

## Appendix 3.A

### Detailed Description of Water Quality Priorities

The identification of Water Quality Priorities is an important first step in the EWMP process. The Water Quality Priorities provide the basis for prioritizing implementation and monitoring activities within the EWMP and CIMP and selection and scheduling of BMPs during the RAA. The identification of Water Quality Priorities is required in Section VI.C.5.a of the Permit as part of the development of a EWMP. The Permit defines three categories of WBPCs to support the development of priorities, as shown in **Table 1**. The Permit establishes a four-step process that leads to prioritization and sequencing of the water quality issues within each watershed, ultimately leading to an organized list of Water Quality Priorities, as follows:

- **Step 1:** Water quality characterization (VI.C.5.a.i, pg. 58) based on available monitoring data, TMDLs, 303(d) lists, stormwater annual reports, etc.;
- **Step 2:** Water body-pollutant classification (VI.C.5.a.ii, pg. 59), to identify water body-pollutant combinations that fall into three Permit defined categories;
- **Step 3:** Source assessment (VI.C.5.a.iii, pg. 59) for the water body-pollutant combinations in the three categories; and
- **Step 4:** Prioritization of the water body-pollutant combinations (VI.C.5.a.iv, pg. 60).

**Table 1. Water Body-Pollutant Classification Categories (Permit Section IV.C.5.a.ii)**

Category	Water Body-Pollutant Combinations (WBPCs) Included
1 Highest Priority	WBPCs for which TMDL Water Quality Based Effluent Limits (WQBELs) and/or Receiving Water Limitations (RWLs) are established in Part VI.E and Attachments L and O of the MS4 Permit.
2 High Priority	WBPCs for which data indicate water quality impairment in the receiving water according to the State's Listing Policy, regardless of whether the pollutant is currently on the 303(d) List and for which the MS4 discharges may be causing or contributing.
3 Medium Priority	WBPCs for which there are insufficient data to indicate impairment in the receiving water according to the State's Listing Policy, but which exceed applicable receiving water limitations contained in the MS4 Permit and for which MS4 discharges may be causing or contributing to the exceedance.

## Water Quality Characterization (Step 1)

The following presents a brief summary of the water quality characterization for the ULAR WMA. **Appendix 3.B** provides a more detailed description of the results of the characterization. To conduct water quality characterization, data were obtained from numerous sources. A data request was submitted to the ULAR WMA to gather information necessary to meet the water quality characterization and source assessment requirements outlined in the Permit (see pages 58 and 59). The data requested to support the water quality characterization included:

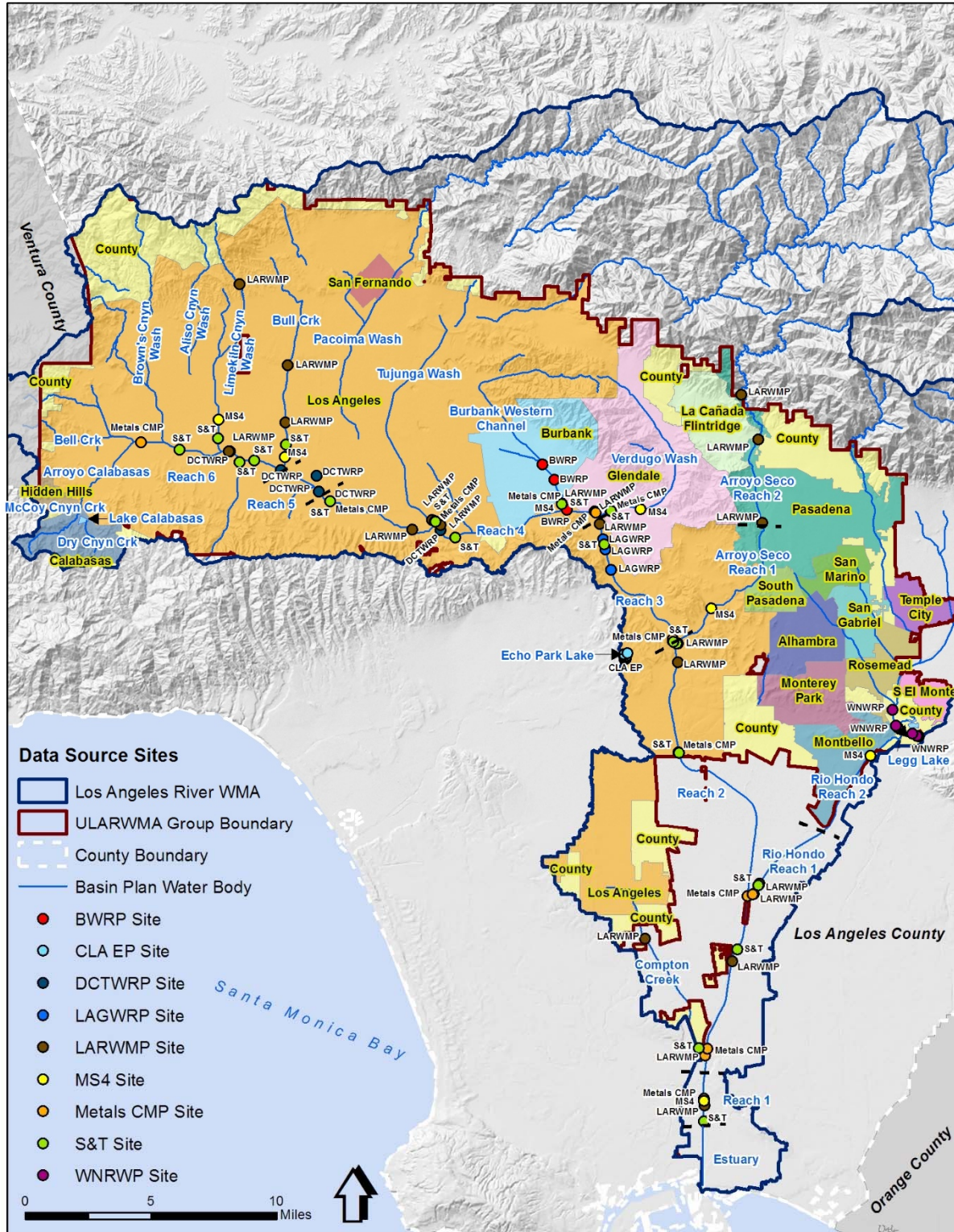
- Monitoring programs, including but not limited to TMDL compliance monitoring and receiving water monitoring;
- Findings from the Permittees' Illicit Connections and Illicit Discharge Eliminations, Industrial/Commercial Facilities, Development Construction, and Public Agency Activities Programs;
- TMDL source investigations; and

