

REPORT OF WASTE DISCHARGE

Submitted To

**COLORADO RIVER BASIN REGIONAL WATER QUALITY CONTROL BOARD
(Order No. R7-2008-0001, NPDES No. CAS617002)**

November 23, 2012

**WHITEWATER RIVER REGION
RIVERSIDE COUNTY**

**RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
COUNTY OF RIVERSIDE, COACHELLA VALLEY WATER DISTRICT
CITIES OF BANNING, CATHEDRAL CITY, COACHELLA, DESERT HOT SPRINGS, INDIAN
WELLS, INDIO, LA QUINTA, PALM DESERT, PALM SPRINGS AND RANCHO MIRAGE**

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1.0 INTRODUCTION

On May 21, 2008, the California Regional Water Quality Control Board – Colorado Region (Colorado Regional Board) adopted Order No. R7-2008-0001, the Third-term Area-wide Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (2008 Permit). This Report of Waste Discharge (ROWD) is an application for the renewal of the 2008 Permit (NPDES No. CAS617002) for the Riverside County Flood Control and Water Conservation District (District), the County of Riverside (County), Coachella Valley Water District (CVWD), and the Cities of Banning, Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage (collectively referred to herein as "Permittees") in the Whitewater River Region within Riverside County. The 2008 Permit expires on May 21, 2013, and requires that this ROWD be submitted no later than November 23, 2012 (180 days in advance of the expiration date). This ROWD has been prepared in consultation with the Permittees and is submitted on all their behalf.

1.1 CONTENTS OF ROWD

The 2008 Permit specifies that at a minimum, the ROWD shall include:

- ◆ Any revisions to the Stormwater Management Plan (SWMP) including, but not limited to, activities the Permittees propose to undertake during the next MS4 Permit term, goals and objectives of such activities, an evaluation of the need for additional Source Control and/or Structural BMPs, proposed pilot studies, etc.;
- ◆ Any new or revised program elements and compliance schedule(s) necessary to comply with Section D, Receiving Water Limitations and Section G, Total Maximum Daily Loads of the 2008 Permit;
- ◆ Changes in land use and/or population including map updates; and
- ◆ Significant changes to the MS4s, outfalls, detention or retention basins or dams, and other controls, including map updates of the MS4s.

Information regarding population estimates and projections as well as current land use and anticipated significant changes in land use are provided in the ROWD. Information and/or maps of the existing MS4 facilities owned and operated by the Permittees and planned additions are also included in the ROWD.

To cost effectively facilitate consistency and coordination in implementing a stormwater management program in Riverside County and to realize economies of scale, the Permittees propose implementation of certain elements of the regional stormwater management programs already implemented in the Santa Ana and Santa Margarita Regions of Riverside County. The proposed enhancements to the stormwater management program are described in the ROWD.

1.2 GENERAL CHARACTERISTICS OF THE WHITEWATER RIVER REGION

The Whitewater River Watershed is located in an arid desert portion of Riverside County, encompassing an area of approximately 1,650 square miles. As used in this ROWD, the term "Whitewater River Region" refers to the urbanized area of the Whitewater River Watershed under the jurisdiction of the

Permittees; this region accounts for 392 square miles of the Watershed. The Whitewater River Region is unique relative to other entities regulated as Phase I MS4s in California; some of those unique characteristics include:

- ◆ The Whitewater River Region is the only Phase I MS4 permit area located in the California desert. Precipitation typically averages 3.6 inches annually in the majority of the urbanized areas.
- ◆ The population of the Whitewater River Region (approximately 483,449¹) supporting compliance activities for the 2008 MS4 Permit is smaller than the populations of other Phase I MS4s in Southern California.
- ◆ Although portions of the Whitewater River Region experienced rapid growth from 2000 through 2006, the economic recession has resulted in little development or population growth since adoption of the 2008 MS4 Permit. Over 70 percent of the region is still comprised of non-urban (rural residential, agriculture, state lands, federal lands, and tribal lands) land uses.² It is projected that the population of Riverside County will increase approximately 6.7 percent by 2015.³ Assuming that the Whitewater River Region's population and urbanized areas increase at a proportional rate, 68.7 percent of the permit area would remain in non-urban land uses in 2015.
- ◆ Almost 60 percent of the Whitewater River Watershed consists of federal, state, and tribal lands⁴ that are not under the jurisdiction of the Permittees.
- ◆ The Whitewater River, as designated by the Colorado River Basin Water Quality Control Plan (Basin Plan), is an ephemeral stream located between Indian Avenue in Palm Springs and Monroe Street in Indio. The Beneficial Uses for this reach of the Whitewater River are freshwater habitat, groundwater recharge, non-contact water recreation, warm freshwater habitat (use, if any, to be determined on a case-by-case basis), and wildlife habitat. Each of these uses are identified as being intermittent, meaning that they are only applicable if flows are sufficient to support those uses. Additionally, when water is present in the River, recreational uses are not attainable due to the extreme flow and attendant hazards.
- ◆ The Whitewater River and the Coachella Valley Storm Channel (CVSC), through the urbanized areas of the Whitewater River Region, are engineered and maintained Receiving Waters, but follow the path of historic waterbodies.
- ◆ The Whitewater River system is typically dry except for localized areas of flow during and immediately following significant storm events. The only Receiving Water within the urbanized area that is known to have perennial flow is the lower 17 miles of the CVSC; a portion of this reach is located outside of the MS4 Permit boundary.

¹ California Department of Finance at www.dof.ca.gov/HTML/DEMOGRAP/NewHist_E-4.xls and Southern California Association of Governments, <http://www.scag.ca.gov/forecast/index.htm>.

² County of Riverside Assessor, current as of March 22, 2011.

³ California Department of Finance at <http://www.dof.ca.gov/research/demographic/reports/projections/interim/view.php>, Riverside County Center for Demographic Research at http://www.rctlma.org/rcd/content/projections/PHEProjections_2010.pdf June 2010

⁴ County of Riverside Assessor, current as of March 22, 2011.

- ◆ The soils in the Whitewater River Region consist primarily of sands that promote rapid natural infiltration of runoff.⁵ For many years, the cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs and Rancho Mirage have required new developments to retain and infiltrate runoff on-site to avoid the need for development of MS4 facilities. Consequently, non-stormwater MS4 discharges to the Receiving Waters of the Whitewater River Region are de minimis.⁶
- ◆ Neither the Whitewater River nor its tributaries are 303(d) listed as impaired waterbodies for any pollutant. The only water quality impairment within the region is associated with bacterial indicators in the CVSC; this impairment is being addressed through a USEPA approved Bacterial Indicators TMDL. Although impairments for Toxaphene, DDT, Dieldrin, and PCBs have also been identified within the CVSC, these pollutants have been identified miles downstream of the Whitewater River Region, near the Salton Sea.

⁵ Order No. R7-2008-0001, NPDES No. CAS617002, California Regional Water Quality Control Board, Colorado River Region, May 21, 2008, Finding 15, p. 7.

⁶ Ibid.

2.0 WHITEWATER RIVER REGION

As used in this ROWD, the Whitewater River Region is the urbanized area of the Whitewater River Watershed under the jurisdiction of all Permittees except the District and the Coachella Valley Water District, which do not govern as a municipal authority over any land areas (such Permittees with jurisdictional authority are referred to herein as "Jurisdictional Permittees." The Permittees are:

- ◆ Riverside County Flood Control and Water Conservation District (District)
- ◆ County of Riverside (County)
- ◆ Coachella Valley Water District (CVWD)
- ◆ City of Banning
- ◆ City of Cathedral City
- ◆ City of Coachella
- ◆ City of Desert Hot Springs
- ◆ City of Indian Wells
- ◆ City of Indio
- ◆ City of La Quinta
- ◆ City of Palm Desert
- ◆ City of Palm Springs
- ◆ City of Rancho Mirage

The District and the County have been designated as Principal Permittees and the cities and CVWD are considered Co-Permittees.

The June 2009 Whitewater River Region SWMP was prepared in compliance with the requirements of the 2008 MS4 Permit; an errata to the 2009 SWMP was subsequently prepared in January 2011 (hereafter referred to as the 2011 SWMP). To coordinate administration and implementation of the requirements of the three Phase I MS4 Permits applicable in Riverside County, the Whitewater River Region SWMP incorporates elements of the Riverside County Drainage Area Management Plan (DAMP). The 2011 SWMP describes the major programs and policies that the Permittees individually and/or collectively develop and implement to manage Urban Runoff to the Maximum Extent Practicable (MEP).

2.1 PERMIT AREA

The area covered under the 2008 MS4 Permit is comprised of the urbanized areas of the Coachella Valley under the jurisdiction of the Jurisdictional Permittees that lie approximately between the San Geronio Pass area to the northwest, and the Salton Sea to the southeast. This area is referred to as the "Whitewater River Region" in this ROWD. The Whitewater River Region comprises approximately 392 square miles, which is 5 percent of the total 7,300 square mile area of Riverside County. Eleven of the 26 municipalities within Riverside County are included in the Whitewater River Region, which falls under the jurisdiction of the Colorado Regional Board.

As set forth in Table 4 below, over 70 percent of the Whitewater River Region is not subject to federal stormwater regulation, the jurisdiction of the State of California, or the jurisdiction of the Permittees. As such, the Permittees may lack legal jurisdiction over stormwater discharges into their respective MS4 facilities from such areas or entities. These areas include:

- ◆ Federal and State lands, including but not limited to: military bases, national forests, hospitals, colleges and universities and highways;
- ◆ Utilities and special districts (including school districts, park districts, publicly owned treatment works and water utilities, etc.);
- ◆ Native American tribal lands; and
- ◆ Agricultural lands (discharges from which are exempted under the Clean Water Act).

Discharges from these, and other point and non-point sources which may or may not be otherwise permitted by or under the jurisdiction of the Colorado Regional Board, may affect Whitewater River Region water quality.

The Whitewater River Region is identified in the Permit Area Map included as Appendix A; areas not regulated under the 2008 MS4 Permit are also identified on the map.

2.2 POPULATION AND LAND USE

2.2.1 Population

The California Department of Finance estimates that as of January 1, 2012, the total population of Riverside County was about 2,227,577. Of the 2.227 million people, approximately 483,449 persons (or 22 percent) reside in the portion of Riverside County within the Whitewater River Region. Of those 483,449 persons, about 98,561 persons reside in the unincorporated area of Riverside County, while approximately 384,888 persons reside within the incorporated cities.

Although portions of the Whitewater River Region experienced rapid growth from 2000 through 2006, the economic recession has resulted in little development or population growth since adoption of the 2008 MS4 Permit. Over the period 2008 through 2012, Riverside County has grown in population by 5.9 percent. Table 1 shows population data, and the percent change for the State, neighboring counties and each of the Whitewater Region Jurisdictional Permittees, for the years 2008 – 2012.

Department of Finance 2012 long-range growth forecasts estimate that population growth in the Whitewater River Region should continue to be greater than that of surrounding counties; 2012 - 2015 County population projections found in Table 2 show that future growth rates of Riverside County (6.7 percent) will continue to be the highest in Southern California. Table 3 shows Whitewater River Region Permittee population projections through 2015, based upon Riverside County Center for Demographic Research projections (RCP-10).

The Permittees believe that the population projections set forth in Table 3, while the best available information at this time, may overstate the actual growth rate for the Region. This belief is based on the significant slowdown in growth experienced in the Region over the past few years as a result of the recession. The projections set forth in Table 3 were developed in 2010.

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Table 1. Population Estimates 2008 – 2012

Geographic Area	Year					Change 2008 to 2012
	1-1-08	1-1-09	1-1-10	1-1-11	1-1-12	
State of California	36,704,375	36,966,713	37,223,900	37,427,946	37,678,563	2.7%
Los Angeles County	9,785,474	9,801,096	9,822,121	9,847,712	9,884,632	1.0%
Orange County	2,974,321	2,990,805	3,008,855	3,028,846	3,055,792	2.7%
San Diego County	3,032,689	3,064,436	3,091,579	3,115,810	3,143,429	3.7%
San Bernardino County	2,009,594	2,019,432	2,033,141	2,046,619	2,063,919	2.7%
Imperial County	168,495	171,670	174,244	175,712	177,441	5.3%
Riverside County	2,102,741	2,140,626	2,179,692	2,205,731	2,227,577	5.9%
Whitewater River Region Unincorporated Area	ND	ND	ND	ND	98,561 (estimate)	--
Banning	28,695	29,144	29,492	29,723	29,965	4.4%
Cathedral City	50,401	50,812	51,093	51,400	51,952	3.1%
Coachella	38,521	39,079	40,508	41,339	41,904	8.8%
Desert Hot Springs	25,115	25,690	25,886	27,277	27,638	10.0%
Indian Wells	4,826	4,910	4,947	4,990	5,035	4.3%
Indio	74,007	74,590	75,263	76,817	78,065	5.5%
La Quinta	36,744	37,116	37,044	37,688	38,075	3.6%
Palm Desert	47,453	47,993	48,215	48,920	49,471	4.3%
Palm Springs	44,026	44,346	44,480	44,829	45,279	2.9%
Rancho Mirage	16,815	17,037	17,165	17,399	17,504	4.1%

- (a) State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2010, with 2000 & 2010 Census Counts. Sacramento, California, September 2011.
- (b) ND = No data. Where ND is noted, there is no comparable data available for that portion of the Unincorporated County within the Whitewater River Watershed.
- (c) Southern California Association of Governments, <http://www.scag.ca.gov/forecast/index.htm>

Table 2. Projected Population for Southern California Counties: 2012 - 2015

Geographic Area	Year		Change 2012 to 2015
	2012	2015	
Los Angeles County	9,884,632	10,138,955	2.6%
Orange County	3,055,792	3,114,304	1.9%
San Diego County	3,143,429	3,238,838	3.0%
San Bernardino County	2,063,919	2,146,336	4.0%
Imperial County	177,441	187,663	5.8%
Riverside County	2,227,577	2,376,190	6.7%

- (a) Surrounding County population estimates obtained from California Department of Finance at <http://www.dof.ca.gov/research/demographic/reports/projections/interim/view.php>, May 2012
- (b) Riverside County 2015 population estimate obtained from Riverside County Center for Demographic Research at http://www.rctlma.org/rcd/content/projections/PHEProjections_2010.pdf June 2010

Table 3. Projected Population for Whitewater River Region Permittees: 2012 - 2015

Geographic Area	Year		Change 2012 to 2015
	2012	2015	
Whitewater River Region Unincorporated Area	98,561	96,721	-1.9%
Banning	29,965	35,648	18.9%
Cathedral City	51,952	58,595	12.8%
Coachella	41,904	52,000	24.1%
Desert Hot Springs	27,638	42,806	54.9%
Indian Wells	5,035	5,452	7.6%
Indio	78,065	93,757	20.1%
La Quinta	38,075	46,537	22.2%
Palm Desert	49,471	53,539	8.2%
Palm Springs	45,279	50,423	11.4%
Rancho Mirage	17,504	17,293	-1.2%

- (a) State of California, Department of Finance, E-4 Population Estimates for Cities, Counties and the State, 2001-2010, with 2000 & 2010 Census Counts. Sacramento, California, September 2011.
- (b) Southern California Association of Governments, <http://www.scag.ca.gov/forecast/index.htm>
- (c) 2015 population estimates obtained from Riverside County Center for Demographic Research at http://www.rctlma.org/rcd/content/projections/PHEProjections_2010.pdf June 2010

2.2.2 Land Use

As noted above, over 70 percent of the Whitewater River Region remains in non-urban land uses or land uses beyond the jurisdiction of the Jurisdictional Permittees (rural residential, agriculture, preserves and open space, state lands, federal lands, and tribal lands). Further, almost 60 percent of the Whitewater River Watershed consists of federal, state, and tribal lands that are not under the jurisdiction of the Permittees' MS4 programs. Given the projection that Riverside County's population will increase by approximately 6.7 percent by 2015, and assuming that the urbanized area increases proportionally, 68.7 percent of the Whitewater River Region would remain in non-urban land uses in 2015.

Land uses in the Whitewater River Region are shown in Table 4. These land uses are based on Riverside County Assessor Parcel Data, current as of March 2011.

Table 4. Current Land Uses in the Whitewater River Region

Land Use	Acreage ^(a)	% of Total
Commercial	7,526	3.0
Industrial	3,692	1.5
Urban Residential (< 1 acre)	30,336	12.1
Parks & Recreation Facilities	13,643	5.4
Streets & Roads	18,295	7.3
Subtotal – Urban Land Use	73,492	29.3
Preserves & Open Space	95,529	43.5
Rural Residential (parcel size > 1 acre)	23,070	6.7
Agriculture	19,365	5.1
Federal/State/Tribal Lands/Non-County Jurisdiction	39,240	15.4
Total	250,696	100

(a) Based upon Riverside County Assessor Parcel Data as of March 22, 2011.

