



**CITY OF SAN CLEMENTE
LOCAL IMPLEMENTATION PROGRAM**

**APPENDIX A-11
WATER QUALITY MONITORING**

A-11.0 WATER QUALITY MONITORING

A-11.1 Principal Permittee (County of Orange) Monitoring

In response to EPA Clean Water Act regulations, in 1990 the County of Orange, the Orange County Flood Control District, and incorporated cities (Permittees) obtained NPDES Storm Water Permits (First Term Permits) from the Santa Ana and San Diego Regional Water Quality Control Boards. First term permits were superseded by new permits issued in 1996 (Second Term Permits) and 2002 (Third Term Permits).

The Permittees developed a Drainage Area Management Plan (DAMP) to assist in implementing storm water pollution control measures. Through this DAMP, the Permittees intend to continue to improve existing storm water quality management practices and, where necessary, to address identified problems and to implement new practices.

The DAMP details monitoring efforts to be implemented throughout the San Diego and Santa Ana regions of Orange County over the course of the Third Term Permits (DAMP Section 11.0). As discussed in the San Diego Regional Water Quality Control Board Municipal NPDES Storm Water permit, Order No. R9-2002-0001, the relevant third term monitoring program for the City of San Clemente includes participation in a monitoring program with the following components:

- Urban stream bioassessment - 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
- Long-term mass loading - Using measurements of key pollutants, measure loads over a time frame of years to decades to compare with past and present levels
- Coastal storm drains - Using a suite of bacterial indicators at high priority drain outfalls, track compliance with regulatory standards and any improvements due to BMP implementation
- Coastal receiving waters - Using measurement of runoff plume characteristics and extent, as well as measures of a suite of physical, chemical, and biological indicators, improve understanding of the impacts of runoff plumes on nearshore ecosystems
- Monitoring random and targeted sites in dry season.

Monitoring Program implementation is supported by funds provided by each of the Permittees. As a Permittee, the City of San Clemente partially funds these monitoring activities. Additional monitoring program activities that will be conducted by the Principal Permittee within the City’s jurisdiction are listed in **Table A-11-1**.

Table A-11-1. Monitoring activities conducted by the County of Orange within the City of San Clemente.

Urban Stream Bioassessment	Mass Emission	Coastal Stormdrain Outlet	Dry Weather Monitoring Program	
			Targeted Sites	Random Sites
Prima Deshecha (M01) @ Calla Grande Vista	Prima Deshecha (M01) @ Calla Grande Vista	Capistrano Co. Beach Drain (Concession)	La Pata at Calle Del Cerro	M00P03
Segunda Deshecha (M02) u/s of Avenida Presidio	Segunda Desheca (M02) @ El Camino Real	M00S01 @ 35067 Beach Road	Bonita Storm Drain @ M02	M00P05
		Poche Beach (M01)		M03P01
		Capo Shores @ House 52		
		Capo Shores @ entrance		
		Pico Drain (M02)		
		Mariposa		
		Linda Lane		
		Under Pier		
		Trafalgar Canyon		
		La Ladera		
		Riviera		

* Alphanumeric code refers to County storm drain designations. Refer to the monitoring program report prepared by the County for additional information.

A-11.2 City of San Clemente Monitoring

In addition to the monitoring activities that will be conducted by the County of Orange, the City will conduct its own dry-season monitoring program to characterize dry-weather flows and aid in detecting illegal discharges into the storm drain system. Data from the City’s local dry-season monitoring program will also be used to support the Poche Beach pilot project BMP as discussed in Section A-3.3. Monitoring will be conducted on flows from major tributary drainage areas encompassing industrial, commercial, and residential land uses in the City’s watershed. For each watershed, target dry-weather monitoring locations were selected to characterize the quality of runoff from these major tributary drainage areas. The target stations are listed in **Table A-11-2** and shown in **Exhibit A-11-I**. As the City’s local dry-weather monitoring program is implemented, the target dry-weather monitoring locations may be revised based on field investigation and results to better serve the objectives of this monitoring program.

