

**SECTION C-11**

**WATER QUALITY MONITORING**

**PROGRAM EFFECTIVENESS ASSESSMENT  
2006-07**





## SECTION C-11, Water Quality Monitoring

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### C-11.0 WATER QUALITY MONITORING

#### C-11.1 Introduction (LIP Section A-11.1)

The countywide monitoring program is conducted on behalf of the Permittees by the County as the Principal Permittee. The countywide monitoring program consists of two separate programs to address the respective requirements of the Third Term Permits:

- The third term San Diego Region monitoring program has been implemented for four years.
- The third term Santa Ana Region monitoring program has been implemented for one year. Until approval in July of 2005, the monitoring program developed for the Santa Ana Region during the second permit term was continuing to be implemented.

#### C-11.1.1 County of Orange Water Quality Monitoring in the San Diego Region

The countywide monitoring program in the San Diego Region consists of the following elements:

- Mass Emissions Monitoring to determine year-to-year trends in pollutant loads from major storm channels;
- Coastal Stormdrain Outfall Monitoring to assess the impacts of dry-weather urban runoff on recreational uses along the coast;
- Urban Stream Bioassessments to determine the biological health of the storm channels;
- Ambient Coastal Receiving Water monitoring to determine the impacts of urban runoff on the ecologically sensitive areas along the coast;
- Dry Weather Monitoring to identify illegal discharges and illicit connections.

**Section C-11** of the 2006-07 Unified Annual Progress Report should be consulted for details of these monitoring efforts.

#### C-11.1.2 County of Orange Water Quality Monitoring in the Santa Ana Region

The countywide monitoring program in the Santa Ana Region, as approved for implementation by the Executive Officer on July 11, 2005, consists of the following elements:

- Long Term Mass Emissions Monitoring to determine year-to-year trends in pollutant loads from major storm channels;
- Estuary/Wetlands Monitoring to describe impacts on estuarine and wetlands ecosystems and the relationship of any impacts to runoff;
- Bacteriological/Pathogen Monitoring, to identify spatial and temporal patterns of elevated level in order to prioritize problem areas;
- Urban Stream and Bioassessment Monitoring to determine the biological health of the storm channels;
- Dry Weather Monitoring to identify illegal discharges and illicit connections;



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- Land Use Correlations to identify changes in runoff associated with the urbanization of previously agricultural land;
- Nutrient TMDL Monitoring to track progress of nutrient control measures over time, based on comparison with TMDL targets.

**Section C-11** of the 2006-07 Unified Annual Progress Report should be consulted for details of these monitoring efforts.

### C-11.1.3 Dry-Weather Monitoring

The County, on behalf of the Permittees, conducts dry-weather monitoring of storm drain effluent during the months of May through September to identify and eliminate illegal discharges and illicit connections (ID/ICs) to the stormdrain system. May 2006 marked the commencement of this monitoring program within the Santa Ana Region.

#### **County Dry Weather Monitoring Data 2006-07**

During the 2006-07 reporting period, the following drains within County jurisdiction were monitored as part of the dry weather program:

##### Random Sites

- COL02P50 (San Juan Creek Watershed)
- COL02P55 (San Juan Creek Watershed)
- COF13@FH (Newport Bay Watershed)

##### Targeted Sites

- COF07S01 (Newport Bay Watershed)
- COSACC@F01 (Newport Bay Watershed)

The "Random Sites" are sampled a total of three times over the course of the dry weather season (May -September) while the "Targeted Sites" are sampled five times. Please see **Section C-10.4** of this report for discussion of the monitoring results. Dry weather data from these drains is included as **Attachment C-11.1** of this report.

### C-11.1.4 Other Studies

#### *13225 Directive for Aliso Creek*

Please see **Section C-3.5** of this report for discussion of monitoring under the 13225 Directive for Aliso Creek.

### **C-11.2 Water Quality Monitoring Program Modifications**

No changes were made to **Section A-11** of the County's LIP during the 2006-07 reporting period.