# 2011 San Mateo Creek Watershed Workplan









November 9, 2010



A COOPERATIVE PROJECT OF THE CITY OF SAN CLEMENTE, THE COUNTY OF ORANGE, AND THE ORANGE COUNTY FLOOD CONTROL DISTRICT

#### 1.0 INTRODUCTION

This Watershed Workplan (Workplan) identifies a schedule of management activities to be undertaken in 2011 by the City of San Clemente, the County of Orange, and the Orange County Flood Control District (the San Mateo Creek Watershed Permittees or Watershed Permittees). This Workplan describes the approach taken by the San Mateo Creek Watershed Permittees to maintain a responsive program in compliance with Directive G of the San Diego Regional Water Quality Control Board's Order (Regional Board Order No. R9-2009-0002<sup>1</sup>).

# 1.1 Watershed Setting

The San Mateo Creek Watershed within Orange County covers about 20 square miles, and is located approximately 50 miles south of Los Angeles and 65 miles north of San Diego. Most of San Mateo Creek and its outlet to the Pacific Ocean are actually located in San Diego County, but the upstream-most portion of the San Mateo Creek Watershed is located in Orange County. The portion of San Mateo Creek within Orange County flows through unincorporated Orange County before entering the City of San Clemente. It then re-enters San Diego County, ultimately discharging into the Pacific Ocean at San Onofre State Beach. The San Mateo Creek tributaries include Gabino Canyon, Paz Canyon, and Blind Canyon, which combine and flow into Cristianitos Creek. The tributaries are also joined by several small, unnamed drainages as they make their way through the watershed. The Paz Canyon tributary flows into Gabino Canyon before combining with the Blind Canyon tributary. This tributary then flows through the area proposed for the Foothill Transportation Corridor and flows into Cristianitos Creek, which ultimately discharges into San Mateo Creek within San Diego County (see **Figure 1**).

The San Mateo Creek Watershed is within the jurisdiction of the San Diego Regional Water Quality Control Board. The San Diego Regional Board has placed San Mateo Creek under the San Mateo Canyon subunit of the San Juan Hydrologic Basin. The Water Quality Control Plan (Basin Plan)<sup>2</sup> lists Devil Canyon, Cold Spring Canyon, San Mateo Canyon, Los Alamos Canyon, Wildhorse Canyon, Tenaja Canyon, Bluewater Canyon, Nickel Canyon, Christianitos Creek, Gabino Canyon, La Paz Canyon, Blind Canyon, and Talega Canyon as tributaries to San Mateo Creek. The Basin Plans also designates beneficial uses (the uses of water necessary for the survival and well being of humanity, plants and wildlife) for inland and coastal waters, set narrative and numerical water quality objectives that must be attained or maintained to protect the designated beneficial uses, and describes implementation programs to protect beneficial uses. The designated beneficial uses in the San Mateo Creek watershed are shown in **Table 1**.

# 1.2 Watershed Management

The majority of the San Mateo Creek Watershed is undeveloped, with no plans for future use at this time. The small portion of developed land within the San Clemente city boundaries will be subject to the Jurisdictional Runoff Management Plan (JRMP) developed by the City of San Clemente. Due to the current undeveloped nature of the San Mateo Creek Watershed within

<sup>&</sup>lt;sup>1</sup> Order No. R9-2009-0002 is available online at: http://www.swrcb.ca.gov/rwqcb9/water\_issues/programs/stormwater/oc\_stormwater.shtml

<sup>&</sup>lt;sup>2</sup> The San Diego Region Water Quality Control Plan (Basin Plan) is available online at: http://www.swrcb.ca.gov/sandiego/water\_issues/programs/basin\_plan/

Orange County, County-led efforts focusing on the establishment of a long-term Watershed Management Framework have been limited.

#### 1.3 Governance

The County of Orange will serve as the Lead Watershed Permittee. As Lead Watershed Permittee, the County shall be responsible for coordinating the production of the Workplan and coordinating annual watershed review meetings and public participation/public noticing.

