lower slopes of Montara Mountain. The endangered wildflowers White-rayed pentachaeta, *Pentachaeta bellidiflora*, San Mateo Woolly Sunflower, *Eriophyllum latilobum*, Marin Dwarf Flax, *Hesperolinon congestum* and the San Mateo Thornmint, *Acanthomintha duttonii*, are found in the vicinity of the Crystal Springs Reservoir. Coastal creeks are home to endangered steelhead and coho salmon.

## Significant Watershed Issues

San Gregorio Creek, Pescadero Creek and San Francisquito Creek are listed as impaired water bodies on the 303(d) list for sediment due to degradation of salmonid habitat. All

three water bodies support steelhead trout runs. Steelhead trout are Federally-listed as threatened in central California. Coho salmon are still thought to be present in Pescadero and San Gregorio Creeks, and these basins are listed as top priority streams in Department of Fish and Game's Coho recovery plan for streams south of the Golden Gate. Coho salmon are State-listed as endangered (south of the Golden Gate) and Federally-listed as threatened in central California. National Marine Fisheries Service staff has stated that the risk of extinction of Coho salmon south of the Golden Gate is higher than for almost any other run of salmonids on the west coast (S. Kramer, personal communication). The San Mateo County coast is the one of the last remaining accessible, rural coastlines next to a major metropolitan area in the nation, and scientists have designated the area a biodiversity "hotspot," a place rich in biodiversity and threatened by urban development.

Pilarcitos Creek watershed is a significant environmental resource, rich in native plant and animal species and identified as critical habitat for the recovery of Steelhead trout (federally listed as threatened). Dams, diversions, and loss of habitat due to channelization and rural and urban residential, agricultural, and commercial influences have significantly altered Pilarcitos Creek. Loss of riparian habitat, migration barriers, sedimentation of stream channels, proliferation of non-native vegetation, and competition for water between agricultural, domestic and environmental uses are principal problems in the watershed.

We have prepared a workplan to establish and implement Total Maximum Daily Loads for sediment to address potential sediment problems in the listed creeks. Of vital importance in this effort is the initiation of holistic watershed assessments to determine whether sediment is actually a major factor limiting salmonid populations or whether watershed disturbances are of equal or greater importance as limiting factors (e.g., water diversion, reduction in large woody debris loading, stream temperature, etc.). A number of stakeholder forums have been established in the west county watersheds as part of locally initiated Coordinated Resource Management Planning (CRMP) processes.

The coastal waters of San Mateo County are within the Monterey Bay National Marine Sanctuary. This presents opportunities for collaboration with other water resource protection efforts, such as the Sanctuary's Agricultural Initiative. Pescadero Creek watershed has been selected as a pilot basin for initial implementation of the Agricultural Initiative in San Mateo County; these efforts hold tremendous promise if they can be effectively implemented. In addition, the San Mateo Stormwater Pollution Prevention Program (STOPPP) effort is being expanded to provide baseline watershed inventory and assessment information in the San Francisquito Creek watershed. We are currently working with the San Francisquito Joint Powers Authority (JPA), which includes representatives from the Santa Clara Valley Water District, San Mateo County Flood Control District, and the cities of East Palo Alto, Menlo Park, and Palo Alto, to address water quality and flood control issues within the watershed. The JPA has received a Proposition 13 grant, and we have formed an inter-disciplinary Technical Advisory Committee to initiate a sediment budget study of the watershed.

San Mateo County has implemented a confined animal waste ordinance that has reduced pollution from horse boarding facilities. San Mateo County and the town of Portola are currently considering adopting creek setback ordinances.

On July 21, 1999, the Regional Board reissued an NPDES permit for San Mateo Countywide Stormwater program (twenty cities and towns and unincorporated areas). The permit requires reduction of pollutants in stormwater discharges to the maximum extent practicable and the elimination of unauthorized non-stormwater discharges. It also requires reduction of pollutants that cause or contribute to violations of water quality standards. The permit requires the permit holders to implement Stormwater Management Plans (the Plans), which specify the measures that are needed to control pollutants in stormwater. The Plans consist of a series of pollution control activities designed to identify and implement control measures to reduce, if not eliminate, pollutants in storm runoff to the maximum extent practicable and to demonstrate compliance with water quality objectives in receiving waters. STOPPP is required to submit annual report(s) that include evaluation of the effectiveness of the Best Management Practices and Performance Standards for each pollutant control measure. Furthermore, STOPPP is required to identify types of activities that need improvements and implement them accordingly. STOPPP is also required to evaluate sources and loadings, as well as management measures, for pollutants including diazinon, PCBs, and mercury.