2.2.3 Proposed New Development

To the extent possible, the Jurisdictional Permittees have identified in this ROWD significant new development projects that, if constructed, will result in the conversion of primarily undeveloped land to developed land during the term of the Fourth-term MS4 Permit. In some cases, because these projects are constructed in phases, completion of these new developments will occur beyond the term of the Fourth-term MS4 Permit (after 2018). It should be noted that not all of the development projects identified below may actually be constructed, or constructed at the scale authorized by the Jurisdictional Permittees.

City of Banning

◆ **Pardee Butterfield Specific Plan**

Location: NE corner of the intersection of Highland Springs Avenue and Wilson Street.

Specific Plan Details: The project will consist of 5,400 homes, 2 public schools, 1 golf course, and several small neighborhood parks and commercial centers.

◆ **St. Boniface Tract**

Location: On Gilman Street, approximately 1,500 feet west of 8th Street.

Specific Plan Details: The site will consist of 166 homes, on 47 acres.

◆ **TTM 36056 (O'Donnell): Banning Business Park**

Location: East of the intersection of Hathaway Street and Nicolet Street.

Specific Plan Details: The site consists of 64 acres, which is zoned industrial/commercial.

◆ **Industrial Zoned Property near Banning Municipal Airport**

Location: Immediately south of Banning Municipal Airport.

Specific Plan Details: The City of Banning has advertised an RFP for development opportunities of 59 acres of land, currently zoned Industrial.

City of Cathedral City

◆ **TM 28561-1 – Rio Del Sol**

Subdivision of 18.33 acres into 10 parcels for light industrial use. SW of the intersection of Date Palm Drive and Varner Road.

◆ **TPM 35032 - Uptown Village**

Development of approximately 9 acres into a multi-tenant commercial project. North of McCallum Way, East of Date Palm Drive.

◆ **TR 31774 - Campanile**

Subdivision of approximately 68 acres into 286 single-family residential lots. 130 Single-family residential dwellings are constructed; 156 remaining vacant lots on 23 ± acres. Between McCallum Way and Ramon Road, Easterly of Santoro Drive.

◆ **TR 31774 - Campanile Commercial**

Development of approximately 4 acres into 2 neighborhood commercial lots. Northeast and northwest intersection of Ramon Road and Via Campanile.

City of Coachella

◆ **Rancho Las Flores Park**

Location: Van Buren and Avenue 48

Specific Plan Details: 29 acres will be developed in Phase I; Over 19,000 cubic yards of native material is shaping the new park site; 12,000 cubic yards of topsoil will be imported, so that the turf can establish strong roots; Class A soils, turf for excellent sports fields; 331,390 square feet of athletic area; three soccer fields with dual use football field, two basketball courts; concession, restroom and storage building; over 60,000 square feet of sidewalks, decorative concrete and brick pavers; 97,000 square feet of landscape area; field lighting for soccer and football fields; path and parking lot lighting; 73 palm trees will be planted, 214 canopy trees will be planted; shaded playground area and over 10 shaded picnic area structures; walking paths and trails will also be constructed.

◆ **La Entrada Project**

Location: The site is located south of Interstate 10 (I-10) and north of the Coachella Branch of the All American Canal.

Specific Plan Details: The project consists of approximately 2,200 acres, of which approximately 1,612 acres are currently in the City of Coachella, and 588 acres are in unincorporated Riverside County. Development would include 7,800 dwelling units and 1,510,970 square feet of commercial uses, plus community facilities, four elementary schools, infrastructure, parks and open space.

◆ **Rancho Coachella Vineyards**

Location: North of Avenue 52, West of Van Buren

Specific Plan Details: 79 Single-family Units Subdivision; 19.66 acres

- ◆ **Los Suenos**
Location: Southeast Corner of Avenue 49 and Calhoun
Specific Plan Details: 143 Single-family Units Subdivision; 37 acres
- ◆ **Coachella-Nickel Creek LLC**
Location: Avenue 44, West of Dillon
Specific Plan Details: 322 Single-family Unit Subdivision; 64.64 acres
- ◆ **Eagle Falls**
Location: North of I10, West of Harrison
Specific Plan Details: 295 Single-family Unit Subdivision; 90+ acres
- ◆ **Villa Palmeras**
Location: South side of Avenue 50 between Jackson Street and Calhoun Street
Specific Plan Details: 111 Single-family attached and detached residential; 11.58 acres
- ◆ **The Vineyards – Phase II**
Location: 44-790 Dillon Road
Specific Plan Details: 46 R.V. lots w/ typical 512 square feet garage/utility structures; 3.84 acres

City of Desert Hot Springs

- ◆ **Pierson Professional Plaza**
Location: Southwest corner of Cholla Drive and Pierson Boulevard
Specific Plan Details: 80,000 square feet commercial project to include medical and retail/restaurant uses on a 9.4 acre site. Expected to start construction by 2013.
- ◆ **Dollar General**
Location: West side of Palm Drive, approximately 1,000 feet of Ironwood Drive
Specific Plan Details: 12,480 square feet commercial retail project on approximately 1.73 acres. Expected to start construction by the start of 2013.
- ◆ **Aloha Systems**
Location: South side of Dillon Road, approximately 300 feet west of Little Morongo Road
Specific Plan Details: Two adjacent ground-mounted photovoltaic plants, each with approximately 1.47 megawatts capacity, on 14.4-acres. Each plant will consist of approximately 7,500 photovoltaic panels attached to a racking system arranged in parallel rows oriented in and east-west direction across the southerly 961 feet of the Property. A temporary mobile construction office and small parking area are proposed at the northeast corner of the Property. Once completed, the plants will operate unstaffed and will deliver power to the local distribution network and then feed into the general power grid. Expected to start construction by the start of 2013.
- ◆ **WalMart**
Location: Southwest corner of Palm Drive and Camino Aventura
Specific Plan Details: 156,000 square feet building and garden center and approximately 25,616 square feet of retail and restaurants on approximately 19 acres. Approximately 717 parking spaces are being proposed. Expected to start construction in 2013.

♦ **Village at Mission Lakes**

Location: Southwest corner of Little Morongo Road and Mission Lakes Boulevard

Specific Plan Details: Shopping center with 68,000 square feet of rentable space. Construction is ongoing.

♦ **Y.K. Spa**

Location: Southeast corner of Hacienda Avenue and La Salle Road

Specific Plan Details: Develop a 12,503 square feet, 10 room private resort spa on approximately 0.80 acres. Expected to start construction by the end of 2012.

City of Indian Wells

There are no known significant developments in the City of Indian Wells that will result in the conversion of primarily undeveloped land to developed land during the term of the Fourth-term MS4 Permit.

City of Indio

♦ **Indio Trails**

Location: North of Frances Way, east of Washington Street, approximately 3.25 miles north of the Interstate 10 intersection along the northwestern boundary of the Indio City limits.

Specific Plan Details: The project proposes subdivision of approximately 732 acres of land, and will consist of approximately 1,150 dwelling units, 4.8 acres of commercial land use, and 267 acres of open space, recreational amenities, paved roadways, concrete walks and driveways, landscaped areas and retention basins.

♦ **Citrus Ranch**

Location: West side of Dillon Road, approximately three miles north of Interstate 10.

Specific Plan Details: The project proposes development of up to 3,075 residential units (single and multi-family), a golf course, trails, a community center, golf course club house and maintenance yard, a fire station site, and a boutique hotel, all on 1,183 acres.

♦ **Las Montanas Marketplace**

Location: North of Varner Road, East of Jefferson Street and West of Madison Street.

Specific Plan Details: The project proposes construction of a mixed use development, including residential, hotel, retail, office, and medical components, all on a 91 acre site.

City of La Quinta

- ♦ **SDP 2011-917 Coral Mountain Apartments** – Southeast of Highway 111 and Dune Palms Road (APN 600-020-054), multi-family affordable rental housing community.

- ♦ **TM 33226, SDP 2006-852 Eden Rock** - 56140 PGA Boulevard (APN 775-220-012; and -014; 775-370-002), 40-acre residential development with a total of 264 units.

- ♦ **PM 31876, SDP 2006-875 Mayer Villa Capri** – Northeast Corner of Fred Waring Drive and Washington Street approximately 25 acres retail and medical office development.

- ♦ **TTM 36305 KB Homes Palizada** – Southeast Corner of Monroe and Avenue 60, 418 single-family detached residential lots.

- ◆ **TM 34243, SDP 2006-863 Alta Verde at Coral Mountain** – Near the Northwest Corner of Avenue 58 and Madison Street 67 single-family residential development.
- ◆ **TM 32879 Griffin Ranch** - Southeast Corner of Madison Street and Avenue 54, 303 single-family residential development.
- ◆ **TTM 33085 Core Madison**– Madison Street between Avenue 51 and 52, 7 single-family home tract.
- ◆ **PM 30903 Washington Park** – Northeast Corner of Washington Street and Avenue 47, Commercial (Restaurant) Development.
- ◆ **TPM 36405 La Quinta Retirement Community** – South side of Seeley Drive, East of Eisenhower Medical Center, 196 suites of retirement and assisted living residences.
- ◆ **TTM 36403** – Southwest Corner of Calle Conchita and Madison Street (APN 766-080-009 and 766-090-008 to 010), 11 single-family residential lots.
- ◆ **Madison Square** - Northeast Corner of Highway 111 and Dune Palms Road, commercial development.

City of Palm Desert

- ◆ **44-377 MONTEREY AVENUE.** - 7,460 square foot office building.
- ◆ **73-026 GUADALUPE AVENUE.** - Office Buildings.
- ◆ **73-500 DINAH SHORE DRIVE** - A 43,446 square foot office/warehouse complex on Lot 34 of PM 24255. APN 653-250-042.
- ◆ **34-501 and 34-601 SPYDER CIR.** - Construct two contiguous industrial buildings totaling 18,991 square feet on a 1.12 acre site. APNs 653-810-019 and 653-810-020.
- ◆ **75-300 GERALD FORD DRIVE** - Construct 100,500 square foot mixed use retail/office center with a two-story parking structure, including one 4,500 square foot bank, four retail/restaurant spaces totaling 16,000 square feet, 2 two-story office/retail buildings totaling 62,000 square feet. APN 653-410-022.
- ◆ **73-650 DINAH SHORE DRIVE** - Construct an 86,000 square foot two-story medical/general office building with a parking structure. APN 653-250-045.
- ◆ **73-665 DINAH SHORE DRIVE** - Construct a 15,267 square foot Industrial building including a tower element up to 34 feet in height. APN 653-810-021.
- ◆ **73-731 SPYDER CIRCLE** - Construct a 7,540 square foot auto repair building. APN 653-810-013.
- ◆ **75-144 GERALD FORD DRIVE** - Construct an 88-room hotel and restaurant pad, including a height exception to allow a maximum height of fifty-two (52) feet. APNs 653-690-076/077.
- ◆ **44-450 MONTEREY AVENUE** - Construct a 17,600 square foot professional office building. APN 627-033-002.
- ◆ **73-741 SPYDER CIRCLE** - Construct a 8,913 square foot automotive tire facility with a tower element at 30 feet, without the tire element. APN 694-240-011.

- ◆ **36-333 PORTOLA AVENUE.** - Construct a 18,166 square foot K-6 school building in a PR-5 residential zone for the Jewish Federation of Palm Springs on a ten-acre property. APN 653-370-032.
- ◆ **45-400 LARKSPUR LANE** - Construct a three-story 106 room boutique hotel and a two-story 16 three-bedroom condominium unit. APNs 627-262-008 and 627-262-011.
- ◆ **36-400 TECHNOLOGY DRIVE** - Construct a four-story, 128 room Holiday Inn, LEED certified with a Gold rating, including restaurant, outdoor pool and spa, meeting room, exercise room, gift shop and height exception of 54 feet. APN 694-190-009.
- ◆ **EL PASEO** - Construct a 27,000 square feet addition to the existing Saks 5th Avenue at the existing Gardens on El Paseo and associated improvements and demolition of existing El Paseo Village and construct a 42,539 square foot retail and restaurant development. APNs 627-261-006, 627-252-004, 627-252-005.
- ◆ **GERALD FORD/PORTOLA/COOK** - Subdivide 69.26 acres into 270 single-family lots. TT 32655.
- ◆ **SHEPHERD LANE** - Subdivide 9.69 acres into 32 single-family lots (8,749 minimum lot size) located on east and west sides of Shepherd Lane, 2,400 feet North of Frank Sinatra Drive TT 34391. APNs 653-380-001 and 019.
- ◆ **74-255 GERALD FORD DRIVE** - Construct 244 single-family homes on 42.2 acre site. TT 34055. APNs 653-390-083, 653-390-087, and 653-390-082.
- ◆ **36-200 PACIFIC AVENUE.** - Tentative Tract Map for 141 single-family homes. TT 34057. APNs 653-390-064, 653-390-077, and 653-390-062.
- ◆ **74-300 COLLEGE DRIVE** - Tentative Tract Map for 72 single-family homes on 81.6 acre site. TT 34074. APNs 653-390-064, 653-390-077, and 653-390-062.
- ◆ **38-301 PORTOLA AVENUE.** - Tentative Tract Map for 159 single-family homes on 18.67 acre site. TT 33719. APNs 620-400-015 and 620-400-016.
- ◆ **TR 31676 Cornishe**

City of Palm Springs

The following is a list of entitled projects which, as of September, 2012, are on hold or under construction:

- ◆ **Monte Sereno (TM30046)** – Located at the Northwest Corner of Bogert Trail and the Palm Canyon Wash. Entitled for 89 single-family homes on 40 acres. 100 percent of the infrastructure and 27 homes are currently constructed. It is estimated that 50 percent of the remaining 62 homes will be constructed by 2018.
- ◆ **Alta (TM30050)** – Located at 3200 S. Palm Canyon Drive. Is entitled for 67 single-family homes on 30 acres. 100 percent of infrastructure and 23 homes are currently constructed. It's estimated that 50 percent of the remaining 44 homes will be constructed by 2018.
- ◆ **Oceo (TM32732)** – Located at 801 E. Palm Canyon Drive. Entitled for 25 townhomes, 9 single-family homes, and two retail stores on 5.5 acres. 100 percent of the infrastructure, 6 townhomes, 3 single-family homes, and the retail stores are currently constructed. It's estimated that 100 percent of the remaining 19 townhomes and 6 single-family homes will be constructed by 2015.

- ◆ **Escena** – Located at the Southeast Corner of E. Vista Chino and Highway 111. Entitled for 1450 single-family homes, a 450-unit resort hotel, a golf course with maintenance facility, on 460 acres. 100 percent of the infrastructure, the golf course with club house and maintenance facility, and 87 single-family homes are currently constructed. It is estimated that only 10 percent of the remaining 1363 homes will be constructed by 2018.
- ◆ **The Towers (TM31263)** - Located at 2850 N. Indian Canyon Drive. Entitled for 30 condominiums on 2.15 acres. 67 percent of the infrastructure and 20 condos are currently constructed. It is estimated that 100 percent of the remaining condos will be constructed by 2018.
- ◆ **Estancias (TM29632)** - Located at 600 E. Acanto Road. 100 percent of the infrastructure and 11 homes are currently constructed. Entitled for 48 homes on 24.8 acres. It is estimated that 85 percent of the 37 remaining homes will be constructed by 2018.
- ◆ **Tuscany Estates (TM28495)** - Located at the West terminus of W. Racquet Club Drive. Entitled for 15 single-family homes on 7 acres. 100 percent of infrastructure and 3 homes are currently constructed. It is estimated that 25 percent of the remaining 12 homes will be constructed by 2018.
- ◆ **Las Palmas Heights (TM27680)** - Located at the southwest corner of W. Vista Chino and Via Monte Vista. Entitled for 9 single-family homes on 6.5 acres. 100 percent of the infrastructure and 3 homes are currently completed. It is estimated that about 25 percent of the remaining 6 homes will be constructed by 2018.
- ◆ **TTM28308** - Located at 1420 E. Sunny Dunes Road. Is entitled for 7 single-family homes on 1.7 acres, but is not constructed. It is estimated that 100 percent of the homes will be constructed by 2015.
- ◆ **TTM31422** - Located at 2630 Anza Trail. Entitled for 5 single-family homes on 2.35 acres. 100 percent of infrastructure is constructed currently, but no vertical construction. It is estimated that 60 percent of the homes will be constructed by 2018.
- ◆ **Luminaire (TM31514)** - Located at the Northwest Corner of E. Palm Canyon Drive and Palm Canyon Wash. Entitled for 62 single-family homes on a 12.54 acre site. 100 percent of infrastructure and 41 homes are currently built out. It is estimated that 100 percent of the remaining 21 homes will be constructed by the end of 2012.
- ◆ **Murano (TM33933)** - Located at 1110 Francis Drive. Entitled for 57 single-family homes on 17.8 acres. About 15 of the homes and 50 of the infrastructure are currently constructed. It is estimated that 100 percent of the remaining 42 homes will be constructed by 2015.
- ◆ **Palermo (TM33561)** - Located at 3300 and 3500 N. Indian Canyon Drive. Entitled for 211 condominiums and two retail stores on 19.4 acres. The project is currently 50 percent built out. It is estimated that the remaining 9.7 vacant acres will be 50 built out by 2016.
- ◆ **Terra Vita (TM33936)** - Located at 1400 E. Amado Road. Entitled for 42 condominiums on 4.65 acres. All infrastructure and 24 condos have been completed on 3.3 acres to date. It is estimated that 100 percent of the remaining 18 condos on 1.35 acres will be built out by 2014.
- ◆ **Palomino (TM33577)** - It is a 2.6 acre site with 1.85 acres being built out to date. Entitled for 24 condominiums and partially built out. It is estimated that 25 of the remaining 0.75 acres will be built out by 2018.
- ◆ **The Enclave (TM32160)** - Located at 2555 N. Sunrise Way. Entitled for 52 single-family homes on 16 acres. 100 percent of infrastructure and 35 single-family homes are currently constructed; it is estimated that about 25 percent of the remaining 17 homes will be constructed by 2018.