- Any other pertinent data, information, or studies related to constituent sources and conditions that could contribute to identification of the highest Water Quality Priorities.

Monitoring data collected within the ULAR WMA were received from the following sources:

- Los Angeles County Department of Public Works (LACDPW)
- DC Tillman, Los Angeles/Glendale, and Burbank Water Reclamation Plants (WRPs)
- City of Los Angeles Status and Trends program
- LA River Metals TMDL Coordinated Monitoring Program
- City of Los Angeles Echo Park Monitoring Program
- Los Angeles River Watershed Monitoring Program (LARWMP)

Over 170,000 data records were compiled and reviewed as part of the data analysis, which likely represents the largest data compilation effort of all the EWMPs in the region. **Figure 1** presents the site locations for the monitoring data received and used for the water quality characterization process.



**Figure 1. Monitoring Site Locations for Data Utilized in the Water Quality Priorities Process**  
 BWRP = Burbank Water Reclamation Plant, CLA EP = City of LA Echo Park Lake, DCTWRP = City of LA Donald C. Tillman Water Reclamation Plant, LAWRP = LA Glendale Water Reclamation Plant, MS4 = LA County M4 Permit, Metals CMP = Metals TMDL Coordinated Monitoring Program, S&T = City of LA Status and Trends, WNRWP = LA County Sanitation District’s Wittier Narrows Water Reclamation Plant.

## Characterization of Receiving Water Quality

Per Part VI.C.5.a.i (page 58) of the Permit, each EWMP shall include an evaluation of existing water quality conditions, including characterization of receiving water quality. **Appendix 3.B** presents additional details on the data analysis approach and results.

Data were compiled to identify constituents exceeding applicable water quality objectives. Applicable water quality objectives were compiled from the California Toxics Rule (CTR), the Basin Plan, and relevant TMDLs. Applicable water quality objectives from the CTR and Basin Plan were selected based on the beneficial uses identified in the Basin Plan.

Generally, the water quality objectives utilized included those established for the protection of aquatic life, contact recreation and human health related to the consumption of organisms. Given the significant number of water quality constituents and corresponding water quality objectives the following steps were taken to identify WBPCs:

- The first step in the analysis was to develop a list of constituents that were sampled for but were never detected in any water body within the EWMP area and therefore would not fall into one of the three Permit categories (see **Table 1**). A list of these constituents is presented in **Appendix 3.B**.
- Next, constituents that were detected, but the sample results never exceeded a corresponding water quality objective and therefore would not fall into one of the three Permit categories were identified. A list of these constituents is presented in **Appendix 3.B**.
- All other constituents (*i.e.*, all constituents detected and with sample results that had at least one result greater than an applicable water quality objective) were subject to further analysis. Summary tables are presented in **Appendix 3.B**.

## Characterization of Discharge Quality

Per Part VI.C.5.a.i (page 58) of the Permit, each EWMP shall include a characterization of stormwater and non-stormwater discharges from the MS4. A characterization was conducted on stormwater and non-stormwater discharges from the MS4 associated with constituents identified in a TMDL, a 303(d) listing, or through the receiving water data analysis described above. The following sources of discharge characterization data were reviewed and are summarized in **Appendix 3.C**:

- TMDL Staff Reports for TMDLs identified in **Appendix 3.B**.
- Los Angeles River Bacteria Source Identification Study (BSI Study) completed by the Cleaner Rivers through Effective Stakeholder-led TMDLs (CREST) group in 2008.
- Data collected as part of the 2007 Southern California Coastal Water Research Project (SCCWRP) Technical Report 510 titled “Sources, patterns and mechanisms of storm water pollutant loading from watersheds and land uses of the greater Los Angeles area, California, USA.”
- Land Use data collected as part of previous MS4 Permit monitoring and presented in the 2000 report titled “Los Angeles County 1994-2000 Integrated Receiving Water Impacts Report.”