The San Mateo Creek Watershed Permittees are also part of the San Juan Creek Watershed and meet with the San Juan Creek Watershed Permittees on a quarterly basis to review and discuss the status of the Workplan and BMP implementation, monitoring, data management and reporting, and review of priorities and necessary refinements.

# 1.4 Workplan Updates

The Workplan will be updated annually in October after review and consideration of the Monitoring Program Annual Report findings. Each November a draft Workplan will be posted on the OC Watersheds website (<a href="www.ocwatersheds.com">www.ocwatersheds.com</a>) for public review and comment. An annual public stakeholder meeting will also be held each November to identify issues of concern among residents in the watershed. The Workplan will be finalized following stakeholder feedback and implementation will begin on January 1 of the following year.



#### 2.0 RECEIVING WATER QUALITY AND BMP IMPLEMENTATION

# 2.1 Water Quality Assessment

There are currently no 303(d) impaired waterbodies in the portion of the San Mateo Creek Watershed within Orange County, nor have any pollutants of concern have been identified.

There are two monitoring stations in the San Mateo Creek Watershed, one urban stream bioassessment monitoring site and one dry weather reconnaissance monitoring site. The objectives of these monitoring program elements are:

Urban stream bioassessment monitoring	Using a "triad" of indicators (bioassessment, chemistry, toxicity), describe impacts on stream communities and the relationship of any impacts to runoff, based on comparisons with reference locations on a year-to-year time frame.
Drywaathar	Light data from both random and targeted sites, define

Dry weather reconnaissance monitoring

Using data from both random and targeted sites, define background dry weather conditions as a basis for identifying candidate sites for further focused source identification work.

The two monitoring locations in the San Mateo Creek Watershed are identified on Figure 1.

A complete discussion of the regional bioassessment monitoring results, including the one site in the San Juan Creek Watershed, can be found in **Unified Report Section C-11**. <sup>3</sup>

The City of San Clemente is a cost-sharing partner in the Countywide Dry Weather Monitoring Program (DWMP) that has been conducted every dry season (May – September) since 2003. The one DWMP site in the San Juan Creek Watershed is sampled three times each dry season (May 1 through September 30). During the DWMP season, County staff notifies San Clemente of any tolerance interval exceedances or any other condition that would suggest an illegal discharge or illicit connection impacting a storm drain outfall. San Clemente's investigation of illicit discharges and illegal connections is described in their JRMP.

# 2.2 Best Management Practice (BMP) Implementation

Due to its largely natural condition, the San Mateo Creek watershed essentially functions as a reference watershed for bioassessment monitoring; therefore many of the BMP implementation plans executed in other watersheds are not applicable to this watershed. However, the San Mateo Creek Watershed Permittees are actively involved in collaborative BMP implementation efforts in adjacent watersheds.

<sup>&</sup>lt;sup>3</sup> The Unified Report is available online at: <a href="http://www.ocwatersheds.com/DAMP\_PEAreports.aspx">http://www.ocwatersheds.com/DAMP\_PEAreports.aspx</a>

#### 4.0 ACRONYMS AND GLOSSARY

4.1 Acronyms

BMP Best Management Practice

Basin Plan Water Quality Control Plan for the San Diego Basin

JRMP Jurisdictional Runoff Management Plan

Regional Board California Regional Water Quality Control Board, San Diego Region

# 4.1 Glossary<sup>4</sup>

Beneficial Uses - The uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote tangible and intangible economic, social, and environmental goals. "Beneficial Uses" of the waters of the State that may be protected include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)].

**Best Management Practices (BMPs)** - Defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the case of municipal storm water permits, BMPs are typically used in place of numeric effluent limits.

Dry Season - May 1 through September 30 of each year.

**Pollutant -** Any agent that may cause or contribute to the degradation of water quality such that a condition of pollution or contamination is created or aggravated.

