

2.0 STATION DESCRIPTIONS

MES were established and monitored throughout the LACFCD in an effort to characterize the water quality of the channels and streams. Tributary stations were selected to characterize the water quality of channels and streams in the subwatersheds.

2.1 Mass Emission Station Selection

The LACFCD monitored seven MES, including Ballona Creek, Malibu Creek, Los Angeles River, Coyote Creek, San Gabriel River, Dominguez Channel, and Santa Clara River. The collective drainage area from the seven MES encompasses approximately 2,060 square miles.

Four of the MES locations installed under the original 1990 Municipal Stormwater Permit were retained under the 1996 and the 2001 Municipal Stormwater Permits, including Ballona Creek (S01), Malibu Creek (S02), Los Angeles River (S10), and San Gabriel River (S14). The Coyote Creek (S13) MES was monitored under the 1990, 1996, and 2001 Municipal Stormwater Permits; however, monitoring was not required under the 1996 Municipal Stormwater Permit. Monitoring began at the Dominguez Channel (S28) MES during the 2001–2002 season and sampling at the Santa Clara (S29) MES began during the 2002–2003 season.

2.2 Mass Emission Station Monitoring Locations and Drainage Areas

Figure 2-1 provides an overview of the study area, showing all MES monitoring locations. Table 2-1a indicates the dominant land use associated with each monitoring station and the total drainage area.

The following are descriptions of the seven MES locations, required by the Municipal Stormwater Permit for the 2012–2013 Monitoring Season, including Ballona Creek, Malibu Creek, Los Angeles River, San Gabriel River, Coyote Creek, Dominguez Channel, and Santa Clara River. Figures 2-2 through 2-8 show the location of each monitoring station along with a description of its land use.

Ballona Creek Monitoring Station (S01)

The Ballona Creek monitoring station is located in the creek at the existing stream gauge station (i.e., Stream Gauge F38C-R) between Sawtelle Boulevard and Sepulveda Boulevard in the City of Los Angeles and was chosen to avoid tidal influences. The upstream tributary watershed of Ballona Creek is 88.8 square miles. The entire Ballona Creek Watershed is 127.1 square miles. Ballona Creek is a concrete-lined trapezoidal channel at the gauging station. This station can be found in the Thomas Guide, page 672, G-4 (Rand McNally, 2010).

Malibu Creek Monitoring Station (S02)

The Malibu Creek monitoring station is located in the creek at the existing stream gauge station (i.e., Stream Gauge F130-9-R) near Malibu Canyon Road, south of Piuma Road. The tributary

watershed to Malibu Creek at this location is 104.9 square miles, and the entire Malibu Creek Watershed is 109.9 square miles. This station can be found in the Thomas Guide, page 628, H-1.

Los Angeles River Monitoring Station (S10)

The Los Angeles River monitoring station is located in the river at the existing stream gauge station (i.e., Stream Gauge F319-R) between Willow Street and Wardlow Road in the City of Long Beach and was chosen to avoid tidal influences. The river is a concrete-lined trapezoidal channel at this station. The total upstream tributary drainage area for the Los Angeles River is 825 square miles. This river is the largest watershed outlet to the Pacific Ocean in the LACFCD. This station can be found in the Thomas Guide, page 795, C-1.

Coyote Creek Monitoring Station (S13)

The Coyote Creek monitoring station is located in the creek at the existing U.S. Army Corps of Engineers (USACE) stream gauge station (i.e., Stream Gauge F354-R) below Spring Street in the lower San Gabriel River Watershed. The station assists in determining mass loading for the San Gabriel River Watershed. The upstream tributary area is 150 square miles and extends into Orange County. The station was chosen to avoid backwater effects from the San Gabriel River to ensure that all water being sampled is from Coyote Creek only. Coyote Creek is a concrete-lined trapezoidal channel at this location. The Coyote Creek MES location has been an active stream gauging station since 1963. This station can be found in the Thomas Guide, page 796, H-2.

San Gabriel River Monitoring Station (S14)

The San Gabriel River monitoring station is located in the river at a historic stream gauge station (i.e., Stream Gauge F263C-R), below San Gabriel River Parkway in Pico Rivera. The upstream tributary area is 450 square miles at this location. The San Gabriel River has a grouted rock-concrete stabilizer along the western levee and a natural section on the eastern side. Flow measurement and water sampling are conducted in the grouted rock area along the western levee of the river. The length of the concrete stabilizer is nearly 70 ft. The San Gabriel River MES location has been an active stream gauging station since 1968. This station can be found in the Thomas Guide, page 676, J-2.