## Water Body Pollutant Classification (Step 2)

Based on available information and data analysis, WBPCs were classified in one of the three Permit categories, as described in **Table 1**. To further support development of the EWMP, the three Permit categories were further subdivided into *subcategories* (described in **Table 2**) and each WBPC was assigned to an appropriate subcategory. **Table 3**, **Table 4**, and **Table 5** present the ULAR WMG WBPCs in Categories 1, 2 and 3 for the associated Los Angeles River mainstem, Los Angeles River Reaches 1-4 tributaries, and Los Angeles River Reaches 5 and 6 tributaries, respectively. **Table 6** presents a summary of the ULAR WMG WBPCs categories for Lake Calabasas, Legg Lake, and Echo Park Lake. Summary tables presenting the data analysis to support the placement of WBPCs into the various subcategories are presented in **Appendix 3.B**.

**Table 2. Details for Water Body-Pollutant Classification Subcategories**

Category	Water Body-Pollutant Combinations (WBPCs)	Description
1	Category 1A: WBPCs with past due or current Permit term TMDL deadlines with exceedances in the past 5 years.	WBPCs with TMDLs with past due or current Permit term interim and/or final limits. These pollutants are the highest priority for the current Permit term.
	Category 1B: WBPCs with TMDL deadlines beyond the Permit term with exceedances in the past 5 years.	The Permit does not require the prioritization of TMDL interim and/or final deadlines outside of the Permit term or USEPA TMDLs, which do not have implementation schedules. To ensure EWMPs consider long term planning requirements and utilize the available compliance mechanisms, these WBPCs should be considered during BMP planning and scheduling, and during CIMP development.
	Category 1C: WBPCs addressed in USEPA TMDL without a Regional Board adopted Implementation Plan.	
	Category 1D: WBPCs with past due or current Permit term TMDL deadlines but have had no exceedances in the past 5 years.	WBPCs where specific actions may end up not being identified because recent exceedances have not been observed and specific actions may not be necessary. The CIMP should address these WBPCs to support future re-prioritization.
2	Category 2A: 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements with exceedances in the past 5 years.	WBPCs with confirmed impairment or exceedances of RWLs. WBPCs in a similar class <sup>1</sup> as those with TMDLs are identified. WBPCs currently on the 303(d) List are differentiated from those that are not to support utilization of EWMP compliance mechanisms.
	Category 2B: 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements that are not a “pollutant” <sup>2</sup> (e.g., toxicity).	WBPCs where specific actions may not be identifiable because the cause of the impairment or exceedances is not resolved. Either routine monitoring or special studies identified in the CIMP should support identification of a “pollutant” linked to the impairment and re-prioritization in the future.
	Category 2C: 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements but there have been no exceedances in the past 5 years.	WBPCs where specific actions for implementation may end up not being identified because recent exceedances have not been observed (and thus specific BMPs may not be necessary.) Pollutants that are in a similar class <sup>1</sup> as those with TMDLs are identified. Either routine monitoring or special studies identified in the CIMP should ensure these WBPCs are addressed to support re-prioritization in the future.
3	Category 3A: All other WBPCs that have exceeded in the past 5 years.	Pollutants that are in a similar class <sup>1</sup> as those with TMDLs are identified.
	Category 3B: All other WBPCs that are not a “pollutant” <sup>2</sup> (e.g., toxicity).	WBPCs where specific actions may not be identifiable because the cause of the impairment or exceedances is not resolved. Either routine monitoring or special studies identified in the CIMP should support identification of a “pollutant” linked to the impairment and re-prioritization in the future.
	Category 3C: All other WBPCs that have exceeded in the past 10 years, but not in past 5 years.	Pollutants that are in a similar class <sup>1</sup> as those with TMDLs are identified.

1 – Pollutants are considered in a similar class if they have similar fate and transport mechanisms, can be addressed via the same types of control measures, and within the same timeline already contemplated as part of the EWMP for the TMDL. (Permit pg. 49, footnote 21).

2 – While pollutants may be contributing to the impairment, it currently is not possible to identify the specific pollutant/stressor.

**Table 3. Summary of Upper Los Angeles River WMA Water Body-Pollutant Categories for Mainstem Reaches**

Constituents	LA River						
	1	2	3 (below LAG)	3 (above LAG)	4	5	6
<b>Category 1A:</b> WBPCs with past due or current Permit term TMDL deadlines <u>with exceedances</u> in the past 5 years. (I = Interim and F = Final Limits)							
Cadmium Total	I (Wet)						
Copper Dissolved	I (Wet)	I (Wet)			I (Wet)	I (Dry)	I (Wet)
Copper Total	I (Wet)	I (Wet)	I (Wet)		I (Wet)	I (Dry)	
Lead Dissolved	I (Wet/Dry)	I (Wet/Dry)	I (Wet/Dry)		I (Wet/Dry)		
Lead Total	I (Wet)	I (Wet)		I (Dry)			
Zinc Dissolved	I (Wet)	I (Wet)			I (Wet)		I (Wet)
Zinc Total	I (Wet)	I (Wet)	I (Wet)		I (Wet)		I (Wet)
Trash	I/F	I/F	I/F	I/F	I/F	I/F	I/F
Sediment: DDTs, PCBs, PAHs <sup>1</sup>	I						
Sediment: Copper, Lead, Zinc <sup>1</sup>	I						
<b>Category 1B:</b> WBPCs with TMDL deadlines beyond the Permit term <u>with exceedances</u> in the past 5 years. (I = Interim and F = Final Limits)							
<i>E. Coli</i>	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)
Cadmium Total	F (Wet)						
Copper Dissolved	F (Wet)	F (Wet)			F (Wet)	F (Dry)	F (Wet)
Copper Total	F (Wet)	F (Wet)	F (Wet)		F (Wet)	F (Dry)	
Lead Dissolved	F (Wet/Dry)	F (Wet/Dry)	F (Wet/Dry)		F (Wet/Dry)		
Lead Total	F (Wet)	F (Wet)		F (Dry)			
Zinc Dissolved	F (Wet)	F (Wet)			F (Wet)		F (Wet)
Zinc Total	F (Wet)	F (Wet)	F (Wet)		F (Wet)		F (Wet)
Sediment: DDTs, PCBs, PAHs <sup>1</sup>	F						
Sediment: Copper, Lead, Zinc <sup>1</sup>	F						
<b>Category 1C:</b> WBPCs addressed in USEPA TMDL without a Regional Board Adopted Implementation Plan. (WLA = Waste Load Allocation in USEPA TMDL)							
None							
<b>Category 1D:</b> WBPCs with past due or current Permit term TMDL deadlines but <u>have not exceeded in past 5 years.</u>							
Cadmium Total		I (Wet NS)	I (Wet)	I (Wet NS)	I (Wet NS)	I (Wet NS)	I (Wet NS)
Copper Dissolved	I (Dry)	I (Dry)	I (Wet/Dry)	I (Dry/Wet NS)	I (Dry)	I (Wet NS)	I (Dry)
Copper Total	I (Dry)	I (Dry)	I (Dry)	I (Wet/Dry)	I (Dry)	I (Wet NS)	I (Wet/Dry)
Lead Dissolved				I (Dry/Wet NS)		I (Dry/Wet NS)	I (Wet/Dry)