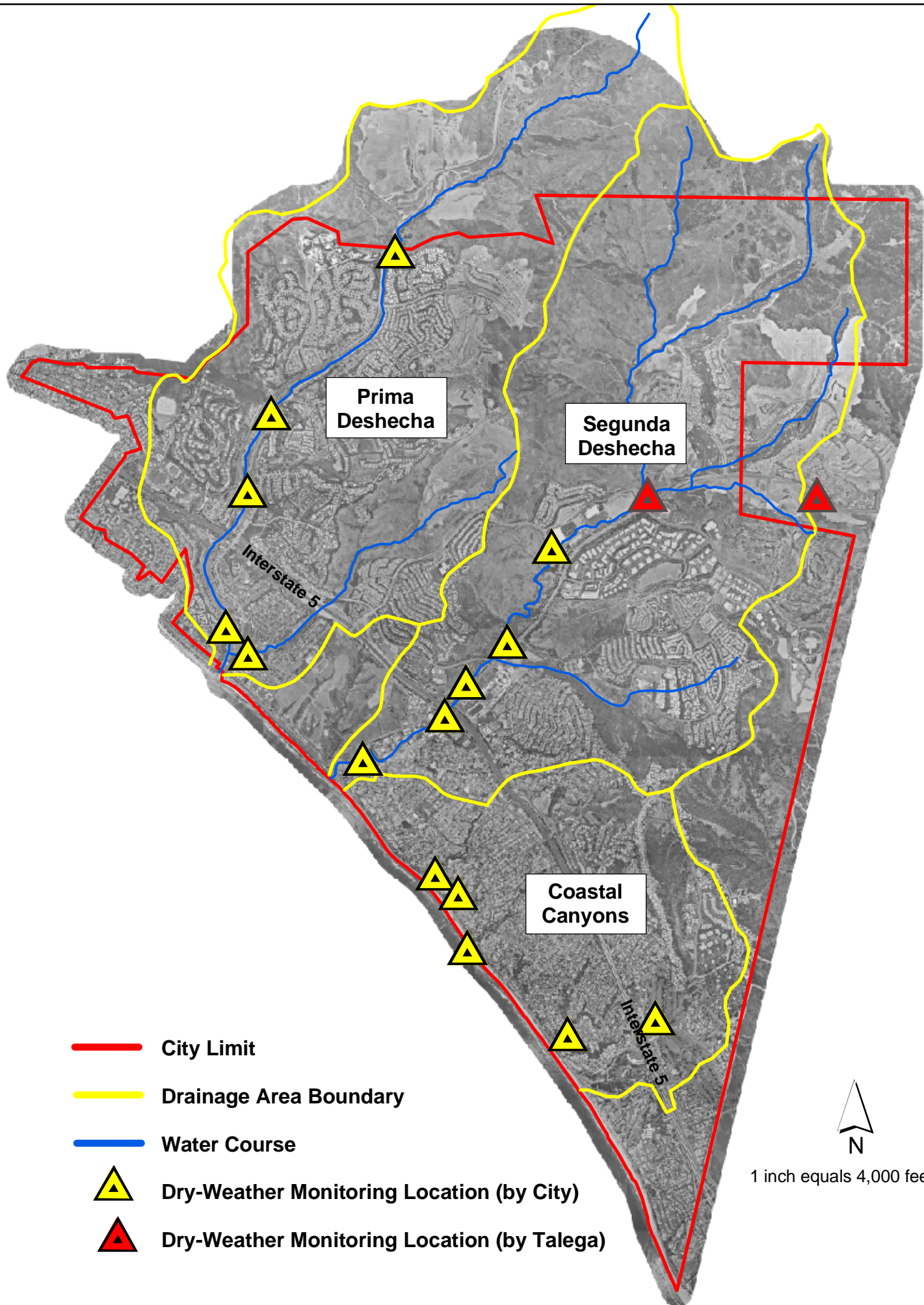
The City’s local dry-weather monitoring program will be conducted in accordance with the procedures outlined in the Third Term Permit (Order No. R9-2002-0001, Attachment E).

Table A-11-2. Target dry-weather locations to be monitored by the City.

	Name	Location
Prima Deshecha Watershed		
	Via Cascadita	West of Via Cascadita, South of Via Montego
	Calle Grande Vista	North of Calle Grande Vista on Shore Cliff Golf Course
	Avenida Vaquero	Avenida Vaquero and Camino de los Mares on Shore Cliff Golf Course
	Calle Nuevo	North end of Shore Cliff Golf Course near intersection of Calle Nuevo and Camino de los Mares
	North City Limit	Near the intersection of Camino de los Mares and Portico del Norte, first junction inside city limits near the landfill
Segunda Deshecha Watershed		
	Linda Lane	Near 90 degree turn of Linda Lane
	Avenida Victoria	Avenida Victoria and S. Calle Seville
	Paseo de Cristobal	Past the north end of Paseo de Cristobal
	Calle Pico	North of N. El Camino Real, between E. Avenida Pico and Calle Lago
	Calle De Industrias	Calle De Industrias shopping center parking lot.
	Avenida Pico	Avenida Pico at San Clemente High School athletic field
	Calle Del Cerro	Near intersection of Calle Del Cerro and E. Avenida Pico
	Camino Vera Cruz	Near intersection of Camino Vera Cruz and E. Avenida Pico
Southern Coastal Drainages		
	Riviera Channel	Between the north end of Plaza a la Playa and the southern curve of S. Ola Vista
	San Clemente Municipal Golf Course	Parking lot of the San Clemente Municipal Golf Course, southwest side of golf course
In addition to the above City-monitored sites, two additional sites in the Talega Development as shown on the map In Exhibit A-11.I will be monitored for a limited-term by the Talega Homeowner Association.		

Exhibit A-11-I

*City of San Clemente
Targeted Dry-Weather Monitoring Locations*



-  City Limit
-  Drainage Area Boundary
-  Water Course
-  Dry-Weather Monitoring Location (by City)
-  Dry-Weather Monitoring Location (by Talega)



1 inch equals 4,000 feet