# Watershed Groups and Watershed Management Efforts

Currently, there are watershed management projects in progress in many watersheds throughout the County, led by local community groups, the San Mateo County Resource Conservation District, Mid-Peninsula Open Space District and others. Water Board staff participate in meetings, provide technical support, and oversee grants.

Watershed	Lead	Activities
San Francisquito Creek	San Francisquito JPA	CRMP, volunteer
		monitoring nutrient
		pollution assessment,
		flood management
		planning, riparian
		planting
Pilarcitos Creek	Pilarcitos Restoration Workgroup, San	Integrated Watershed
	Mateo Co RCD, State Water	Management Plan (Oct.
	Resources Control Board	2008)
Pescadero/Butano	San Mateo Co RCD	Watershed assessment,
Creeks	Monterey Bay National Marine	sediment budget, creek
	Sanctuary	stabilization
San Gregorio Creek	San Mateo Co. RCD	Mainstem channel
		restoration near mouth

## Significant Issues

### Urban Runoff

- Stream and wetland impacts from new development
- Water quality impairment from pesticide runoff
- Water quality impacts from industrial and commercial facilities and illicit discharges Stream and Wetland Habitat Protection
- Declining steelhead and Coho salmon habitats in coastal streams.
- Uncertainty in current stream conditions due to a lack of watershed assessment data
- Degrading stream quality from rural road erosion
- Water quality impacts from proposed San Francisco Airport expansion wetland fill
- Declining water levels in Lake Merced

# **Impacts from Pollutants**

- Beach pollution and closures from sewage overflows
- Creek pollution by nutrients from horse stables
- Water quality impacts from coastal agricultural facilities, including irrigation runoff, fertilizer and pesticide discharges, and habitat impacts on tributary creeks

# Program Implementation by RWQCB staff and local partners

- Regulating water quality compliance at new Pacifica wastewater treatment facility
- Groundwater management of the Westside Basin
- More effective implementation of California's Nonpoint Source Program Management Measures by RWQCB, local agencies, and land owners.
- More effective leveraging and oversight of grants
- Gain stormwater program improvements through critical review of annual reports
- Technical assistance and support for county planning and public works staff (streambank ordinance, rural road maintenance standards, CEQA review)

# Proposed RWQCB Staff Workplan for FY 2010/11 and 2011/12

## Urban Runoff

- Oversee San Mateo County Urban Runoff Program including: review annual report, conduct annual audit, and assist with runoff issues associated with construction and new development, participate in technical advisory committee meetings.
- Amendment municipal storm water permit to include revised new development standards

## Stream and Wetland Habitat Protection

• Review and approve or disapprove applications for 401 water quality certifications, approximately 50 applications per year.

# **Impacts from Pollutants**

- Reissue NPDES and Waste Discharge Permits
- Complete pretreatment compliance inspections
- Conduct annual compliance inspections
- Resolve outstanding issues with major NPDES permits
- Implement TMDL workplan components

## Program Implementation by RWQCB staff and local partners

• Oversee 319(h) grants for Pescadero Creek and Apanolio Canyon

- Oversee Proposition 13 grant for San Francisquito Creek
- Oversee Pilarcitos Creek restoration
- Take enforcement actions as needed

# High Priority Unfunded Activities

- Enforce water quality violations from horse stable operations
- Review and comment on timber harvest plans
- Review of CEQA documents
- Document and follow-up on suspected septic systems discharges into creeks during storm events that lead to beach closures
- Assist in implementing strategies from Agricultural and Rural Lands Action Plan published by the Monterey Bay National Marine Sanctuary

# High Priority Projects for Grant Funding

- Limiting factor analysis of San Francisquito Creek watershed
- Watershed assessments to confirm or reject siltation/sediment listings, and determine whether there are other causes for impairment (e.g., riparian impacts, flow depletion, nutrients)
- Implement initial restoration and management actions in impaired watersheds
- Establish stakeholder forum(s) and watershed management plans to promote proactive problem solving by local entities. Include priority listing of actions needed to resolve watershed disturbances, and initial recommendations for salmonid recovery
- Facilitate multi-agency coordination and consolidation of Endangered Species Act (ESA) and Clean Water Act (CWA) mandates