Constituents	LA River						
	1	2	3 (below LAG)	3 (above LAG)	4	5	6
Lead Total	I (Dry)	I (Dry)	I (Wet/Dry)	I (Wet)	I (Wet/Dry)	I (Dry/Wet NS)	I (Wet/Dry)
Zinc Dissolved			I (Wet)	I (Wet NS)		I (Wet NS)	
Zinc Total				I (Wet)		I (Wet NS)	
Ammonia as N	F (Dry/Wet)	F (Dry/Wet NS)	F (Dry/Wet)	F (Dry/Wet)	F (Dry/Wet)	F (Dry/Wet)	F (Dry/Wet)
Nitrate as N	F	F	F	F	F	F	F
Nitrite as N	F	F	F	F	F	F	F
Nitrogen (NO3-N+NO2-N)	F	F	F	F	F	F	F
<b>Category 2A:</b> 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements with exceedances in the past 5 years.							
2,3,7,8-TCDD (Dioxin)			Dry				
Bis(2-ethylhexyl)Phthalate	Dry						
Diazinon						Dry	
Selenium						Dry	Dry
Chloride						Dry	Dry
Sulfate						Dry	Dry
TDS						Dry	
Cyanide	303 Dry/Wet						
<b>Category 2B:</b> 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements that are not a “pollutant” <sup>2</sup> (i.e., toxicity) with exceedances in the past 5 years.							
pH	Dry	Dry					
<b>Category 2C:</b> 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements but have not exceeded in past 5 years.							
Mercury Total	Dry	Dry/Wet (NS)	Dry	Dry	Dry/Wet (NS)		Dry
Thallium Total							Dry (NS)
TDS							Dry (NS)
Oil		Delist				Delist	
Diazinon	Wet (Delist)						
<b>Category 3A:</b> All other WBPCs with exceedances in the past 5 years.							
2,3,7,8-TCDD (Dioxin)			Wet	Wet			
Bis(2-ethylhexyl)Phthalate	Wet						
Diazinon					Dry		
Dibenzo(a,h)Anthracene						Dry	
Indeno(1,2,3-cd)Pyrene						Dry	

Constituents	LA River						
	1	2	3 (below LAG)	3 (above LAG)	4	5	6
4,4-DDD						Dry	
4,4-DDE						Dry	
Nickel Total						Dry	
Selenium Total	Dry						
Zinc Dissolved	Dry						
Zinc Total	Dry		Dry				
Sulfate					Dry		
Cyanide					Dry	Dry	
<b>Category 3B:</b> All other WBPCs that are not a “pollutant” <sup>2</sup> (i.e., toxicity) with exceedances in the past 5 years.							
pH	Wet	Wet (NS)	Dry	Dry		Dry	
Dissolved Oxygen	Wet		Dry		Dry	Dry	Dry
<b>Category 3C:</b> All other WBPCs that have exceeded in the past 10 years, but not in past 5 years.							
2,3,7,8-TCDD (Dioxin)				Dry			Dry (NS)
Benzo(a)Anthracene			Dry				
Bis(2-ethylhexyl)Phthalate			Dry	Dry		Dry	
Chrysene			Dry		Dry		Dry (NS)
Dibenzo(a,h)Anthracene			Dry	Dry			
Dichlorobromomethane			Wet				
Indeno(1,2,3-cd)Pyrene			Dry	Dry			
Heptachlor						Dry	
Mercury Total	Wet		Wet	Wet		Dry	Wet (NS)
Nickel Total				Dry			
Selenium Total				Dry	Dry		
Thallium Total	Dry	Dry (NS)	Dry	Dry	Dry		
Zinc Total					Dry		
Sulfate				Dry			
TDS					Dry		
Chlorine (Total)			Dry	Dry	Dry	Dry	Dry
Cyanide			Dry	Dry			Dry

1 – Pollutants associated with the Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL were identified as applicable to Reach 1 of the LA River as the nearest downstream receiving water segment from the EWMP area.