Dominguez Channel Monitoring Station (S28)

The Dominguez Channel monitoring station is located in the channel at Dominguez Channel and Artesia Boulevard in the City of Torrance and was chosen to avoid tidal influence. Flow at this station is measured by the flow meter attached to the auto sampler. The upstream tributary area is 33 square miles. The Dominguez Channel monitoring station is located in a concrete-lined rectangular channel. This station can be found in the Thomas Guide, page 733, H-7.

Santa Clara River Monitoring Station (S29)

The Santa Clara monitoring station is located in the river at the Santa Clara River and the Old Road in Santa Clarita. The Santa Clara River is primarily a soft bottom channel, which makes accurate flow monitoring extremely difficult. This location was originally chosen because flow monitoring was possible from the existing United States Geological Survey (USGS) 11108000 Santa Clara River near Saugus, California, Stream Gauging Station. Currently, the LADPW Water Resources Division operates a real-time stream gauging station at the station. The flow gauging operation has been subject to shifting river conditions in recent years. The upstream

tributary area is approximately 411 square miles. This station can be found in the Thomas Guide, page 4550, C-2.

2.3 Tributary Station Selection

All six of the tributary monitoring stations (i.e., Upper Las Virgenes Creek (TS25), Cheseboro Canyon (TS26), Lower Lindero Creek (TS27), Medea Creek (TS28), Liberty Canyon Channel (TS29), and PD 728 (TS30)) were established in accordance with the 2001 Municipal Stormwater Permit Monitoring Permit. 2011-2012 was the first year monitoring was conducted at these stations. The six tributary monitoring stations were used to collect water quality data from subwatersheds in the Malibu Canyon Watershed Management Area.

2.4 Tributary Monitoring Locations and Drainage Areas

Figure 2-9 is an overview of the study area showing all the tributary monitoring stations. Table 2-1b contains the dominant land uses for each station.

Provided below are descriptions of the six tributary monitoring stations required by the Municipal Stormwater Permit for the 2012-2013 Monitoring Season. Stations were identified as TS25, TS26, TS27, TS28, TS29, and TS30. Figures 2-10 through 2-15 show the location of each tributary monitoring station.

Upper Las Virgenes Creek (TS25)

The Upper Las Virgenes Creek Tributary monitoring station is located in the creek, south of Parkmor Road, east of the intersection with La Virgenes Road (County Highway N1) in the City of Calabasas. The upstream tributary watershed area is approximately 5,795 acres. This station can be found in the Thomas Guide, page 558, H-3.

Cheseboro Canyon (TS26)

The Cheseboro Canyon Tributary monitoring station is located in the creek, south of Agoura Road to the southwest of the intersection of Agoura Road and Cornell Road in the City of Agoura Hills. The upstream tributary watershed area is approximately 5,346 acres. This station can be found in the Thomas Guide, page 558, A-6.

Lower Lindero Creek (TS27)

The Lower Lindero Creek Tributary monitoring station is located in the creek, south of Agoura Rd to the west of Kanan Road (County Highway N9) in the City of Agoura Hills. The upstream tributary watershed area is approximately 4,160 acres. This station can be found in the Thomas Guide, page 557, J-6.

Medea Creek (TS28)

The Medea Creek Tributary monitoring station is located in the creek, south of Agoura Road to the southwest of the intersection of Agoura Road and Cornell Road in the City of Agoura Hills. The upstream tributary watershed area is approximately 4,091 acres. This station can be found in the Thomas Guide, page 558, A-6.

Liberty Canyon Channel (TS29)

The Liberty Canyon Channel Tributary monitoring station is located in the channel, east of Liberty Canyon Road, south of the intersection with Park Vista Road in the City of Agoura Hills. The upstream tributary watershed area is approximately 905 acres. This station can be found in the Thomas Guide, page 588, E-1.

PD 728 at Foxfield Drive (TS30)

Tributary monitoring station PD 728 is located in the channel, south of Lindero Canyon Road east of Foxfield Drive, in the City of Westlake Village. The upstream tributary watershed area of this station is approximately 1,789 acres. This station can be found in the Thomas Guide, page 557, C-7.