- ◆ **Pedregal Tract** - A 13.95 acre site located on the Chino Cone at the southwest corner of Tram Way and Highway 111. Was entitled, but is now expired. It is estimated that 100 percent of site will be built out by 2018.
- ◆ **32 @ Agave (TM33161)** - Located at 300 Radio Road. Entitled for 32 single-family homes. 15 percent of the infrastructure and 4 single-family homes are currently constructed. It is estimated that 25 percent of the remaining infrastructure and single-family homes will be constructed by 2018.
- ◆ **The Cottages at Smoketree (TM33878-1)** - Located at 1800 S. Sunrise Way. Entitled for 8 single-family homes on 4 acres. 100 percent of the infrastructure and 3 single-family homes are currently constructed. It is estimated that about 60 percent of the remaining single-family homes will be constructed by 2018.
- ◆ **The Morrison (TM34165 Amended)** - Located at 444 N. Avenida Caballeros. Entitled for 53 single-family homes on 8.5 acres. 100 percent of infrastructure and 26 single-family homes are currently constructed. It is estimated that 100 percent of the remaining 27 single-family homes will be constructed by the end of 2012.
- ◆ **College of the Desert West Valley Campus (CODWVC) Solar Field (E-3803)** – Entitled, but not constructed on the western 60 acres of the CODWVC. It is estimated that 100 percent of the solar field will be constructed by 2018.
- ◆ **Desert Fashion Plaza Mall in downtown Palm Springs (TPM36446)** - Redevelopment of existing mall on 13.4 acres is not yet entitled, but does have an approved Specific Plan. Located at 101 and 123 N. Palm Canyon Drive. It is estimated that 75 percent of the redevelopment on 13.4 acres will be constructed by 2018.
- ◆ **College of the Desert West Valley Campus** - Located West of N. Indian Canyon Drive between Tramview Road and Chino Canyon Creek Levee on about 450 acres. Not entitled, but does have an approved Specific Plan. It is estimated that 10 percent of the infrastructure and vertical construction will be constructed by 2016.

City of Rancho Mirage

- ◆ **Foxx (TTM31004)** – Located on Cypress Lane, 450 feet east of Los Alamos. This is a previously approved (6/2/2005) subdivision of 6.86 acres to construct 11 lots for eventual custom house construction. They were conditioned to retain 100 percent on site. No rough grading or other construction has started. Plans are being revised for possible 2012 start of construction. It is estimated that 100 percent of the infrastructure construction will be completed by 2018.
- ◆ **Tangerine Court (TM31800)** – Located at the Northwest Corner of Sunny Lane and Palm View Drive. This is a previously approved (12/16/2004) subdivision of 7.06 acres to construct 13 lots for eventual custom house construction. They were conditioned to retain 100 percent of stormwater runoff on site. No rough grading or other construction has started yet. Plans are being revised for possible 2012 starting. It is estimated that 100 percent of the infrastructure construction will be completed by 2018.
- ◆ **GenLB-Rancho LLC (TM34640)** – Located at 68900 Frank Sinatra Drive encompassing the existing Ritz Carlton Hotel and surrounding vacant property. This is a previously approved (8/3/2006) subdivision of 38.3 acres to construct hotel and condominiums. As a property south of the Whitewater Channel, located on impermeable rocky soils, it was conditioned to detain additional stormwater runoff and "nuisance water" so that the net runoff rate would not increase post-development. The hotel remodeling has been on hold. No additional condominium or

residential plans have been approved. No starting date for the additional units is known. The hotel remodeling is supposed to be completed by Fall of 2013.

- ◆ **Monte Vista Rancho Mirage, LLC "5 Peaks" (TPM35684)** - Located on Highway 111 west of Mirage Road. This is a previously approved (6/18/2009) subdivision of 60.7 acres into 4 commercial lots and 1 open space lot for eventual business construction. As a property south of the Whitewater Channel, on semi-impermeable rocky soils, they were conditioned to detain additional stormwater runoff and "nuisance water" so net runoff rate would not increase post-development. No rough grading or other construction has started. Plans have been submitted but not yet approved. It appears to be "on hold". No starting date or completion date is known.

Unincorporated Riverside County

There are no planned significant developments for the Whitewater River Region that would result in the conversion of primarily undeveloped land to developed land during the term of the Fourth-term MS4 Permit.

2.3 MUNICIPAL SEPARATE STORM SEWER SYSTEM

2.3.1 Existing MS4 Facilities

Each year, the Permittees report additions to their MS4 facilities to the District. These new facilities are then added to the updated MS4 facility maps that are included in the Annual Report to the Colorado Regional Board. Maps depicting the Permittee MS4 facilities are provided in Appendix B. Table 5 below provides a listing of MS4 facilities completed by the Permittees during the term of the 2008 Permit.

Table 5. Permittee MS4 Facilities Completed Between May 2008 and October 2012

<i>Project Name/Description</i>	<i>Project Type or Types</i>	<i>Project Size or Length</i>
Banning		
Banning MDP Line D Segment	5' x 4.5' RCB	1,968 feet
Coachella		
Calle Bouganvilla, East of Tyler Street; 50780 Calle Mendoza; 6 th Street and Vine; 6 th Street and Orchard; 6 th Street and Palm	Installed 5 drywells to control dry weather discharges to CVSC.	
District		
East Cathedral Canyon	Toe-down structure; Rip-rap installation	8,000 feet
Palm Springs MDP Line 34A	18" to 48" RCP	1,327 feet
Palm Springs MDP Line 8 and Lateral 8A	18" to 66" RCP	4,340 feet
Palm Springs MDP Lateral 6A	42" RCP	1,430 feet
Palm Springs MDP Line 22 Stage 2	66" to 84" RCP	2,169 feet
Palm Springs MDP Line 31 and Line 32	60" RCP	3,710 feet
Cathedral City Cove Area (MS 33)	24" to 48" RCP	1,770 feet
Indio		
Avenue 45 to Golf Center Drive Drainage Improvements	18" to 60" RCP	500 feet
Calhoun Street Drainage Improvements	18" to 60" RCP	6000 feet

Whitewater River Region Report of Waste Discharge

<i>Project Name/Description</i>	<i>Project Type or Types</i>	<i>Project Size or Length</i>
Shields Road and Avenue 46 Drainage Improvements	18" to 60" RCP	800 feet
Jackson Street Drainage Improvements	18" to 60" RCP	10,000 feet
Monroe Street Drainage Improvements	18" to 60" RCP	700 feet
La Quinta		
Drainage and Landscape Improvements for Avenue 50 at Park Avenue	Installed 2 catch basins	
Washington St Drainage Phase II	Constructed retention basin with 2 drywells. Volume = 1.04 acre feet	
Simon Drive Drainage Improvements	Installed 1 catch basin	
Horseshoe Drainage	Installed catch basin and drywell	
Wolff Waters Affordable Housing	Constructed two 24" outfalls at the La Quinta Evacuation Channel	
Palm Springs		
3603 McCarthy Road	60" RCP	611 feet
Rancho Mirage		
San Jacinto Villas Storm Drain	1,750 feet of 18" to 36" RCP, double-drywell system	

Legend: RCP = Reinforced Concrete Pipe; RCB = Reinforced Concrete Box

2.3.2 Planned Additions to MS4 Facilities

The Permittees have identified planned facility additions or modifications to their respective MS4s for the next 5 years, as shown in Table 6.

Table 6. Planned Additions or Modifications to Permittee MS4s

<i>Proposed Project Name</i>	<i>Description</i>
Banning	
Montgomery Street Channel – Sunview Drive Stormdrain	1,340 feet of 18" to 48" RCP on the NW corner of Wilson St, and Sunrise Avenue.
District	
Gilman Home Channel Line A, Lateral A	Line A: From Williams Street north in 4 th St to Nicolet Street Lateral A: Approximately 1,000 feet of RCP from 8 th St, west to the existing channel at George Street, between 10 th and 12 th Street
Palm Springs MDP Line 41	From existing Stage 2 at Golf Club Drive to Cherokee Way. Includes Lateral 41c in Matthew Drive.
Palm Springs MDP Line 43 and 43a	Connects Eagle Canyon Dam outlet to West Cathedral Canyon Channel.
Eagle Canyon Dam	Located southerly of Canyon Plaza Drive.
Banning MDP Line H	Approximately 3,400 feet of 36" to 66" RCP from an outlet in Smith Creek Channel north in Hathaway Street to Barbour Street
Banning MDP Line I	Box crossing on Smith Creek at Ramsey Street
Banning MDP Line K	Box crossing on West Pershing at Ramsey Street
Banning MDP Line D-1	From Ramsey Street north in Hathaway Street to George Street
Banning MDP Line D-2	Almost 1-mile of underground stormdrain, from Ramsey Street north in Hargrave Street to Indian School Lane.
Banning MDP Line F	Underground storm drain from an outlet to Smith Creek north in San Gorgonio Avenue approx. 3,000 feet to Westward Avenue.
Indio	
Jefferson St Drainage Improvements (Avenue. 38 – Avenue 39)	Design and Construction of 4 dry wells.
La Quinta	
Coral Mountain Apartments	Install 48" outfall at the La Quinta Evacuation Channel
Travertine	Install drainage for master planned development of 2,300 housing units, hotel and commercial uses, and golf courses.
Palm Springs	
Baristo Channel Lateral	120 feet of 19" by 24" elliptical RCP
Rancho Mirage	
Monte Vista Rancho Mirage, LLC "5 Peaks" (TPM35684)	Existing drainage system will be extended to take overflow from onsite detention system. Detention storage limits runoff to existing levels. New drywells will address nuisance water.

Note: Funding sources have not been identified for all projects.

2.4 WATERSHED CHARACTERISTICS

The Whitewater River Watershed is the arid desert region of Riverside County that lies between the San Gorgonio pass area to the northwest and the Salton Sea to the southeast. The majority of this area is encompassed by the generally northwest-southeast trending Coachella Valley, which is the northern portion of a large low-lying area in the Colorado Desert known as the Salton Basin. The San Jacinto and Santa Rosa Mountains bound the Coachella Valley on the southwest, and the San Gorgonio Mountains, Indio Hills and Mecca Hills bound the northeast side. Major drainage is through the Whitewater River and its tributaries that reach the northern end of the Salton Sea. The headwaters of the Whitewater River originate from Mt. San Gorgonio.

The Whitewater River Region comprises 23.7 percent of the Whitewater River Watershed; only 8.3 percent of the total Watershed area is comprised of urban land uses (residential, commercial, industrial, parks and recreation, and streets and roads).⁷ Additionally, almost 60 percent of the Watershed area consists of federal, state, and tribal lands that are not under the jurisdiction of the Jurisdictional Permittees.

2.4.1 Climate and Precipitation

Climactic conditions in the Whitewater River Region are arid. The winters are mild and summers are hot, with temperatures ranging from below freezing to over 120°F. Evapotranspiration rates for the region are among the highest to be found throughout the state (approximate net of 71.6 inches per year⁸). Rainfall across the Coachella Valley floor averages 3.6 inches per year, and 30 to 40 inches in the surrounding mountains. As can be seen in Figure 1 below, the mean annual precipitation in the Whitewater River Region is typically 25 percent or less than that of other Phase I MS4 permit areas in California.

Alluvial-fan flash flooding from the surrounding mountain ranges and severe flooding has been recorded in the area, beginning as early as 1825.⁹ However, periods of several years or more may pass between significant storm events. When storms occur, they tend to be discrete convective cells, and feature short but intense rainfall, typical of monsoonal thunderstorms. As such, individual storms rarely affect the entire drainage network.

In addition to the minimal amount of precipitation in the Whitewater River Region, there is no defined rainy (wet) season within the Whitewater River Watershed.¹⁰ Whereas the wet season in coastal Southern California is typically defined by the period from October to March,¹¹ general precipitation events can occur from July to March in the Whitewater River Region, due to susceptibility to monsoonal moisture during the summer months. Convective rainfall events (summer thunderstorms) make up a large portion

⁷ County of Riverside Assessor, current as of March 22, 2011.

⁸ California Irrigation Management Information System (CIMIS), at <http://www.cimis.water.ca.gov/cimis/images/etomap.jpg>

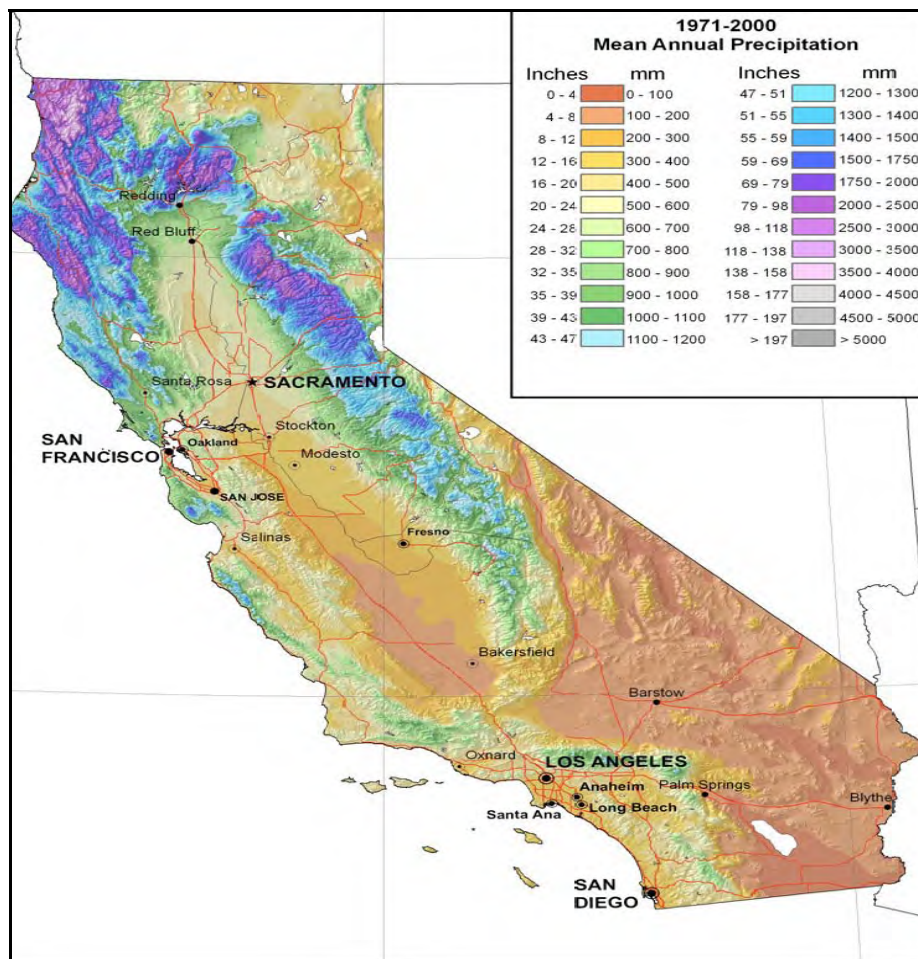
⁹ Discussion excerpted from Coachella Valley Integrated Regional Water Management Plan. Prepared by Coachella Valley Regional Water Management Group. December 2010. Available at www.cvrwm.org.

¹⁰ Order No. R7-2008-0001, NPDES No. CAS617002, California Regional Water Quality Control Board, Colorado River Region, May 21, 2008, Finding 15, p. 6, 7.