**Pollution -** As defined in the Porter-Cologne Water Quality Control Act: "the alteration of the quality of the waters of the State by waste, to a degree that unreasonably affects the either of the following: 1) The waters for beneficial uses; or 2) Facilities that serve these beneficial uses." Pollution may include contamination.

**Pollutants of Concern** – Pollutants for which water bodies are listed as impaired under CWA section 303(d), pollutants associated with the land use type of a development, and/or pollutants commonly associated with runoff. Pollutants commonly associated with runoff include total suspended solids; sediment; pathogens (e.g., bacteria, viruses, protozoa); heavy metals (e.g., copper, lead, zinc, and cadmium); petroleum products and polynuclear aromatic hydrocarbons; synthetic organics (e.g., pesticides, herbicides, and PCBs); nutrients (e.g., nitrogen and phosphorus fertilizers); oxygen-demanding

<sup>&</sup>lt;sup>4</sup> Definitions are derived from Attachment C of Order 2009-2009-002.

substances (decaying vegetation, animal waste, and anthropogenic litter).

**Pollution Prevention** - Pollution prevention is defined as practices and processes that reduce or eliminate the generation of pollutants, in contrast to source control BMPs, treatment control BMPs, or disposal.

Receiving Waters - Waters of the United States.

**Runoff** - All flows in a storm water conveyance system that consists of the following components: (1) storm water (wet weather flows) and (2) non-storm water including dry weather flows.

**Watershed** - That geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).



Table 1: Designated Beneficial Uses – San Mateo Creek

Inland Surface Water	REC-1	REC-2	WARM	COLD	WILD	RARE	SPWN
San Mateo Creek	0	•	•	•	•	•	•
Devil Canyon	0	•	•	•••	•		•
Cold Spring Canyon	0	•	•	•	•		
San Mateo Canyon	0	•	•	•	•	•	•
Los Alamos Canyon	0	•	•	•	•		•
Wildhorse Canyon	0		•	•	•		
Tenaja Canyon	0	•	•	•	•		•
Bluewater Canyon	0	•	•	•	•		

Inland Surface Water	REC-1	REC-2	WARM	COLD	WILD	RARE	SPWN
Nickel Canyon	0	•	•		•		
Christianitos Creek	0	•	•	•	•		
Gabino Canyon	0	•	•	•	•		
La Paz Canyon	0	•	•	•	•		
Blind Canyon	0	•	•	•	•		
Talega Canyon	0	•	• •	•	•		
Coastal Water	REC1	REC2	BIOL WILI	D RARE	MAR	MIGR	SPWN
San Mateo Creek Mouth	•		•	•	•	•	•

Existing - 

Potential - O

Contact Water Recreation (**REC-1**) - Includes uses of water for recreational activities involving body contact where ingestion of water is reasonably possible.

Non-Contact Water Recreation (REC-2) - Includes uses of water for recreational activities involving proximity to water.

Warm Freshwater Habitat (WARM) - Includes uses of water that support warm water ecosystems.

Cold Freshwater Habitat (**COLD**) – Includes uses of water that support cold water ecosystems.

Marine Habitat (MAR) – Includes uses of water that support marine ecosystems.

Wildlife Habitat (WILD) - Includes uses of water that support terrestrial ecosystems.

Rare, Threatened, or Endangered Species (RARE) – Includes uses of water that support habitats necessary for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened or endangered.

Spawning, Reproduction or Early Development (**SPWN**) – Includes uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

Preservation of Biological Habitats of Special significance (**BIOL**) – Supports uses of water that support designated areas or habitats such as reserves or Areas of Special Biological Significance.

Source: http://www.waterboards.ca.gov/sandiego/programs/basinplan.html

San Mateo Creek Watershed Monitoring Sites UNINCORPORATIED SAN CLEMENTE Orange County San Mateo Creek Watershed **County Boundary** Waterbody Water Course 2 Miles Dry Weather Monitoring

Figure 1: San Mateo Creek Watershed – Jurisdictional Boundaries & Monitoring Sites