2 – While pollutants may be contributing to the impairment, it currently is not possible to identify the specific pollutant/stressor.

Note that unless explicitly stated as sediment, constituents are associated with the water column.

I/F = Denotes where the Permit includes interim (I) and/or final (F) effluent and/or receiving water limitations.

NS = Not sampled

Dry/Wet = Weather condition was based on the designation provided by the sampling program. If no information was provided by the sampling program, flow records were reviewed and where flow was greater than 500 cubic feet per second (cfs) identified in the LA River Metals TMDL as a wet weather event, the sample was identified as a wet weather sample.

303 = WBPC on the 2010 303(d) List where the listing was confirmed during data analysis.

Delist = WBPC on the 2010 303(d) List that meets the delisting requirements.

**Table 4. Summary of Upper Los Angeles River WMA Water Body-Pollutant Categories for LA River Reaches 1-4 Tributaries**

Constituents	Compton Creek	Rio Hondo			Arroyo Seco	Verdugo Wash	Burbank Western Channel	Tujunga Wash
		1	2	3				
<b>Category 1A:</b> WBPCs with past due or current Permit term TMDL deadlines <u>with exceedances</u> in the past 5 years.								
Copper Dissolved		I (Dry)					I (Dry)	I (Dry)
Copper Total	I (Dry)	I (Dry)				I (Wet) NS	I (Dry)	I (Dry)
Lead Dissolved		I (Dry)			I (Wet/Dry)			
Lead Total	I (Dry)	I (Dry)						I (Dry)
Zinc Total		I (Dry)						
Ammonia as N								F (Dry)
Nitrate as N							F (Dry)	
Nitrite as N					F (Dry)		F (Dry)	
Trash	I/F	I/F	I/F		I/F	I/F	I/F	I/F
<b>Category 1B:</b> WBPCs with TMDL deadlines beyond the Permit term <u>with exceedances</u> in the past 5 years.								
<i>E. Coli</i>	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)
Copper Dissolved		F (Dry)					F (Dry)	F (Dry)
Copper Total	F (Dry)	F (Dry)				F (Wet) NS	F (Dry)	F (Dry)
Lead Dissolved		F (Dry)			F (Wet/Dry)			
Lead Total	F (Dry)	F (Dry)						F (Dry)
Zinc Dissolved								
Zinc Total		F (Dry)						
<b>Category 1C:</b> WBPCs addressed in USEPA TMDL without a Regional Board Adopted Implementation Plan. (WLA = Waste Load Allocation in USEPA TMDL)								
None								
<b>Category 1D:</b> WBPCs with past due or current Permit term TMDL deadlines <u>but have not exceeded</u> in past 5 years.								
Cadmium Total	I (Wet NS)	I (Wet NS)	I (Wet NS)		I (Wet NS)	I (Wet NS)	I (Wet NS)	I (Wet NS)
Copper Dissolved	I (Dry/Wet NS)	I (Wet NS)	I (NS)		I (Wet/Dry)	I (Wet)/(Dry NS)	I (Wet NS)	I (Wet NS)
Copper Total	I (Wet NS)	I (Wet NS)	I (NS)		I (Wet/Dry)	I (Dry NS)	I (Wet NS)	I (Wet NS)
Lead Dissolved	I (Dry/Wet NS)	I (Wet NS)	I (NS)			I (Wet/Dry NS)	I (Dry/Wet NS)	I (Dry)/Wet NS)

Constituents	Compton Creek	Rio Hondo			Arroyo Seco	Verdugo Wash	Burbank Western Channel	Tujunga Wash
		1	2	3				
Lead Total	I (Wet NS)	I (Wet NS)	I (NS)		I (Wet/Dry)	I (Wet/Dry NS)	I (Dry/Wet NS)	I (Wet NS)
Zinc Dissolved	I (Wet NS)	I (Dry/Wet NS)	I (Wet NS)		I (Wet)	I (Wet)	I (Wet NS)	I (Wet NS)
Zinc Total	I (Wet NS)	I (Wet NS)	I (Wet NS)		I (Wet)	I (Wet)	I (Wet NS)	I (Wet NS)
Ammonia as N	F (Dry/Wet NS)	F (Dry/Wet NS)	F (NS)		F (Dry/Wet NS)	F (NS)	F (NS)	F (Wet NS)
Nitrate as N	F	F	F (NS)		F	F (NS)	F (Wet)	F
Nitrite as N	F	F	F (NS)		F (Wet NS)	F (NS)	F (Wet)	F
Nitrogen (NO3-N+NO2-N)	F	F	F (NS)		F	F (NS)	F	F
<b>Category 2A:</b> 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements with exceedances in the past 5 years.								
2,3,7,8-TCDD (Dioxin)							Dry	
Bis(2-ethylhexyl)Phthalate							Dry	
Chlorodibromomethane							Dry	
Chloride								Dry
Copper Total				Dry				
Cyanide			303 Dry (NS)					
<b>Category 2B:</b> 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements that are not a “pollutant” <sup>1</sup> (i.e., toxicity) with exceedances in the past 5 years.								
Benthic-Macroinvertebrates	303				303			
Dissolved Oxygen				Dry				
pH				Dry				
<b>Category 2C:</b> 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements but have not exceeded in past 5 years.								
Bis(2-ethylhexyl)Phthalate			Dry /Wet (NS)		Wet (NS)	Dry/Wet (NS)	Wet (NS)	
Selenium Total							Delist	
Chlorine (Total)							Wet	
Cyanide							Delist	
<b>Category 3A:</b> All other WBPCs with exceedances in the past 5 years.								
Benzo(a)Pyrene				Dry			Dry	
Benzo(b)Fluoranthene							Dry	
Benzo(k)Fluoranthene				Dry				