¹¹ The wet season is defined in as October 1st through May 31st in the MS4 Permit for the Santa Ana Region of Riverside County, and October 1st through April 30th in the MS4 Permit for the Santa Margarita Region.

of annual rainfall, in contrast to the general winter precipitation that dominates rainfall events in western Riverside County and the coastal plains.

Figure 1 – Mean Annual Precipitation Grid Map for California



a) PRISM 1971-2000 Mean Annual Precipitation grid map for California excerpted from NOAA Atlas 14, Volume 6, Version 2.

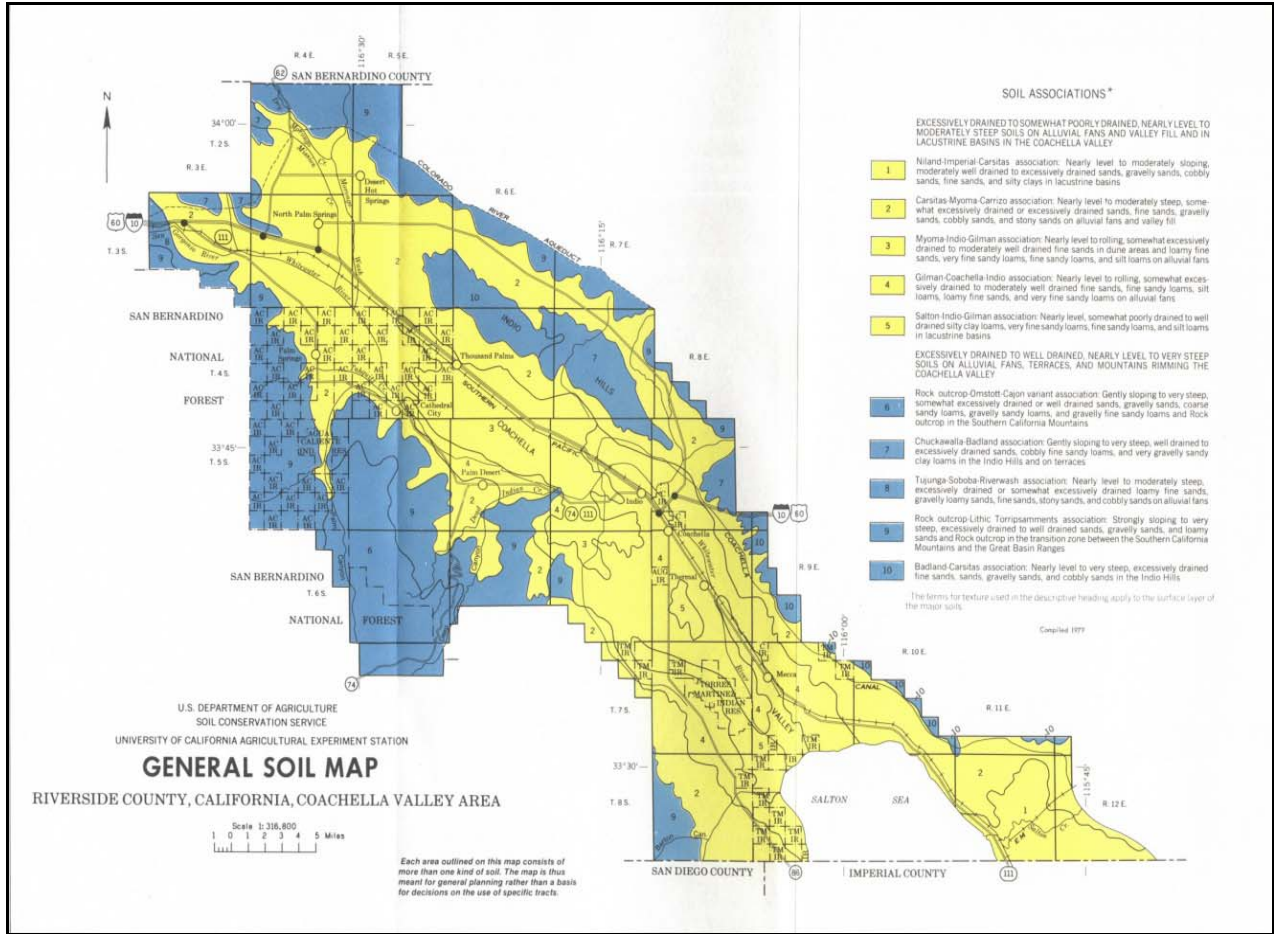
2.4.2 Soils and Geology

The Whitewater River Region is located in a wide, flat valley with generally poor surface drainage characteristics. Concentrated flows from surrounding mountains have deposited bouldery alluvial fans comprised of loosely packed, highly pervious soils where they have interfaced with the flat valley floor. Much of the development in the Whitewater River Region has occurred at or near the base of the mountains, on or near historical alluvial fans.

As illustrated in Figure 2 below, with the exception of a small area south of Thermal, the soil in the Whitewater River Region is classified as Carsitas and Myoma; this soil is extremely pervious, and provides for high rates of infiltration. Additionally, the Whitewater River Region features much less impervious area than other MS4 permit areas due to the lower density of development and large areas of open space. Through ordinance, many of the Jurisdictional Permittees have required on-site retention and

infiltration of runoff to take advantage of the high infiltration rates, and avoid the need for development of MS4 facilities.

Figure 2 – Coachella Valley Area General Soils Map



2.4.3 Hydrology

The Whitewater River/CVSC is the primary drainage course in the region, spanning the entire Coachella Valley. The Whitewater River originates in the San Bernardino Mountains and winds southeast, where it joins with the San Gorgonio River. From that point, its flows are directed to infiltration at the Whitewater recharge basins, just west of Indian Canyon Drive in Palm Springs. From the recharge basins, the Whitewater River continues southeast through the Region to Washington Street in La Quinta, where it becomes the CVSC. The Whitewater River and CVSC in the urbanized areas of the Whitewater Region are stabilized, engineered dry washes, but follow the path of historic waterbodies.

The Whitewater River and its tributary Receiving Waters are predominantly ephemeral. Due to lack of interflow contributions and soil type, time and volume of flow in regional Receiving Waters is minimal: during and immediately following significant storm events and/or during periods of snow melt. Although there is perennial flow in some stream reaches in the surrounding mountains located outside of the

Region, these flows will typically evapotranspire and/or infiltrate prior to reaching the urbanized areas of the valley.¹² As an example, USGS flow data was recently obtained from the upper and lower portions of Palm Canyon Creek, which is a Receiving Water tributary to the Whitewater River in Palm Springs. The data showed that in the last 23 years, Palm Canyon Creek exhibited flow in the urban areas an average of less than 1 percent of the days of each year. With the exception of a 17-mile segment of the CVSC, the Whitewater River Region system is dry. Flow in the Whitewater River downstream of the Whitewater recharge basins is so infrequent that several sections of the channel have been integrated into golf courses.

The City of Banning is located in the northwest corner of the Whitewater River Watershed and does not share an interconnected MS4 with the remainder of the Permittees. The MS4 operated by the City of Banning discharges directly to the San Geronio River and/or its tributaries; most of these discharges infiltrate. During significant runoff events, storm drainage may flow as far as the Whitewater Spreading Grounds; however, this is not typical. As set forth in the 2008 Permit, the City of Banning is included as a Permittee to facilitate coordination with the regional programs implemented by the Whitewater River Region Permittees, and to reduce the administrative duties on the Regional Board.¹³

The City of Desert Hot Springs, located north of the City of Palm Springs, also does not share an interconnected MS4 with the remainder of the Permittees. The MS4 operated by the City of Desert Hot Springs drains to several washes tributary to Little and Big Morongo Creeks, which are the primary Receiving Waters. Discharges from the City of Desert Hot Springs predominantly infiltrate. Rarely, and only during significant storm events, would any storm drainage from this city flow into the Whitewater River. Like the City of Banning, the City of Desert Hot Springs is also included in the MS4 Permit to facilitate coordination with the regional programs implemented by the Permittees and to reduce the administrative duties on the Regional Board.¹⁴

The CVSC is the only surface waterbody in the Whitewater River Region that features perennial flow; these flows are primarily due to NPDES-permitted POTW discharges, as well as agricultural return flows. The CVSC is approximately 25 miles in length from the City of La Quinta to the north shore of the Salton Sea. The improved channel was constructed in 1948 and is operated by the CVWD to safely convey flood flows and perennial treated community wastewater, agricultural return flows, and urban runoff to the Salton Sea. There are three Permittee-owned MS4 outfalls in the CVSC; two of these outfalls were recently modified to capture and divert dry weather runoff from tributary urban areas to dry wells as part of the implementation of the CVSC Bacterial Indicators TMDL.

2.4.4 Beneficial Uses

With the exception of the lower reach of CVSC, all of the Receiving Waters in the Whitewater River Region are dry ephemeral washes. The Basin Plan identifies the designated Beneficial Uses within the

¹² Order No. R7-2008-0001, NPDES CAS617002, NPDES Permit and Waste Discharge Requirements for the MS4 within the Whitewater River Watershed, California Regional Water Quality Control Board, Colorado River Region, May 28, 2008, Finding 15, p. 7.

¹³ Ibid, p.8.

¹⁴ Ibid.

Colorado River Region.¹⁵ With the exception of the Whitewater River below the Whitewater Recharge Basins, the designated Beneficial Uses of these ephemeral Receiving Waters include Agriculture Supply, Groundwater Recharge, Contact and Non-Contact Water Recreation, Warm Freshwater Habitat, and Wildlife Habitat. The designated Beneficial Uses of the Whitewater River below the Whitewater Recharge Basin are classified as "intermittent," and are groundwater recharge, non-contact water recreation, warm freshwater habitat (use, if any, determined on a case-by-case basis), and wildlife habitat. During non-storm conditions the absence of water precludes these Beneficial Uses. During wet weather conditions flows in these systems are prone to flash flooding, and contact and non-contact water recreation in the Receiving Waters is extremely dangerous and not conducive to these Beneficial Uses. Also, the short, intermittent flows are not sufficient to support warm freshwater habitat.

The designated Beneficial Uses of the CVSC are contact and non-contact water recreation, fresh water replenishment, warm freshwater habitat, wildlife habitat, and preservation of rare, threatened, or endangered species. As contact and non-contact water recreation in the Whitewater River and CVSC during wet weather conditions is extremely dangerous due to flooding conditions, the MS4 Permittees plan on working with the Regional Board to develop wet weather recreational use standards. CVWD actively enforces access restrictions and no trespass requirements within the CVSC.

¹⁵ Water Quality Control Plan – Colorado River Basin – Region 7, California Regional Water Quality Control Board/State Water Resources Control Board, June 2006.

2.5 CURRENT WATER QUALITY CONCERNS AND ISSUES

Section 305(b) of the Clean Water Act requires states to describe the water quality of all navigable waters, and to provide "a description of the nature and extent of non-point sources of pollutants and recommendations as to the programs which must be undertaken to control each category of such sources, including an estimate of the costs of implementing such programs." The 303(d) List is a subset of the 305(b) List, which includes water quality rankings of "good," "threatened," or "impaired," for each assessed waterbody. The most current 305(b) List for the Whitewater River Region is summarized in Table 7.

Table 7. 305(b) List for the Whitewater River Region

Waterbody Name	Type of Waterbody	Size	Units	Water Quality Status
Whitewater River	River	25	Miles	Good
Big Morongo Creek	River	15	Miles	Good
Little Morongo Creek	River	15	Miles	Good
Coachella Valley Storm Channel	River	17	Miles	Impaired (Cause: Pathogens; Probable Source: Unknown)
Falls Creek	River	5.74	Miles	Good
Millard Canyon Creek	River	5	Miles	Good
Mission Creek	River	15	Miles	Good
Snow Creek (Riverside County)	River	3.3	Miles	Good
Tahquitz Creek	River	13.21	Miles	Threatened (Cause: Pathogens; Probable Source: Agriculture)
Twin Pines Creek	River	3	Miles	Threatened (Cause: Pathogens; Probable Source: Agriculture)

Source: http://ofmpub.epa.gov/tmdl_waters10/attains_watershed.control?p_huc=18100200&p_state=CA&p_cycle=2004&p_report_type=A

From this list, it is apparent that most of the assessed receiving waterbodies within the region, including the Whitewater River, have been identified as having good water quality. Further, waterbodies listed as threatened or impaired do not identify urban runoff as a source.

Permittee monitoring data gathered during wet and dry weather events have revealed similar results. For example, most conventional pollutants, including nutrients, oil and grease, MBAS, ammonia and nitrates, have not been observed in exceedance of Water Quality Objectives since program inception. Also, of the 192 toxic pollutants that are currently included on USEPA's Priority Pollutant List, inclusive of all pollutants that were included on the list but have been removed over the last three Permit terms, 167 have never been detected at any outfall or Receiving Water monitoring station in the region. Of the remaining pollutants on the list, only Chromium and Lead have ever been observed in amounts which exceed Water Quality Objectives; both of these constituents have been found to be present in natural deposits and groundwater throughout the region.^{16, 17}

¹⁶ Coachella Valley Water District. 2011 Domestic Water Quality Report. 2011.

¹⁷ Presser, Theresa, Sylvester, Marc, and Low, Walton. Bioaccumulation of Selenium from Natural Geologic Sources in Western States and Its Potential Consequences. Environmental Management Vol. 18, No. 3, pp.423-436. Springer-Verlag, 1994.

Several water quality parameters are naturally occurring in the Whitewater River Watershed. As mentioned above, elevated levels of Lead and Chromium have been observed during wet weather conditions, at all or most background assessment Receiving Water monitoring sites, indicating natural sources for these constituents. CVWD's 2011 Domestic Water Quality Report notes that Lead and Chromium are present in regional drinking water due to erosion or leaching of natural deposits of these metals. Additionally, certain activities generate pollutants in stormwater/urban runoff which are beyond the ability of the Permittees to eliminate. Examples include operation of internal combustion engines, which can contribute Petroleum Hydrocarbons; automobile brake pad wear, which contributes Copper; tire wear, which contributes Lead; residues from lawful application of pesticides, which can contribute some toxics (the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) precludes local regulation of pesticides); and, runoff from agricultural activities, which can contribute nutrients and pathogens to surface waters.

The only Receiving Water listed on the 303(d) list within the Whitewater River Region is the 17 mile reach of the CVSC from Dillon Road to the Salton Sea (the lower portion of this reach is located outside of the Region), which is listed as being impaired with bacterial indicators;¹⁸ this impairment is being addressed through a USEPA approved TMDL. In 2009, CVWD completed a study that determined that subsurface flows found in agricultural drains are not a source of exceedances of E. coli water quality criteria in the CVSC. The source of E. coli water quality criteria exceedances in the CVSC is therefore believed to be from natural sources.¹⁹ The City of Coachella recently completed diversion of outfalls that previously discharged to the CVSC to dry wells, eliminating dry weather discharges of bacterial indicators from two out of a total of three Permittee owned MS4 outfalls to CVSC.

In recent monitoring annual report submittals, the Permittees have identified elevated levels of E. coli to be the only chronic water quality problem in the region. While sources are yet to be identified, the Permittees recommend implementation of the following BMPs to address E. coli sources:

- The USEPA approved Bacterial Indicators TMDL will address E. coli, its sources, and BMP implementation in CVSC;
- Permittee IC/ID investigation efforts will continue to focus on potential urban sources of pollutants;
- Promote water conservation to manage dry weather inputs and reduce potential for wet weather pollutant loading;
- Continue existing New Development/Redevelopment program;
- Where feasible, eliminate MS4 outfalls to Receiving Waters;
- Continue to focus outreach efforts on BMPs for urban bacterial sources.

¹⁸ 2010 CWA Section 303 (d) List of Water Quality Limited Segments, Colorado River Basin Regional Water Quality Control Board, USEPA Approval Date: October 11, 2011.

¹⁹ "Bacterial Indicator Monitoring for Coachella Valley Subsurface Drainage Entering the Coachella Valley Stormwater Channel," Coachella Valley Water District, 2009.

3.0 WHITEWATER RIVER REGION STORMWATER MANAGEMENT PROGRAMS

The overarching goals of the Whitewater River Regional MS4 program are maintenance of the existing high Receiving Water quality and implementation of preventative measures. Aside from issues relating to the lower reach of the CVSC (which is being addressed through a TMDL), Region Receiving Water quality has been protected during the Region's three MS4 Permit terms. The 2011 Whitewater River Region SWMP is a programmatic document that was developed by the Permittees to describe the regional activities and programs that are being implemented to comply with Permit requirements during the term of the 2008 Permit; updates to the SWMP occur as necessary. Programs described in the 2011 SWMP have been enhanced over the last three Permit terms through an iterative process, and address all of the program elements required by 40 CFR 122.26(d)(2)(iv).

In June of 2012, a USEPA-contracted auditor, along with Regional Board staff, conducted an MS4 program audit at the City of Palm Springs. A total of eight program areas were evaluated during the audit, the findings of which are summarized in Table 8 below:

Table 8. June 2012 City of Palm Springs MS4 Program Audit Findings

Program	Positive Attributes	Recommendations	No Finding	Potential Deficiencies	Deficiencies
Program Management	1				
Illicit Connection/Illegal Discharge (IC/ID)		2			
Commercial-Industrial			1		
New Development-Redevelopment	2	1			
Private Construction Activities	1				
Permittee Construction Activities				1	
Permittee Facilities-Activities	1	2			1
Public Education/Outreach	1				
Totals	6	5	1	1	1

a) USEPA Region 9 MS4 Phase I Compliance Inspection: Final Inspection Report, City of Palm Springs, WDID 7A332001M12. August 21, 2012.

While the stated purpose of the audit was to assess the City's program implementation status and compliance with 2008 Permit requirements, the Permittees believe that findings of the final audit report, combined with regional monitoring data, provide an accurate portrait of regional program implementation as a whole. The MS4 program in the City of Palm Springs is representative of the Regional program, as MS4 programs detailed in the SWMP are generally implemented region-wide, and are the result of collaborative Permittee development and implementation efforts. Additionally, monitoring data reflects that in general, water quality standards are being attained Region-wide.

3.1 PROGRAM MANAGEMENT

The 2008 Permit requires that this ROWD include any proposed revisions to the SWMP. For the fourth Permit term, the Permittees propose to revise this requirement through submittal of a Local Implementation Plan (LIP) template for Regional Board approval. The LIP will effectively replace the SWMP as the primary documentation of Permittee compliance activities and programs. The LIP will additionally allow for description of jurisdiction-specific details regarding organization, procedures and departmental responsibilities. The Permittees propose to develop a common LIP template so that regional program consistency will be maintained.

The 2008 Permit also requires that activities proposed for the next permit term, including the goals and objectives of such activities and an evaluation of the need for additional source control and/or structural BMPs, proposed pilot studies, etc., be incorporated into the ROWD. These recommended program adjustments are described in Sections 3.1 through 3.8 below. Findings and recommendations from USEPA's 2012 audit of the City of Palm Springs have also been integrated, where applicable.

3.1.1 Current Program Element

3.1.1.1 Principal Permittee and Permittee Responsibilities

Implementation Agreement

The purpose of the Implementation Agreement is to facilitate collaboration between the Permittees, set forth the responsibilities of the Principal Permittees and the Co-Permittees, and to provide for funding of "umbrella" activities. In March 1998, the Permittees entered into a formal NPDES stormwater discharge permit implementation agreement for the Whitewater River Region; amendments to the agreement have occurred as necessary. Currently, the Principal Permittees and the Co-Permittees operate under an Implementation Agreement that was executed in March 2008.

Under the terms of the current Implementation Agreement, the District, as Co-Principal Permittee, is required to:

- ◆ Conduct public education activities on a regional basis that focus on reducing non-point source pollution within the Whitewater River Region.
- ◆ Perform and/or coordinate sampling and analysis of surface water and urban runoff in accordance with the provisions of the 2008 Permit Monitoring and Reporting Program for sites located within the limits of its jurisdiction.
- ◆ Chair Desert Task Force meetings and coordinate, implement and contribute to MS4 Permit compliance activities.
- ◆ Forward information received from the Regional Board to the Permittees.
- ◆ Prepare and submit required reports to the Regional Board.

- ◆ Comply with Section B (Discharge Prohibitions), Section D (Receiving Water Limitations), and Section F (Best Management Practices) of the 2008 MS4 Permit as they pertain to District facilities and operations.
- ◆ Keep adequate records, information and/or data concerning program development and implementation activities, and produce or supply same on request of the Regional Board.

Also under terms of the current Implementation Agreement, each Permittee, including each Principal Permittee, is required to:

- ◆ Adopt and enforce local ordinances and regulations within their respective jurisdictions to ensure compliance with the MS4 Permit (the District and CVWD rely on precept of combined legal authority, as they are not Jurisdictional Permittee general purpose governments, and do not have authorities to take enforcement actions, or regulate discharges into the MS4). This includes the exercise of land use controls, the exercise of police powers and the enforcement of ordinances that the Permittees presently have adopted or will adopt in the future.
- ◆ Perform reconnaissance surveys of their MS4 facilities as required by the 2008 Permit. Any wet weather or dry weather sampling or field screening for the reconnaissance surveys are the responsibility of the Permittees, depending on where the discharge originates. Each Permittee is responsible for keeping any records, tables or other data that are needed to support the reporting of the survey results to the Regional Board.
- ◆ Produce or supply records, information and/or data upon request of the Regional Board or the Principal Permittees.
- ◆ Implementing each of the BMPs and/or other programs and activities required by the MS4 Permit in accordance with their authority.

In accordance with the March 2008 Implementation Agreement, in the event that the District requires the services of a consultant (or consultants) to prepare manuals, develop programs or perform studies relevant to the entire Whitewater River Region, the cost of the consultant services will be shared by the Permittees. The shared costs are allocated as a specified fixed percentage contribution from the District and CVWD, and a contribution from the remaining Permittees based on population.

3.1.1.2 Interagency Agreements

The District, in its role as Co-Principal Permittee, administers several area-wide programs in consultation with the other Permittees. These area-wide programs include:

- ◆ Hazardous Materials emergency response
- ◆ Household Hazardous Waste Collection/Antifreeze, Battery, Oil and Latex Paint/Conditionally Exempt Small Quantity Generator Program (HHW/ABOP/CESQG),
- ◆ Regional and statewide monitoring efforts
- ◆ Industrial/Commercial Industrial/Commercial Compliance Assistance Program (CAP) and
- ◆ Public education and outreach

3.1.1.3 Watershed Planning

Currently, two primary groups coordinate water quality focused planning efforts in the Whitewater River Watershed: the Desert Task Force and the Coachella Valley Regional Water Management Group.

Desert Task Force

The Desert Task Force is a technical committee which consists of representatives from each Permittee and which, pursuant to the 2008 Permit, meets quarterly at a minimum. The Desert Task Force directs the development or revision of the program elements comprising the 2011 Whitewater River Region SWMP and coordinates implementation of the Whitewater River Region MS4 program. The Desert Task Force also provides technical assistance and support to facilitate coordination with related water quality management programs and monitoring, and to respond to new legislative and regulatory initiatives. A District representative chairs the Desert Task Force and provides staff reports to Task Force members.

Coachella Valley Regional Water Management Group (CVRWMG)

The CVRWMG is a collaborative effort led by the five water purveyors of the Coachella Valley (CVWD, Coachella Water Authority, Desert Water Agency, Indio Water Agency, and the Mission Springs Water District) to develop an Integrated Regional Water Management Plan (IRWMP) to address the water resources planning needs of the Valley. The IRWMP, which was finalized in December 2010, enables the Region to apply for grants related to the IRWM program led by the California Department of Water Resources.

The area of the CVRWMG Management Region is generally the same as the Whitewater River Watershed, but does not include the area west of Cabazon. All municipalities and water purveyors within the Region share a common water supply, wastewater system and flood control infrastructure, making it easier to coordinate and establish regional goals and objectives. Among the group's formulated goals and objectives is to protect or improve regional water quality.²⁰

3.1.1.4 Coachella Valley Storm Channel Bacterial Indicator TMDL

As noted above, the only Receiving Water impairment within the Whitewater River Region is associated with bacterial indicators in a 17 mile reach of the CVSC from the Valley Sanitation District outfall to the Salton Sea; the lower portion of this reach is located outside of the Permit Area. This impairment is being addressed through a TMDL, which received USEPA approval on April 27, 2012. Regional Board staff submitted the formal request for water quality information from responsible parties to the TMDL on October 8, 2012; this notification initiated Phase I of the two-part implementation process delineated in the TMDL Basin Plan Amendment. Phase I actions will take three years to complete and will focus on monitoring and addressing bacterial indicators associated with wastewater discharges from NPDES facilities, and urban runoff. Responsible parties to the CVSC Bacterial Indicators TMDL are required to submit respective monitoring plans for Regional Board approval by January 6, 2013.

²⁰ Coachella Valley Integrated Regional Water Management Plan, http://www.cvrwmg.org/docs/2011_11_30_CVRWMG-CVRWMG-CoachellaValleyIntegratedRegionalWaterManagementPlan_150258.pdf. December 2010.

3.1.1.5 Legal Authority

The Phase I stormwater regulations [40 CFR §122.26(d)(2)(i)(A-F)] require operators of MS4s to demonstrate that they have adequate legal authority to:

- ◆ Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the MS4 by stormwater discharges associated with industrial activity and the quality of stormwater discharged from sites of industrial activity;
- ◆ Prohibit through ordinance, permit, contract, order or similar means, illicit discharges to the MS4;
- ◆ Control through ordinance, order or similar means the discharge to an MS4 of spills, dumping or disposal of materials other than stormwater;
- ◆ Control through interagency agreements among Co-Permittees the contribution of pollutants from one portion of the municipal system to another portion of the municipal system;
- ◆ Require compliance with conditions in ordinances, permit, contracts or orders; and
- ◆ Carry out all inspections, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the MS4.

Adequate legal authority is a prerequisite for Permittees to effectively implement compliance programs to reduce pollutants in stormwater/urban runoff to the MEP. The legal authority necessary to implement compliance programs and pursue enforcement is provided to the Jurisdictional Permittees through local stormwater and erosion control ordinances. All Permittees (excluding the District and CVWD²¹) have adopted comprehensive stormwater ordinances, which provide them with the legal authority to implement the requirements of the 2008 Permit. The Permittees provided certification of adequate legal authority to the Regional Board in June 2009.

The management and discharge controls addressed by the Permittees' stormwater and erosion control ordinances are summarized as follows:

- ◆ The disposal of pollutants onto public or private land is prohibited;
- ◆ Construction activities are required to comply with the local stormwater, erosion and sediment control ordinances;
- ◆ Priority New Development and Redevelopment projects are required to implement a combination of Region-appropriate structural and non-structural BMPs to prevent deterioration of Receiving Water quality that could impair subsequent or competing Beneficial Uses of the water;
- ◆ Illicit connections or discharges to the MS4 are prohibited; and
- ◆ Non-stormwater discharges, with the exception of discharges permitted by the Regional Board or which are listed as allowed in the 2008 Permit, are prohibited. Non-stormwater discharges are any discharges to the MS4 or Receiving Waters that are not entirely composed of stormwater.

The Permittees do not have legal authority over stormwater discharges into their MS4 facilities from agricultural activities, state and federal facilities, utilities and special districts, Native American tribal

²¹ The District and CVWD already had the authority needed to implement the requirements of the enforcement/compliance programs and as such did not need to adopt the model stormwater ordinance.

lands, wastewater management agencies and other point and non-point source discharges otherwise permitted by, or under the jurisdiction of, the Regional Board.

3.1.1.6 Enforcement and Compliance Strategy

An Enforcement and Compliance Strategy for ensuring that construction sites, commercial establishments, and industrial facilities operate in compliance with local stormwater, urban runoff and erosion control ordinances was developed jointly by the Phase I MS4 Permittees in the Santa Ana River and the Santa Margarita River Regions of Riverside County. The same Enforcement and Compliance Strategy was incorporated into the Whitewater River Region SWMP and is being implemented by the Permittees in the Region. The goal of the Enforcement and Compliance Strategy is to provide progressive, fair and consistent enforcement of stormwater ordinances throughout the Region. Generally, the professional judgment of code enforcement staff guides the appropriate level of response. Features of the Enforcement and Compliance Strategy include adequate training, procedures for prioritization of violations, coordination with other agencies when appropriate, record keeping and reporting.

3.1.1.7 Funding Sources

The costs incurred by the Permittees in implementing the 2011 SWMP fall into two broad categories:

- ◆ **Shared Costs.** These are costs that fund activities performed mostly by the District under the Implementation Agreement. These activities include overall stormwater program coordination; interagency agreements; representation at the California Stormwater Quality Association, meetings of the Colorado Regional Board, SWRCB or other public forums; preparation and submittal of compliance documents and other reports required under the MS4 Permit, Water Code Section 13267 requests, budget and other program documentation, coordination of consultant studies, Permittee meetings and semi-annual training sessions.
- ◆ **Individual Permittee Costs.** These are costs incurred by each Permittee for implementing within its jurisdiction the BMPs (drainage facility inspections for illicit connections/illegal discharges, drainage facility maintenance, drain inlet/catch basin stenciling, emergency spill response, street sweeping, litter control, public education, etc.) outlined in the 2011 Whitewater River Region SWMP.

The Permittees utilize four funding methods to finance their respective MS4 Permit compliance activities, with many Permittees utilizing a combination of these funding sources. Different funding methods include:

- ◆ **Whitewater Watershed Benefit Assessment Area.** In May 1991 the District established the Whitewater Watershed Benefit Assessment Area to fund: (1) its MS4 NPDES permit compliance activities as a Permittee and (2) area-wide, or "umbrella" MS4 NPDES permit program activities conducted or performed on behalf of all of the Phase I MS4 Permittees.
- ◆ **County Service Area 152.** County Service Area 152 (CSA 152) was formed in December 1991 to provide funding for compliance activities associated with the MS4 Permit. Under the laws that govern CSAs, sub-areas may be established within the overall CSA area with different assessment rates set within each sub-area. Initially, the County, and the Cities of Banning, Cathedral City, Coachella, Desert Hot Springs, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage were assessed through CSA 152. However, with the passage of Proposition 218

in 1996, the County, CVWD, and the Cities of Banning, Cathedral City, Coachella, Indio, and Palm Desert discontinued assessing.

- ◆ **General Fund /Other Revenues.** A portion of the ad valorem property taxes received by CVWD, together with minimal revenues generated by flood management and new subdivision fees, are the only financial resources available for CVWDs stormwater programs. The County and the Cities of Banning, Cathedral City, Coachella, Indian Wells, Indio, and Palm Desert currently utilize general fund revenue to finance MS4 Permit compliance activities.

3.1.2 Proposed Revisions to Program Element

The Permittees propose to continue to implement many existing Program Management structure and funding mechanisms in the Fourth-term MS4 Permit. The Permittees propose the following actions for the next MS4 Permit term:

- ◆ Development of an LIP template for submittal to the Regional Board. The LIP template will describe the activities and programs implemented by the Permittees to comply with Fourth-term Permit requirements.
- ◆ Individual Permittee LIPs will be completed within one year of Regional Board approval of the LIP template. Revisions to individual LIPs will occur annually, as necessary.
- ◆ MS4 dischargers named as responsible parties in the Bacterial Indicators TMDL for the CVSC will work collaboratively with the Regional Board to develop a BMP-based narrative water quality based effluent limit to address the TMDL Waste Load Allocation and implementation plan, if the Regional Board determines that Phase II implementation actions are required.
- ◆ The Permittees will continue to maintain adequate legal authority to control the contribution of pollutants to the MS4s by stormwater/urban runoff and enforce those authorities.
- ◆ The Permittees believe that their existing enforcement authorities are adequate to implement the Permit. The Permittees will continue to take appropriate enforcement actions against violators of local stormwater and erosion control ordinances, in accordance with the Phase I stormwater regulations and the guidelines and procedures described in the Enforcement and Compliance Strategy. Enforcement and Compliance Strategy details and procedures will be described in the LIP.
- ◆ The Permittees will continue to participate in Desert Task Force meetings. The Permittees will also continue to work with the CVRWGMG to facilitate integrated water management solutions.
- ◆ The Permittees will review the existing Implementation Agreement to determine if changes are necessary to reflect the requirements of the Fourth-term MS4 Permit.

3.2 ELIMINATION OF ILLICIT CONNECTIONS AND ILLEGAL DISCHARGES (IC/IDs)

3.2.1 Current Program Element

3.2.1.1 Discharge Prohibitions

The Permittees enforce the Discharge Prohibitions detailed in the 2008 Permit.

3.2.1.2 Outfall Mapping

In accordance with 40 CFR 122.26 (iii) (B) (1) and the 2008 Permit, the Permittees maintain and update the Whitewater River Region map annually to identify all major outfalls which discharge to Receiving Waters, major structural controls, and to ensure that the MS4 Permit boundary encompasses all urbanized areas within Permittee jurisdiction.

3.2.1.3 Source Inventory and Control

As previously mentioned, the District administers several area-wide programs in consultation with the Permittees, including the CAP and HHW/ABOP/CESQG programs. The CVRWMG, which includes many MS4 Permittee agencies, addresses the Region's water resources planning needs with the objective of protecting and improving regional water quality. These programs and groups achieve multiple outcomes with regard to compliance with the 2008 Permit, including source inventory and control.