Constituents	Compton Creek	Rio Hondo			Arroyo Seco	Verdugo Wash	Burbank Western Channel	Tujunga Wash
		1	2	3				
Chrysene				Dry				
Diazinon				Dry				
Dibenzo(a,h)Anthracene				Dry				
Indeno(1,2,3-cd)Pyrene				Dry				
Chlorpyrifos	Dry							
Mercury Total							Dry	
Zinc Total								Dry
Chloride	Dry						Dry	
TDS							Dry	Dry
Chlorine (Total)							Dry	
<b>Category 3B:</b> All other WBPCs that are not a “pollutant” <sup>1</sup> (i.e., toxicity) with exceedances in the past 5 years.								
pH			Dry (NS)/Wet (NS)				Dry/Wet (NS)	
<b>Category 3C:</b> All other WBPCs that have exceeded in the past 10 years, but not in past 5 years.								
beta-BHC							Dry	
Bis(2-ethylhexyl)Phthalate					Dry (NS)			
Diazinon			Wet (NS)					
Heptachlor							Dry	
Cadmium Total							Dry	Dry
Copper Dissolved			Dry (NS)					
Copper Total			Dry (NS)					
Lead Total			Dry (NS)					
Mercury Total	Dry/Wet (NS)			Dry	Wet (NS)	Wet (NS)	Wet (NS)	Dry
Thallium Total							Dry	
Zinc Total						Dry (NS)	Dry	
Chloride				Dry				

1 – While pollutants may be contributing to the impairment, it currently is not possible to identify the specific pollutant/stressor.

I/F = Denotes where the Permit includes interim (I) and/or final (F) effluent and/or receiving water limitations.

NS = Not sampled

Dry/Wet = Weather condition was based on the designation provided by the sampling program. If no information was provided by the sampling program, flow records were reviewed and where flow was greater than 500 cubic feet per second (cfs) identified in the LA River Metals TMDL as a wet weather event, the sample was identified as a wet weather sample.

303 = WBPC on the 2010 303(d) List where the listing was confirmed during data analysis.

Delist = WBPC on the 2010 303(d) List that meets the delisting requirements.

**Table 5. Summary of Upper Los Angeles River WMA Water Body-Pollutant Categories for LA River Reaches 5 and 6 Tributaries**

Constituents	Bell Creek	Bull Creek	Caballero Creek	Aliso Canyon Wash	McCoy Canyon	Dry Canyon
<b>Category 1A:</b> WBPCs with past due or current Permit term TMDL deadlines with exceedances in the past 5 years.						
Trash	I/F	I/F	I/F	I/F	I/F	I/F
<b>Category 1B:</b> WBPCs with TMDL deadlines beyond the Permit term with exceedances in the past 5 years.						
<i>E. Coli</i>	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)	I/F (Wet/Dry)
<b>Category 1C:</b> WBPCs addressed in USEPA TMDL without a Regional Board Adopted Implementation Plan. (WLA = Waste Load Allocation in USEPA TMDL)						
None						
<b>Category 1D:</b> WBPCs with past due or current Permit term TMDL deadlines but have not exceeded in past 5 years.						
Cadmium Total	I (Wet NS)	I (Wet NS)	I (Wet NS)	I (Wet NS)	I (Wet NS)	I (Wet NS)
Copper Dissolved	I (NS)	I (Dry/Wet NS)	I (NS)	I (Dry)/(Wet NS)	I (NS)	I (NS)
Copper Total	I (NS)	I (Dry/Wet NS)	I (NS)	I (Dry)/(Wet NS)	I (NS)	I (NS)
Lead Dissolved	I (NS)	I (Dry/Wet NS)	I (NS)	I (Dry/Wet NS)	I (NS)	I (NS)
Lead Total	I (NS)	I (Dry/Wet NS)	I (NS)	I (Dry/Wet NS)	I (NS)	I (NS)
Zinc Dissolved	I (Wet NS)	I (Dry/Wet NS)	I (Wet NS)	I (Wet NS)	I (Wet NS)	I (Wet NS)
Zinc Total	I (Wet NS)	I (Dry)/(Wet NS)	I (Wet NS)	I (Wet NS)	I (Wet NS)	I (Wet NS)
Ammonia as N	F (NS)	F (Dry/Wet NS)	F (NS)	F (Dry/Wet NS)	F (NS)	F (NS)
Nitrate as N	F (NS)	F	F (NS)	F	F (NS)	F (NS)
Nitrite as N	F (NS)	F	F (NS)	F	F (NS)	F (NS)
Nitrogen (NO3-N+NO2-N)	F (NS)	F	F (NS)	F	F (NS)	F (NS)
<b>Category 2A:</b> 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements with exceedances in the past 5 years.						
None						
<b>Category 2B:</b> 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements that are not a “pollutant” <sup>1</sup> (i.e., toxicity) with exceedances in the past 5 years.						
None						
<b>Category 2C:</b> 303(d) Listed WBPCs or WBPCs that meet 303(d) Listing requirements but have not exceeded in past 5 years.						
Bis(2-ethylhexyl)Phthalate		Dry (NS)/Wet		Dry (NS)/Wet		
Selenium Total			Dry (NS)	Dry		
<b>Category 3A:</b> All other WBPCs with exceedances in the past 5 years.						
Sulfate				Dry		
TDS				Dry		