The CAP implements scheduled inspection of hazardous materials and food service establishment facilities in the Region. Each Jurisdictional Permittee develops and maintains a source database of commercial and industrial facilities within its respective jurisdiction based on information provided from the CAP, among other sources.

The HHW/ABOP/CESQG programs offer the Region's residents and small businesses with opportunities to properly dispose of hazardous waste. For the 2008 Permit term, as of June 30, 2012, these programs collected over 549 tons of hazardous materials which may have been otherwise improperly disposed of.

In July 2012, the CVRWMG was awarded a \$4,000,000 Proposition 84 grant to use towards implementation of a Regional Water Conservation Program to assist the Coachella Valley in meeting the requirements of its 20 percent water-use reduction by 2020 plan. Program features include, but are not limited to, implementation of a water auditing program, workshops for landscape professionals, incentives for turf replacement, subsidies for irrigation clocks, increased public education and outreach, subsidization of residential sprinkler upgrades and a residential leak detection program. The City of Banning has also implemented several water conservation measures to address the 20 percent reduction by 2020 requirement, including adoption of a water efficient landscape ordinance, water survey programs for residential customers and installation of tiered rates.

3.2.1.4 Detection

The Permittees implement several programs to detect IC/IDs, including field and MS4 facility inspections, IC/ID based dry weather outfall monitoring, and a toll-free hotline for incident reporting.

Each Permittee conducts scheduled field and MS4 inspections for IC/IDs, as required by the 2008 Permit. Inspections may be conducted by multiple departments within a Permittee's jurisdiction, including Maintenance, Code Enforcement, Building and Safety, NPDES and/or Engineering inspector staff. All staff who may encounter IC/IDs during the course of their general duties receive training on IC/ID detection, investigation/reporting/response, and BMP implementation; training is offered by the District semi-annually. Additionally, the 2008 Permit outfall monitoring program requires quarterly visits during dry weather to outfall monitoring stations to look for evidence of non-typical flow and water quality

conditions. If evidence of IC/ID is observed, the Permittee with jurisdiction over the tributary area is notified to conduct a follow-up investigation.

Predominantly, IC/IDs are reported by the public or by Permittee field personnel. Permittees operate respective local IC/ID notification telephone numbers through Public Works, Police Department and/or code enforcement complaint hotlines. The District also operates a 24-hour toll-free number (800.506.2555), which receives complaints regarding discharges to MS4 facilities; complaints are routed to the appropriate Jurisdictional Permittee or agency with jurisdiction within the Region. As of June 30, 2012, the toll-free hotline had received 4,100 calls County-wide during the 2008 Permit term.

3.2.1.5 Reporting

Permittees report, within 24 hours of becoming aware of the circumstances, all discharges that endanger human health or the environment to the Regional Board and the California Office of Emergency Services (OES). Other spill incidents, including any unauthorized discharges that are not reportable to the OES, are reported to the Regional Board's Executive Officer as part of the Annual Report.

In order to formalize the procedures followed for incident documentation and follow-up, the Permittees developed model IC/ID reporting forms, including incoming complaint, investigation reporting, and responsible party reporting forms. These forms are found in Appendix D of the 2011 SWMP and are utilized region-wide. The Permittees also document all IC/ID incidents by maintaining a database which tracks incident specifics, including location, amount spilled, outcome of the case, and enforcement actions taken; individual Permittee IC/ID database reports are submitted with the Annual Report.

3.2.1.6 Response

The County's Hazardous Materials Emergency Response Team responds, and coordinates clean-up of, incidents in which reportable quantities of hazardous materials have been spilled or discharged. The Permittees continue to provide financial support to this program to ensure that hazardous materials from spills or dumping have minimal impact on MS4s and Receiving Waters.

On May 2, 2006, the SWRCB adopted the Sanitary Sewer Order, which requires public agencies that own or operate sewage systems to develop and implement Sewer System Management Plans (SSMPs) and report all Sanitary Sewer Overflows (SSO) through the SWRCB's online SSO database. CVWD and the Cities of Banning, Coachella, and Palm Springs have obtained coverage under the Sanitary Sewer Order and have developed, or are developing, SSMPs in compliance with that order. Each agency's SSMP contains procedures for SSO response, clean-up and enforcement. Permittees that are not required to maintain SSMPs utilize the reporting and response procedures found in the Sanitary Sewer Overflow Guidance Document, which is Appendix F of the 2011 SWMP, to mitigate impacts of SSOs on Receiving Waters. The Guidance also contains procedures which facilitate region-wide inter-agency coordination in cases where SSOs cross jurisdictional boundaries.

3.2.1.7 Investigation and Enforcement

Within 24 hours of receipt of notification or observation by staff or a third-party, the Permittees initiate an investigation of spills, leaks, and/or illegal discharges. Permittees meet the following minimum guidelines when responding to reports of IC/IDs:

- ◆ If the reported incident is outside of a Permittee's jurisdiction, referral to the appropriate agency and/or the Regional Board is made;
- ◆ Permittees respond to reports of IC/IDs within their jurisdiction;
- ◆ Inspections performed in response to a reported IC/ID are documented using the IC/ID Investigation Report form (Appendix D of the 2011 SWMP);
- ◆ When appropriate, samples of illegal discharges are collected. The procedure for collecting IC/ID samples is provided in the Consolidated Monitoring Program, which is available on the District's website; and
- ◆ Enforcement actions are taken in accordance with the Enforcement and Compliance Strategy, if necessary.

3.2.2 Proposed Revisions to Program Element

To support a comprehensive, Region-wide MS4 program the Permittees propose the following actions:

- ◆ The Permittees believe that the current Regional inspection programs effectively manage IC/IDs, and will continue to support the CAP and HHW/ABOP/CESQG programs as a means of tracking and controlling potential sources of pollutants region-wide.
- ◆ The Permittees will also continue to look for opportunities to coordinate with local water agencies on existing water conservation program measures, including the Regional Water Conservation Program and 20 percent reduction by 2020 requirements, to assist in addressing non-stormwater discharges within the Region.
- ◆ The Permittees will continue to prohibit and eliminate IC/IDs to their MS4s. In addition, the Permittees will continue to implement and improve MS4 routine inspection and monitoring and reporting programs. If routine inspections or water quality monitoring indicate an IC/ID, it will be investigated appropriately.
- ◆ The Permittees will continue to utilize standardized reporting forms and the IC/ID database to document and track IC/ID incidents and their outcomes.
- ◆ The Permittees will continue to investigate IC/IDs to their MS4s within 24 hours of receipt of notice. Receipt of notification, investigation, and inter-departmental coordination procedures will be detailed in each Permittee's LIP.
- ◆ The Permittees will continue to report all discharges that endanger human health or the environment to the Regional Board and the OES; reporting procedures will be detailed in each Permittee's LIP.
- ◆ The Permittees will continue to implement procedures delineated in respective approved SSMPs (if applicable) for inter-agency coordination where SSOs may cross jurisdictional boundaries, and to report on and clean-up SSOs within the Region. Permittees that do not require an SSMP will utilize coordination and response procedures delineated in the LIP.

3.3 COMMERCIAL AND INDUSTRIAL SOURCES

3.3.1 Current Program Element

3.3.1.1 Industrial/Commercial Compliance Assistance Program

The 2008 Permit requires Permittees to implement a Industrial/Commercial Inspection Program. The Permittees coordinate with the County Department of Environmental Health (DEH), Regional Board staff, and others as necessary, to develop a targeted list of industries which are potential sources of pollutant loads to the MS4. Jurisdictional Permittees typically use one or more methods to comply with the Industrial/Commercial Inspection Program requirements:

- 1) Incorporate inspections into individual Permittee wastewater pre-treatment program inspections;
- 2) Address requirements through business license inspection programs or similar licensing programs; or
- 3) CAP inspections.

The CAP involves a detailed stormwater compliance survey for (1) facilities that must secure a hazardous materials permit for storing, handling or generating such materials, and (2) retail food facilities. This information is documented on existing inspection forms. Inspections resulting in enforcement action are referred to the appropriate Permittee for follow-up action. During commercial or industrial facility surveys, CAP inspectors document whether a facility:

- ◆ Appears to be in compliance with local stormwater ordinances and 2008 Permit requirements;
- ◆ Has effectively applied BMPs;
- ◆ If applicable, has submitted a Notice of Intent (NOI) to comply with the General Permit for Stormwater Discharges Associated with Industrial Activities; and
- ◆ Has properly managed authorized non-stormwater discharges or whether there is evidence of unauthorized non-stormwater discharges, which may be illicit connections or illegal discharges to the MS4.

Many types of Industrial/Commercial establishments are inspected, including those that conduct automobile mechanical repair, maintenance, fueling, cleaning, auto body repair, and painting or coating operations. There are currently approximately 8,900 facilities County-wide which have a hazardous materials permit, of which approximately 4,800 are inspected annually; all facilities are inspected at least once during a two-year cycle. There are approximately 8,500 food service establishments County-wide, all of which are inspected at least annually. As of June 30, 2012, the CAP had performed 1,566 inspections at food service establishments and Hazmat facilities located in the Whitewater River Region during the 2008 MS4 Permit term.

3.3.1.2 Industrial/Commercial Database

Each Jurisdictional Permittee is required to develop and maintain a source database of commercial and industrial facilities within its respective jurisdiction consistent with 2008 Permit requirements. Permittee

maintenance of the source database includes regularly updating the database for information obtained during CAP facility inspections or from other sources. The Permittees' source databases of industrial/commercial facilities include restaurants, automotive service and industrial facilities and mobile cleaning businesses (tracked by Permittees through a business license or some other process/procedure).

3.3.1.3 Reporting to the Regional Board

If while conducting a industrial/commercial facility inspection, it appears that a facility may be required to have coverage under California's General Permit for Stormwater Discharges Associated with Industrial Activities (Industrial General Permit), and the facility operator has indicated that no NOI has been filed, the inspector will provide the operator with an informational sheet on the requirements of the Industrial General Permit. The inspector will also document the name, address, and Standard Industrial Classification (SIC) code of the facility. Because the Permittees do not have the authority to enforce the provisions of the Industrial General Permit, a listing of such facilities is compiled and forwarded to Regional Board staff for further action.

3.3.2 Proposed Revisions to Program Element

To support a comprehensive, Region-wide MS4 program, the Permittees propose the following actions:

- ◆ The Permittees believe that the existing Industrial and Commercial Inspection program is protective of local Receiving Waters.
- ◆ The Permittees will continue to obtain proof of compliance with the Industrial General Permit prior to issuance of a business license or a certificate of occupancy for a newly constructed industrial facility, where necessary information is available. Procedures for assurance of coverage will be included in each Permittee's LIP.
- ◆ The Permittees will continue to participate in the CAP or equivalent, and document the number of surveys/inspections conducted and the actions taken. An appropriate summary of said actions shall be provided to the District for inclusion in the Annual Report.
- ◆ Each Permittee will continue to coordinate with County DEH and others to update its database of industrial/commercial facilities within its jurisdiction that are known to be contributing substantial pollutant loads to the MS4.
- ◆ The Permittees will continue to provide notification to Regional Board staff regarding information gathered during surveys of industrial/commercial facilities. The notification will include observed potential violations of the Industrial General Permit, prior history of violations, enforcement actions taken by the Permittee, and other relevant information.

3.4 DEVELOPMENT PLANNING AND CONSTRUCTION ACTIVITIES

3.4.1 Current Program Element

3.4.1.1 Development Planning

Jurisdictional Permittee development approval and permitting processes carry forth project-specific requirements in the form of conditions of approval, design criteria, tracking, inspection, and enforcement

actions that assist with ensuring that new development and redevelopment projects address impacts on water discharged to the MS4.

Priority Development Projects

The 2008 Permit specifies new development and redevelopment projects that are required to have a Water Quality Management Plan (WQMP) to manage stormwater discharges. The primary objective of the WQMP is to ensure that the land use approval and permitting process of each Jurisdictional Permittee will minimize the impact of Urban runoff to the MEP through application of Site Design, Source Control and Treatment Control BMPs on a project-specific and/or sub-regional or regional basis. Consistent with the Permit, discretionary new development and redevelopment projects that fall into one or more of the following Priority Development Project categories are required to have a WQMP:

1. Single-family hillside residences that create 10,000 square feet or more of impervious area where the natural slope is 25 percent or greater;
2. Single-family hillside residences that create 10,000 square feet of impervious area where the natural slope is 10 percent or greater where erosive soil conditions are known;
3. Commercial and industrial developments of 100,000 square feet or more;
4. Automotive repair shops [includes Standard Industrial Classification (SIC) codes 5013, 7532, 7533, 7534, 7537, 7538, and 7539];
5. Retail gasoline outlets disturbing greater than 5,000 square feet;
6. Restaurants disturbing greater than 5,000 square feet;
7. Home subdivisions with 10 or more housing units; and
8. Parking lots of 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to urban runoff.

Other Development Projects

The Permittees require "Other Development Projects" (projects that are not Priority Development Projects, but discharge into the MS4 and disturb an area of one acre or more) to incorporate a combination of Structural and Non-Structural Source Control BMPs, as applicable and feasible, into project plans through conditions of approval or building/grading permit conditions.

Review and Approval of Project-Specific WQMPs

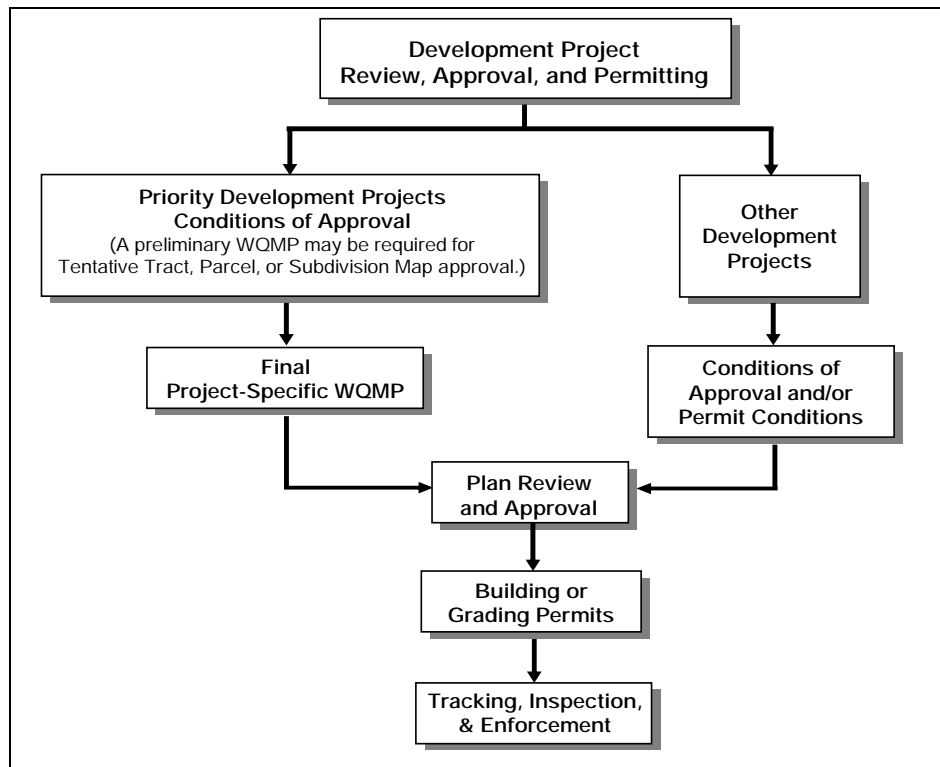
The Whitewater River Region WQMP Guidance document and Template together contain the legal, administrative, and technical information needed to acquaint developers and contractors with the requirements for post construction BMPs in Priority Development Projects. The WQMP Guidance and

Template are available through Permittee websites, and as part of the review process for project planning and permitting.

Project-specific WQMPs may be submitted as "preliminary" during the discretionary or land use entitlement phase depending upon the level of detail known about the overall project design at the time project approval is sought. However, prior to issuance of grading or building permits, the project applicant must submit the final project-specific WQMP for review and approval by the Permittee. The Whitewater Development Planning and Permitting Process is illustrated below in Figure 3.

To assist in conducting thorough and consistent reviews of project-specific WQMPs, the Permittees have developed and utilize a WQMP Review Checklist. Additionally, the Permittees have developed a database and reporting form for purposes of tracking all project-specific WQMPs; each Permittee's database report is submitted with the Annual Report.