Constituents	Bell Creek	Bull Creek	Caballero Creek	Aliso Canyon Wash	McCoy Canyon	Dry Canyon
<b>Category 3B:</b> All other WBPCs that are not a “pollutant” <sup>1</sup> (i.e., toxicity) with exceedances in the past 5 years.						
None						
<b>Category 3C:</b> All other WBPCs that have exceeded in the past 10 years, but not in past 5 years.						
Diazinon				Wet (NS)		
Cadmium Total			Dry (NS)			
Copper Total			Dry (NS)			
Lead Total			Dry (NS)			
Mercury Total			Dry (NS)			
Nickel Total			Dry (NS)			
Zinc Total			Dry (NS)			
Cyanide		Wet (NS)		Wet (NS)		

1 – While pollutants may be contributing to the impairment, it currently is not possible to identify the specific pollutant/stressor.

I/F = Denotes where the Permit includes interim (I) and/or final (F) effluent and/or receiving water limitations.

NS = Not sampled

Dry/Wet = Weather condition was based on the designation provided by the sampling program. If no information was provided by the sampling program, flow records were reviewed and where flow was greater than 500 cubic feet per second (cfs) identified in the LA River Metals TMDL as a wet weather event, the sample was identified as a wet weather sample.

303 = WBPC on the 2010 303(d) List where the listing was confirmed during data analysis.

Delist = WBPC on the 2010 303(d) List that meets the delisting requirements.

**Table 6. Summary of Upper Los Angeles River WMA Water Body-Pollutant Categories Associated with Lakes**

Constituent	Lake		
	Legg	Calabasas	Echo Park
<b>Category 1A:</b> WBPCs with past due or current Permit term TMDL deadlines with exceedances in the past 5 years.			
Trash	I/F	--	--
<b>Category 1C:</b> WBPCs addressed in USEPA TMDL without a Regional Board Adopted Implementation Plan.			
Total-P	X	X	X
Total-N	X	X	X
Trash	--	--	X
PCBs (water and sediment)	--	--	X
Chlordane (water and sediment)	--	--	X
Dieldrin (water and sediment)	--	--	X

I/F – Denotes where the Permit includes interim (I) and/or final (F) limitations.  
 Note that unless explicitly stated as sediment, constituents are associated with the water column.

## Source Assessment (Step 3)

Following classification of WPBCs into Category 1, 2 and 3, the next step in the prioritization process is to conduct a source assessment. The Permit requires that a source assessment be conducted to identify potential sources within the watershed for the WPBCs in Categories 1-3, utilizing existing information. The source assessment also evaluates whether pollutants likely originate from the MS4 versus other sources. Pollutant exceedances may come from point or non-point sources, described below. Often, however, non-point source discharges may flow through the MS4 and thus become associated with the MS4 and subject to the MS4 Permit requirements.

### Permit Requirements

The specific requirements in the Permit for the source assessment are as follows (per section VI.C.5.a.iii, page 59):

“(1) Permittees shall identify known and suspected storm water and non-storm water pollutant sources in discharges to the MS4 and from the MS4 to receiving waters and any other stressors related to MS4 discharges causing or contributing to the Water Quality Priorities. The identification of known and suspected sources of the highest Water Quality Priorities shall consider the following:

(a) Review of available data, including but not limited to:

- (i) Findings from the Permittees’ Illicit Connections and Illicit Discharge Elimination Programs;
- (ii) Findings from the Permittees’ Industrial/Commercial Facilities Programs;
- (iii) Findings from the Permittees’ Development Construction Programs;
- (iv) Findings from the Permittees’ Public Agency Activities Programs;
- (v) TMDL source investigations;
- (vi) Watershed model results;
- (vii) Findings from the Permittees’ monitoring programs, including but not limited to TMDL compliance monitoring and receiving water monitoring; and
- (viii) Any other pertinent data, information, or studies related to pollutant sources and conditions that contribute to the highest Water Quality Priorities.

(b) Locations of the Permittees’ MS4s, including, at a minimum, all MS4 major outfalls and major structural controls for storm water and non-storm water that discharge to receiving waters.

(c) Other known and suspected sources of pollutants in non-storm water or storm water discharges from the MS4 to receiving waters within the watershed.”

The findings from items VI.C.5.a.iii (1)(a)(i)-(vii) and item VI.C.5.a.iii (1)(c) of the Permit that are pertinent to the Category 1, 2 and 3 pollutants identified in **Table 3**, **Table 4**, **Table 5**, and **Table 6** are summarized below.

Item *VI.C.5.a.iii (1)(b)* will be addressed by the CIMP, as it is included in the discussion of the MS4 database requirements of Part VII.A of Attachment D of the Permit (Monitoring and Reporting Program).

## Point sources

Point sources are discrete conveyances that can carry pollutants to surface waters. Discharges from point sources are regulated by both federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) permits and California's Porter-Cologne Water Quality Control Act Waste Discharge Requirements (WDRs). Combined NPDES/WDR permits are issued for discharges to surface waters. Urban runoff in the ULAR WMA is regulated as a point source under two municipal stormwater NPDES permits that cover MS4 discharges – one for LA County and one for Caltrans.