Figure 3 – Permittee Development Planning and Permitting Process



Best Management Practices

The WQMP incorporates a measurable goal of addressing 100 percent of the treatment requirements for a site (based on an 85th Percentile 24-hour event), using site design / Low Impact Development (LID) BMPs to take advantage of the Region's highly pervious soils. Similarly, requirements are also included for project proponents to assess the flow rate, volume, velocity and duration of discharges to manage potential increases in runoff from proposed developments such that it does not cause downstream erosion or habitat loss.

Per 2008 Permit requirement, the Permittees developed the Whitewater BMP Design Handbook in 2009 to inform the development community on Whitewater Region BMP design criteria, and to assist with sizing and selection of BMPs appropriate to the Region. The majority of the BMPs detailed in the Design Handbook are infiltration BMPs, which encourage utilization of the Region's pervious soils to meet LID goals. In general, utilization of the Region's soils has been found to be the most cost-effective means of meeting regional post-construction requirements.

Permittees require operation and maintenance (O&M) of site BMPs throughout the life of a priority development project by assuring that funding sources and parties responsible for O&M are identified in the final submitted WQMP. Typical agreements that the Permittees require to ensure long term O&M include: recorded covenant and agreements, home owners association or property owners association covenants, codes and restrictions, and/or formation of, or annexation to, a maintenance or assessment district. Site self-inspection and record keeping requirements are also specified within the WQMP.

There has been little development activity in the Whitewater River Region since adoption of the 2008 Permit post-construction requirements due to the continuing economic recession; however, post-construction stormwater mitigation has been implemented in the Region for some years. Through ordinance or municipal code, the Cities of Cathedral City, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs and Rancho Mirage have required specific new developments to retain and infiltrate runoff on-site to mitigate increased runoff and downstream impacts many years prior to development and implementation of the post-construction requirements found in the 2008 Permit. Since adoption of the 2008 Permit post-construction requirements, eight of the eleven Jurisdictional Permittees now require 100 percent on-site retention of the 100 year, 3-hour storm event or greater via local ordinance, which is in excess of the 85th percentile 24-hour requirement found in the Permit. Compliance with these requirements addresses both the requirements of local ordinances as well as the regional goals of the WQMP.

3.4.1.2 Construction Activities

Private Construction Projects

The 2008 Permit requires that Permittees implement and enforce a program to reduce pollutants in any urban runoff to the MS4 from construction activities that result in a land disturbance of one acre or more, and from construction activities that disturb less than one acre but that are part of a larger common plan of development or sale. Therefore, the Permittees implement the following:

- ◆ Verify that applicants for private construction projects requiring coverage under California's General Permit for Stormwater Discharges Associated with Construction Activity (Construction General Permit) have filed an NOI prior to the issuance of any building or grading permit, or other approvals. Additionally, Permittees verify coverage by accessing a searchable database of construction sites state-wide, known as SMARTS.
- ◆ Maintain procedures for site plan review which incorporate consideration of potential water quality impacts.

- ◆ Maintain ordinances to require erosion and sediment controls, and enforce per the Enforcement and Compliance Strategy, to ensure site compliance to the extent allowable under State or local law.
- ◆ Require construction site operators to implement appropriate erosion and sediment control BMPs and control on-site wastes, which may cause adverse impacts to water quality.
- ◆ Conduct construction site inspections to assure that a site-specific Stormwater Pollution Prevention Plan (SWPPP) is maintained on-site at all times, check for evidence of unauthorized non-stormwater discharges that may be potential IC/IDs, and assure compliance with Permittee ordinances, regulations, codes and the WQMP.
- ◆ Develop and implement site prioritization criteria that are used to assign either high priority or normal priority to construction sites that disturb areas equal to or greater than 1 acre in size; inspection frequencies are associated with site priority.
- ◆ Notify the Regional Board when Permittee staff observe potential non-compliance with the Construction General Permit or other order or permit issued by the SWRCB or Regional Board.

Additionally, the Coachella Valley falls within a "serious" air non-attainment area, as determined by the South Coast Air Quality Management District (SCAQMD). As part of compliance with air quality standards, the Permittees joined forces with the Coachella Valley Association of Governments (CVAG) to create and implement the Coachella Valley Dust Control Ordinance (PM 10 Ordinance). PM 10 requires that all sites within the Region which require a grading permit, or that involve more than 5,000 square feet of soil disturbance, or import/export more than 100 cubic yards of material per day, must prepare and have a Fugitive Dust Control Plan approved by the agency with jurisdiction. A site's Fugitive Dust Control Plan requires that a site implement at least one mitigating BMP for each fugitive dust source category listed in the plan. PM 10 BMPs tend to be synonymous with stormwater BMPs, and include: stabilization of a site's ingress/egress, stockpiles, slopes and disturbed areas, watering of all wind-erodible surfaces, and monitoring of weather conditions. General purpose governments with jurisdiction (which include the Jurisdictional Permittees) are also required by SCAQMD to implement an inspection program to assure compliance with respective PM 10 ordinances.

Utilizing the risk calculation methodologies found within the Construction General Permit, it can be observed that in general, sediment and Receiving Water risks within the Region are low. 2008 Permit requirements for construction activities, combined with individual jurisdictional PM 10 requirements, have resulted in programs that require all regional land disturbances which may have potential to impact water quality to be subject to BMP implementation requirements and Permittee compliance inspections.

Permittee Construction Projects

Permittee public works construction projects located within the Region that would normally require coverage under the Construction General Permit require the Permittees to notify the Regional Board by completing and submitting the NOI form included as Attachment A to the 2008 Permit prior to the start of construction.

The Permittees are required to develop and implement site-specific SWPPPs consistent with the requirements of the Construction General Permit for construction activities that exceed one acre or more

of disturbed soil; SWPPPs are retained on-site for the duration of project construction. Public works construction project monitoring includes site inspections before anticipated storm events and after actual storm events to:

- ◆ Verify SWPPP implementation,
- ◆ Identify areas contributing to discharges of stormwater from the construction site, and
- ◆ Determine if adequate BMPs have been properly implemented and maintained, or whether additional BMPs are needed.

Permittees retain records of construction site inspections for at least five years. Instances of noncompliance or anticipated noncompliance are reported to the Regional Board within 30 days of identification of the noncompliance and include a description of the noncompliance, actions necessary to achieve compliance, and a schedule for achieving compliance.

3.4.2 Proposed Revisions to Program Element

3.4.2.1 Development Planning

To support a comprehensive, Region-wide MS4 program, the Permittees propose the following actions:

- ◆ The Permittees propose that the 2008 Permit New Development and Redevelopment project requirements be reviewed to consider the appropriateness of LID BMP hierarchies in the arid Coachella desert region, and are willing to work collaboratively with Regional Board staff to consider adjustments to the current program appropriate to the unique conditions and needs of the Whitewater River Region.
- ◆ The Permittees propose to revise the current definition of "Redevelopment," consistent with other current statewide and Regional Water Quality Control Board MS4 Permits, to clarify that where a Redevelopment Project replaces less than 50 percent of the existing impervious surfaces of the site, and the existing site was not previously subject to Construction General Permit, Priority Development Project or applicable ordinance or municipal code post-construction requirements, the treatment requirements and numeric sizing criteria apply only to the addition or replacement, and not to the entire developed site.
- ◆ The Permittees will continue, through existing ordinances, development review processes, conditions of approval, design criteria, tracking, inspection and enforcement actions, to ensure that all discretionary "Priority," and "Other" New Development and Redevelopment projects address their short- and long-term impacts on Receiving Water quality by reducing pollutants and runoff flows. Development planning/review processes, inter-departmental coordination, and tracking and inspection procedures will be described in each Permittee's LIP.
- ◆ The Permittees will continue to implement the measurable goal of addressing 100 percent of on-site treatment requirements based on an 85th Percentile 24-hour event using site design / LID BMPs.
- ◆ The Permittees will continue to track project-specific WQMPs via databases.
- ◆ The Permittees will continue to ensure long term O&M of post-construction BMPs through requirements to submit recorded covenant and agreements, or other typical maintenance

mechanisms, and by assuring that funding sources, parties responsible for O&M, and site self-inspection and record keeping requirements are identified within each project-specific WQMP.

- ◆ NPDES training and education programs will be reviewed and updated within 12 months of development of the New Development/Redevelopment program enhancements to consider revisions.

3.4.2.2 Construction Activities

To support a comprehensive, Region-wide MS4 program, the Permittees propose the following actions:

- ◆ The Permittees will continue to implement and enforce the current program to reduce pollutants in urban runoff from construction activities that result in a land disturbance of one acre or more, and from construction activities that disturb less than one acre but that are part of a larger common plan of development or sale. Applicable ordinances, site plan review, site prioritization, and inspection and notification procedures will be described in each Permittee's LIP.
- ◆ The Permittees will continue to utilize existing programs, including PM 10 ordinances and requirements, to address site plan evaluation, BMP implementation and inspection at project sites which may have potential to impact water quality.
- ◆ The Permittees will continue to provide annual training for construction inspection staff. To supplement annual training and facilitate Regional consistency, Permittee construction inspection staff will biennially attend a Regional construction inspector open forum/meeting, in which local issues and concerns will be discussed.

3.5 MUNICIPAL FACILITIES AND ACTIVITIES

3.5.1 Current Program Element

Post-Construction

Requirements for managing the quality and quantity of stormwater runoff also apply to Permittee public works projects in the Region meeting the definition of "Priority" or "Other." Each Permittee incorporates Site Design and Source Control (structural and non-structural) BMPs into the process of planning, designing, and preparing construction plans and specifications for their public works projects. For public works projects that qualify as a Priority Development Project, the planning and design must conform to WQMP Design Standards found in the 2008 Permit. Where a Permittee requires on-site retention of runoff at a level equivalent to the Volumetric or Flow-Based Treatment Control BMP design criteria specified in the 2008 Permit for its public works project, as with private development projects, additional Site Design BMPs and Treatment Control BMPs are not required. Where applicable, the O&M procedures and requirements for Site Design, Structural Source Control, and Treatment Control BMPs included in a Permittee's public works project are incorporated into a Facility Pollution Prevention Plan (FPPP).

Each Permittee has developed and implemented policies and procedures to ensure that the planning and design of its public works projects reflect these requirements for managing the quality and quantity of stormwater runoff to prevent or minimize water quality impacts to the MEP.

Facilities

The Permittees have identified the types of Permittee facilities they operate, the activities conducted at those facilities, and those activities conducted that have the potential to contribute pollutants of concern to urban runoff. Based on this information, a list of potential Source Control BMPs was developed by the Permittees. In general, this list utilizes the BMP designations used in the 2003 California Stormwater Best Management Practice Handbooks²² (Industrial and Municipal Handbooks).

The Permittees have developed maintenance schedules for their MS4 facilities, implement those maintenance schedules, and report on these activities annually. Maintenance schedules address clean-out schedules and frequencies for the Permittees' catch basins, MS4 channels, debris basins, and retention/detention basins. Wastes and materials removed are disposed of per applicable laws and appropriate BMPs are implemented to minimize impacts to the Receiving Waters to the MEP. The legibility and condition of stencils, markers, or signs to discourage illegal dumping to the MS4 are also verified as part of MS4 facilities maintenance.

FPPPs are prepared, implemented, and maintained for Permittee facilities that have maintenance areas or outdoor storage areas; the Permittee list of facilities requiring FPPPs is updated as necessary. As of 2011, there were 112 Permittee facilities requiring FPPPs in the Region; each of those facilities is inspected annually, and FPPPs are reviewed and updated by the Permittees when necessary to reflect changes in conditions. Re-inspections and corrective actions are taken where deficiencies are found. Inspection reports and documentation of resulting corrective actions are kept for five years, and are incorporated into the facility FPPPs.

Activities

The Permittees have identified BMPs for municipal activities including, but not limited to street sweeping, streets and roads maintenance, catch basin cleaning, vehicle and equipment maintenance areas, landscape maintenance, swimming pool operation and maintenance, and the application of pesticides.

The Permittees utilize BMP Fact Sheet SC-70 (Road and Street Maintenance) from the California Stormwater BMP Handbook–Municipal²³ as a model for common road maintenance activities, and implement the appropriate BMPs for their streets and roads maintenance activities conducted by Permittee staff. Additionally, the Permittees incorporate applicable BMPs into streets and roads maintenance contracts and require their contractors to implement the appropriate BMPs.

Each Permittee requires that pesticides be applied in conformance with existing state and federal regulations. Additionally, some Permittees have developed and implemented an Integrated Pest Management (IPM) program.

²²California Stormwater Quality Association. January 2003. <http://www.cabmphandbooks.com/> or CASQA, P.O. Box 2105, Menlo Park, California, 94026-2105.

²³ <http://www.cabmphandbooks.com/Municipal.asp>

Training

Staff involved in implementing a Permittee's maintenance program receive annual training on the following topics:

- ◆ Requirements of local stormwater ordinances
- ◆ Requirements of the 2008 Permit
- ◆ Source Control BMPs listed in SWMP Section 6.3.5
- ◆ Fertilizer and Pesticide Management
- ◆ Permittee FPPPs
- ◆ Other applicable pollution control measures

Permittee streets and roads maintenance staff also periodically conduct tailgate training to review the model fact sheet of BMPs for common road maintenance activities.

Permittee staff responsible for restricted-use pesticide application are trained and certified under FIFRA requirements and the California Food and Agriculture Code. The Permittees maintain a list of pesticide application personnel and their certifications. Additionally, landscape maintenance contractors contracted by Permittees for pest management or pesticide application are required to be certified.

3.5.2 Proposed Revisions to Program Element

To support a comprehensive, region-wide MS4 program, the Permittees propose the following actions:

- ◆ The Permittees will continue to incorporate Site Design and Source Control BMPs and WQMP Design Standards, if applicable, into public works projects that qualify as "Priority" or "Other" Development Projects. Applicable development planning/review processes, policies, inter-departmental coordination, tracking and inspection procedures will be described in each Permittee's LIP.
- ◆ The Permittees will continue to maintain an updated list of maintenance and outdoor storage facilities requiring site-specific FPPPs.
- ◆ The Permittees will continue to annually inspect facilities requiring FPPPs; follow-up inspections and corrective actions will continue to be performed if deficiencies are observed. FPPPs will continue to be reviewed and updated as necessary to reflect changes in conditions.
- ◆ The Permittees have developed maintenance schedules for their MS4 facilities, and will continue to implement those maintenance schedules. BMPs utilized during MS4 maintenance will be described in each Permittee's LIP.
- ◆ The Permittees will continue to utilize the developed list of potential Source Control BMPs to address any potential impacts to water quality which may result from Permittee activities. Permittees will also consult other sources of BMP information and consider implementation of additional methods and measures, as appropriate.
- ◆ The Permittees will continue to provide training to municipal and field operations staff on fertilizer and pesticide management, maintenance procedures, FPPPs, local stormwater ordinances, MS4 Permit requirements, and other pollution control measures.
- ◆ The Permittees will review and update training and education programs for their employees within 12 months of adoption of the Fourth-term MS4 Permit.

3.6 PUBLIC EDUCATION AND OUTREACH

3.6.1 Current Program Element

3.6.1.1 Only Rain Down the Storm Drain Program

As a Principal Permittee, the District has developed a County-wide Public Education and Outreach program on behalf of the Permittees, known as the "Only Rain Down the Storm Drain" program. The District has continued to expand implementation of public information and outreach activities to facilitate the development and implementation of the SWMP. To leverage finite resources, the "Only Rain Down the Storm Drain" Program partners with various entities to promote pollution prevention and environmental awareness. In general, the program meets the following goals:

- ◆ Incorporation of public involvement in the program development and implementation process.
- ◆ Participation in joint outreach efforts to ensure that a consistent and effective message on urban runoff pollution prevention is brought to the public.
- ◆ Targeting of residents and commercial and industrial establishments.
- ◆ Measureable increases in the awareness of urban runoff issues.
- ◆ Development of targeted BMP guidance for specific pollutants and residential and business activities, including identification of actions to prevent sewage spills.
- ◆ Promotion of the 1-800 hotline for reporting illegal dumping from residential, industrial, construction and commercial sites into public streets, the MS4 and waterbodies. Other items that may be reported are clogged storm drains, faded or missing catch basin decals or markers, and providing general urban runoff and BMP information.

Pollution prevention education based upon BMPs is a major focus of the "Only Rain Down the Storm Drain" Program. The Program includes three categories - public behavior, business activity, and Potential Pollutants. Table 9 identifies typical audience and outreach methods for the three categories of the Public Education and Outreach Program.

Table 9. Public Education and Outreach Methods

Category	Audience	Potential Outreach Methods
Public Behavior	Residents; General Public	• Pamphlets • Brochures • Calendar • Radio • TV/Cable • Billboards • Utility Bill Inserts • Door Hangers • Newspaper Inserts • Direct Mail • Advertisements • Community Events • Surveys • Community Presentations • Internet Website • 1-800 line
	Students	• Classroom Presentations • DVDs & Videos • Workbook Materials • Children's Workshops • Contests • Internet Website
	Home Gardeners	• Focused Brochures • Posters • Composting Workshops • Newspaper Inserts • Home & Garden Shows • Flower Shows
Business Activity	Commercial; Industrial (restaurants, automotive service centers, gasoline service stations, pavement cutting, etc.)	• Brochures • Posters • Site Inspections • Trade Shows • Shelf Talkers
	Mobile Operators (auto maintenance; vehicle	• Brochures • Information at Public Permit Counters

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Category	Audience	Potential Outreach Methods
	washing; mobile carpet, drape and furniture cleaning; mobile steam cleaning)	• Site Inspections (base of operations) • Trade Shows • Chambers of Commerce • Business License Counters
	Groundskeepers, landscape installation, nurseries, greenhouses	• Focused Brochures • Posters • Workshops • Newspaper Inserts • Site Inspections (base of operations)
	Architects; Developers	• Focused Brochures • Information at Public Permit Counters • WQMP Workshops • Information at Public Planning Counters • LID BMP Design Handbook
	General Contractors; Construction Contractors	• Focused Brochures • Information at Public Permit Counters • Site Inspections
Potential Pollutants	Users or Generators of fertilizers, pesticides, chemicals, and other pollutants	• Pamphlets • Brochures • TV/Cable • Utility Bill Inserts • Newspaper Inserts • Advertisements • Community Events • Community Presentations • Surveys • Internet • Licensing

The District maintains an Internet website that provides information to residents and businesses about the problem of urban runoff pollution and offers simple urban runoff pollution prevention activities. Educational materials can be requested through the website, which also has a tracking mechanism for the number of views. During the 2008 Permit term, over 340,000 total views have been tallied to this date. The website address is <http://www.floodcontrol.co.riverside.ca.us/stormwater/>

In addition to the countywide and Regional public education activities undertaken by the District, each Permittee implements public education activities to address local needs or MS4 Permit requirements. These local activities can include distribution of public education information during construction site/business inspections, distribution of public education materials at front counters, local fairs and other community activities, and development of specific public education programs/materials to address specific needs.

From July 2008 to July 2012, over 5,480 students in grades 1 – 5 had been reached County-wide as a result of the classroom presentations program. At minimum, Riverside County MS4 Permittees participate in approximately 55 outreach events per year, and it is estimated over 710,000 people have been reached County-wide during the 2008 Permit term.

Per 2008 Permit requirement, the Permittees utilize public surveys at local events to assess the effectiveness of the "Only Rain Down the Storm Drain" Program. Throughout the 2008 Permit term, surveys were distributed each year at the Date Festival and Tamale Festival in Indio. The surveys consist of three simple questions which gauge public knowledge with regards to illegal dumping, and impacts of illegal dumping on Receiving Waters. During the 2008 Permit term, a total of 5,838 survey questions were answered, of which 72.2 percent of those questions were answered correctly.

3.6.2 Proposed Revisions to Program Element

To support a comprehensive, Region-wide MS4 program the Permittees propose the following actions:

- ◆ The Permittees will continue to update and distribute targeted BMP guidance developed for restaurants, industrial facilities, construction sites, automotive service centers and gasoline service stations, and residential properties (including pet ownership, landscape and swimming pool maintenance, septic tank maintenance, and outdoor cleaning activities).

- ◆ The "Only Rain Down the Storm Drain" Program will continue to utilize public awareness surveys at events to educate residents and gauge the effectiveness of the program, and utilize the existing website, advertisements, promotional materials, brochures, 1-800 line and other media and outreach channels to increase stormwater awareness.
- ◆ The Permittees will continue to distribute public education materials to encourage the public to report clogged MS4 facilities, faded or missing catch basin stencils, illegal dumping from residential, industrial, construction and commercial sites into public streets, MS4 facilities and waterbodies, and general pollution prevention information via the 1-800 hotline.
- ◆ The Permittees will continue to partner with other entities, where possible, to promote pollution prevention and environmental awareness.
- ◆ The Permittees will continue to incorporate public involvement in the program development and implementation process.

3.7 MONITORING PROGRAM

3.7.1 Overview of the Whitewater River Region Water Quality Monitoring Program

The overall goal of the Whitewater River Region water quality monitoring program is to characterize urban runoff discharges from the MS4. Monitoring is conducted by the District and CVWD; each agency samples within its respective service area of the Region.

Water quality sampling activities were originally initiated in preparation for the Part 2 Permit Application in 1992. The District and the CVWD coordinated field screening for representative land use areas and identified sampling sites to fulfill the Part 2 application requirements. Sampling occurred during the 1993-94 wet seasons to characterize runoff from the selected monitoring points.

The current sampling protocol was established when the Regional Board adopted the 2008 Permit, and is a continuation of the Monitoring and Reporting Program contained within the initial MS4 Permit in 1996 (Board Order No. 96-015). From the 1995-96 wet season to the present, the program has included monitoring of regional outfalls and Receiving Waters during both wet and dry weather.

Specific monitoring objectives set during the 2008 Permit term were designed to:

- ◆ Develop and support an effective urban runoff management program;
- ◆ Identify those Receiving Waters which, without additional action to control pollution from urban runoff, cannot reasonably be expected to achieve or maintain applicable Water Quality Standards;
- ◆ Characterize pollutants associated with urban runoff and assess the influence of urban land uses on Receiving Water Quality; and
- ◆ Analyze and interpret the collected data to identify trends, if any, both to prevent impairments through the implementation of preventive BMPs and to track improvements based on the MS4 management program.

Based on these objectives, the 2008 Permit monitoring program includes:

- ◆ In lieu of dry-weather sampling, an IC/ID program that encourages identification and elimination of sources of illicit dry-weather flows;
- ◆ The removal of the annual analysis of constituents that have not been identified in discharges;
- ◆ Requirements that eliminate duplication of parameters being analyzed using multiple methods with different detection limits; and
- ◆ Monitoring stations that better characterize urban runoff within the Permit area.

The Permittees have rotated Outfall and Receiving Water monitoring stations throughout the Region over the past three MS4 Permit terms. Table 10 lists the monitoring stations that were utilized during the 2008 Permit term.

Table 10. 2008 MS4 Permit Monitoring Stations

<u>Outfall Monitoring Stations</u>		
<i>Monitoring Station</i>	<i>Tributary Drainage Area (acres)</i>	<i>Percent Urban Land Use</i>
Ramsey Street City of Banning	677.3	69.3%
Portola Ave. SD City of Palm Desert	929.5	81.3%
Avenue 52 SD City of Coachella	509	20.5%
<u>Receiving Water Monitoring Stations</u>		
<i>Monitoring Station</i>	<i>Tributary Drainage Area (acres)</i>	<i>Percent Urban Land Use</i>
Upper Whitewater River Riverside County	9,392.4	2.6%
CVSC @ Avenue 52 City of Coachella	814,515	14%

The following sections summarize additional regional or statewide monitoring efforts that the Permittees have participated in, a summary analysis of pollutants monitored under the program, a discussion of limitations of the use of water quality monitoring data, and recommendations for revision to the Monitoring and Reporting Program.

Participation in Regional Monitoring Efforts

The following summarizes the Permittee's participation in Regional or Statewide monitoring efforts. Per 2008 Permit requirements, the Permittees have participated in these efforts to enhance program design, parameter test methods, calibrate labs, evaluate BMP effectiveness, and/or advance the science and understanding of urban runoff impacts on Receiving Waters.

Southern California Stormwater Monitoring Coalition

The District participates in the Southern California Stormwater Monitoring Coalition, which is a regional monitoring consortium. The consortium includes the Los Angeles, Santa Ana, and San Diego Regional

Boards and each of the Principal Permittees in Southern California, and the City of Long Beach. The overall goal for this consortium is to establish a Southern California stormwater research and monitoring program that focuses on improving stormwater monitoring science, coordinating data collection programs, and evaluating the effects of stormwater discharges to Receiving Waters.

California Association of Stormwater Quality Agencies (CASQA)

CASQA is composed of stormwater quality management organizations and individuals, including cities, counties, special districts, industries, and consulting firms throughout the state, and was formed in 1989 to recommend approaches to the SWRCB for stormwater quality management in California. In this capacity, CASQA has assisted and continues to assist the SWRCB with the development and implementation of stormwater permitting programs.

3.7.2 Long-Term Analysis of Pollutants Commonly Associated with Urban Runoff

The Beneficial Uses of the Whitewater River from the headwaters in San Geronio to the Whitewater Recharge Basins are Municipal, Agricultural, Groundwater Recharge, Recreation I, Recreation II, Warm Freshwater Habitat (intermittent), Cold Freshwater Habitat, Wildlife Habitat and Hydropower Generation. The only MS4 discharge which has potential to impact this reach of the River is from the City of Banning, which represents only a small portion of the tributary watershed to this reach. During dry weather, there is no flow to the Whitewater River from the City of Banning. During the majority of wet weather events, the City of Banning's discharges generally infiltrate prior to reaching the Whitewater River.

The Whitewater River from the Whitewater Recharge Basins to the end of the Whitewater River Region is defined as a Wash (Ephemeral Stream), with intermittent Beneficial Uses of Groundwater Recharge, Recreation II and Wildlife Habitat.

The following summarizes analysis of Permittee monitoring data gathered over the last two MS4 Permit terms:

- Priority Pollutants, with the exception of certain naturally occurring metals listed below, have either rarely been detected, or have never been detected in the Outfalls and Receiving Waters of this Region. In the few cases of rare detections, levels have never been observed in exceedance of applicable Water Quality Objectives;
- All Receiving Water monitoring sites, Outfall monitoring sites and background assessment sites exhibited elevated pH levels, suggesting naturally alkaline conditions in the Region;
- Depressed Dissolved Oxygen levels were observed during wet and dry weather conditions at the CVSC @ Avenue 52 Receiving Water monitoring site; MS4 Outfall discharges could not be identified as a contributor to this condition;
- Elevated E. coli levels were observed at the CVSC @ Avenue 52 Receiving Water monitoring site and Avenue 52 Outfall monitoring site (both located within the impaired section of CVSC subject to TMDL), and also at the Ramsey Street, and Portola Avenue Outfall monitoring sites. These elevated E. coli levels were observed during wet weather conditions.

- Permittee monitoring data suggests that E. coli is not a dry weather water quality problem in the Region; this is primarily due to the fact that during dry weather, Regional Receiving Waters do not exhibit flow. Only one exceedance of Water Quality Objectives for E. coli was observed at a Receiving Water site (CVSC, in 2009), and elevated levels were observed once at an Outfall site (Sunrise Avenue Stormdrain, in 2003).

During dry weather, there are no urban runoff flows that reach Receiving Waters. There may be localized areas of urban runoff flows in a few concrete lined outfalls, but as soon as flows reach earthen channel segments they quickly recharge, are absorbed by local vegetation, and infiltrate shortly after discharging to the earthen segment.

Some water quality parameters are naturally-occurring in the Whitewater River Watershed. The CVWD 2011 Domestic Water Quality Report identifies the following constituents as having "erosion or leaching of natural deposits" as the major source in the ground water supply:

- | | | | |
|-------------|------------|------------|------------|
| ♦ Aluminum | ♦ Arsenic | ♦ Boron | ♦ Chromium |
| ♦ Copper | ♦ Chloride | ♦ Fluoride | ♦ Hardness |
| ♦ Iron | ♦ Sodium | ♦ Sulfate | ♦ TDS |
| ♦ Turbidity | | | |

Permittee monitoring data has reflected that several of these constituents have also appeared in surface water flows, at times in exceedance of Water Quality Objectives. Monitoring data from the Upper Whitewater River monitoring station, a station which under the 2008 Permit is monitored by the Permittees to assist with determination of natural background concentrations of pollutants, shows that during wet weather conditions, 100 percent of collected samples exceeded Water Quality Objectives for Total Lead, and almost 67 percent of samples exceeded Water Quality Objectives for Total Chromium. Lead and Chromium have also been detected at every Permittee monitored Receiving Water and Outfall site; however, the only area where exceedances of Water Quality Objectives has occurred is at this monitoring station, which is located high in the Watershed, and features very little urban influence. Thus, it has been concluded that these exceedances reflected natural sources.

CVSC Bacterial Indicator TMDL Monitoring

As previously mentioned, responsible parties to the CVSC Bacterial Indicators TMDL are required to submit respective monitoring plans for Regional Board approval by January 6, 2013; parties that form groups have an additional 90 days to submit Quality Assurance Project Plans. Phase I monitoring will last for a period of three years; monitoring and other actions taken in Phase I will assist in determining whether Water Quality Objectives have been achieved, sources of bacterial pollution have been identified, and whether additional actions will be required in Phase II.

3.7.3 Inherent Limitations in Analyzing Water Quality Data

There are inherent limitations in analyzing water quality data. Point source discharges from industrial processes, such as treated wastewater effluent and industrial discharges, generally:

- ♦ come from a single or a few sources;

- ◆ come from readily identifiable source(s);
- ◆ are generally consistent in chemical character from day to day; and
- ◆ can be easily instrumented.

On the other hand, non-point source flows such as those collected and analyzed as part of the NPDES MS4 monitoring programs usually:

- ◆ come from a multitude of sources;
- ◆ can come from non Permittee- regulatable sources, many of which are non-urban in nature, including:
 - State, federal or tribal lands
 - Natural leaching of soils
 - Wildlife
 - Atmospheric deposition
 - Wildfires
- ◆ can vary widely in chemical character at any given moment due to:
 - Unidentified episodic issues related to natural phenomena
 - Magnitude of rainfall and extent of contributing area
 - Potential one-time illicit discharges that were not identified at the time of sampling
 - natural random variation; and
- ◆ cannot be easily instrumented due to the wide variation in depth and velocity and associated impacts of natural or unnatural aggradation and degradation of natural stream beds.

Because ephemeral stormwater flows are, by their very nature, particularly random in character, it can take many years before monitoring data trends can be detected or to determine the effectiveness of a control measure. Additionally, due to limited rainfall (3.6 inches annually) and the ephemeral nature of most Receiving Waters within the Whitewater River Region, collecting sufficient wet and dry weather data to characterize discharges from the MS4 and assess improvement or degradation in water quality due to urban runoff is extremely challenging. As discussed above, there are limited flowing Receiving Waters with perennial flow that may be impacted by urban runoff under normal hydrologic conditions in the Region.

3.7.4 Evaluation of the Effectiveness of Existing Control Measures

Even with the difficulty in evaluating the specific characteristics of stormwater flows in the Whitewater River, no Region-wide water quality problems have been determined that can be associated primarily with urban runoff. Therefore, existing Permittee programs are judged to be effective at addressing water quality issues.

3.7.5 Proposed Revisions to Program Element

The Permittees will collaborate with Regional Board staff prior to the adoption of the Fourth-term MS4 Permit to review monitoring program goals and implementation to determine if there are opportunities to

improve its effectiveness, address urban TMDL monitoring requirements for regulated Permittees, and better coordinate with monitoring activities of CVWD and other entities.

3.8 PROGRAM EVALUATION, REPORTING AND REVISION

3.8.1 Current Program Element

Annual Report and Program Effectiveness Assessment

By January 15th of each year, the Permittees prepare an annual report summarizing the implementation of the component program elements described in the SWMP. To support preparation of each Annual Report, the Permittees use standardized reporting forms and submit documentation of their respective Permit compliance programs to the District. The District aggregates Permittee submittals into one cohesive document to the Regional Board.

The Permittees regularly assess the program elements of the SWMP to identify improvements that will promote the reduction of pollutants in urban runoff to the MEP while also supporting the responsible management and allocation of the public resources available to implement the SWMP. In addition to assessing effectiveness of individual program elements, the Permittees also conduct assessments of their overall programs. The strategy for assessing overall program effectiveness focuses on quantitative and indirect methods, as aside from the lower reach of CVSC (which is being addressed through TMDL), Regional Receiving Water quality has been protected during the past three MS4 Permit terms. In general, the overarching goals of the Whitewater River Regional program are maintenance of Receiving Water quality and implementation of preventative measures. As such, program effectiveness is assessed according to how well each program element meets those goals.

3.8.2 Proposed Program Revisions

3.8.2.1 Annual Reporting

The Permittees will work collaboratively with Regional Board staff to develop a coherent, simplified format for annual reporting, which focuses on data tracking and reporting of critical information. The Permittees propose to develop standardized reporting forms based upon the revised format incorporated into the Permit.

The Permittees will work collaboratively with Regional Board staff to develop streamlined program effectiveness assessment methods and schedules during the fourth MS4 Permit term.