There are many non-MS4 point sources in the watershed including municipal wastewater from publicly owned treatment works, stormwater from industrial facilities, non-process industrial wastewater, and other non-stormwater and non-wastewater discharges in the watershed including dewatering from construction projects, potable supply wells discharges, groundwater cleanup sites and landfills. The non-MS4 NPDES permits in the ULAR watershed include the general construction stormwater permits, general industrial stormwater permits, and general NPDES permits identified in **Table 7**. **Table 7** also includes the type and number of NPDES permits in the entire LAR watershed.

The three “other major industrial” NPDES discharges identified in **Table 7** include:

- Pacific Terminals, LLC, Dominguez Hills Tank Farm: Hydrostatic test water
- The Boeing Company, Santa Susana Field Lab: Stormwater mixed with industrial wastewater
- Metropolitan Transit Authority, Eastside Light Rail Transit Project: Treated wastewater from underground construction activities

In addition to these three major industrial discharges, NPDES permits identified in **Table 7** include stormwater and treated wastewater for petrochemical facilities, paper production, glass manufacturing, metal fabrication, and water treatment facilities.

The significance of these permitted discharges with respect to their potential contributions of pollutants to the watershed is a function of the volume of flow associated with their discharges and their water quality characteristics. The contributions of these discharges to dry weather runoff or wet weather runoff also varies. For example, discharges governed by General Construction and General Industrial stormwater permits can send contaminated wet weather runoff directly into the LA River and its tributaries, as well as into the MS4. However, during dry weather, their potential for pollutant contribution is expected to be fairly low. A broad assessment of the relative potential for pollutant contribution and runoff condition (wet weather or dry weather) of the discharges typically associated with each of the permit types is also provided in **Table 7**.

**Table 7. NPDES Permits in the Los Angeles River Watershed<sup>1</sup>**

Type of NPDES Permit	Number of Permits	Potential for Pollutant Contribution
Publicly Owned Treatment Works	6	High (dry weather)
Municipal Stormwater	3	High (wet/dry weather)
Industrial Stormwater	1,307	High (wet weather)
Construction Stormwater	204	High (wet weather)
Other Major Industrial NPDES Discharges	3	High (wet weather)
Minor NPDES Discharges	15	Medium (wet/dry weather)
General NPDES Permits:		
Construction and Project Dewatering	35	Medium (wet weather)
Petroleum Fuel Cleanup Sites	7	Medium (dry weather)
VOCs Cleanup Sites	6	Medium (dry weather)
Hydrostatic Test Water	8	Low (wet/dry weather)
Non-Process Wastewater	9	Medium (dry weather)
Potable Water	25	Low (wet/dry weather)
<b>Total</b>	<b>1,628</b>	

1 – The number of permits listed are from the entire LA River watershed. A subset of these apply to the ULAR watershed.

Source: LAR Metals TMDL, 2005

## Non-point sources

Pollutants from non-point sources are conveyed to surface waters in a diffuse manner, i.e., not directly from point source conveyances. However, when contaminants from such non-point sources reach the MS4 system, they often become regulated through the MS4 point source NPDES permits. Non-point sources in the ULAR watershed include:

- Onsite Wastewater Treatment Systems (OWTS, a.k.a. septic systems)
- Runoff from the National and State forests outside of the MS4s into the headwaters of many tributaries
- Sources that occur within the channels of the LA River and tributaries (“in-channel sources”) such as:
  - Groundwater discharges
  - Anthropogenic sources
  - Pet Waste
  - Sanitary sewer leaks/spills
  - Illicit/illegal discharges
  - Wildlife and birds
  - Suspension and/or regrowth of sediment-associated pollutants

## Pollutants, Source Assessment and MS4 Linkage

Based on the source assessment and pollutant linkages to the MS4, the Water Quality Priorities were generated as summarized in **Table 8**. A source assessment discussion of the potential sources of these Category 1, 2 and 3 pollutants identified for the ULAR watershed is provided in **Appendix 3.D**, and the potential linkage of the MS4 system as a significant contributor of these pollutants to the water quality exceedances is indicated in **Table 8**. Unless a pollutant is attributed to a non-MS4 source, such as a water reclamation plant, the EWMP will likely need to identify control measures to address the Water Quality Priorities.

If the findings of the source assessment indicate that there is likely a source other than the MS4 to which the water quality exceedances can be attributed, then the MS4 linkage is noted as “low”. Where TMDLs that have identified waste load allocations for the MS4 exist (Category 1 pollutants), the linkage is “high”. Where there is not a clear determination of positive or negative attribution to the MS4, the linkage is rated as “medium” and a conservative assumption of attribution has been assumed for the purposes of the EWMP.

**Table 8. Water Quality Priorities for ULAR WMA**

Category	Pollutant	Water Body	MS4 Linkage
Category 1	<i>E. Coli</i>	LAR Reaches 1 through 6	High
	Sediment DDTs, PCBs, PAHs	LAR Reach 1	High
	Cadmium, Copper, Lead, Zinc	LAR Reaches 1 through 6 and tributaries	High
	Sediment Copper, Lead, Zinc	LAR Reach 1	High
	Ammonia-N, Nitrate- N, Nitrite-N, Nitrate-N + Nitrite-N	LAR Reaches 1 through 6 and tributaries	Low
	Trash	LAR Reaches 1 through 6 and tributaries	High
Category 2	2,3,7,8-TCDD (Dioxin)	LAR Reach 3 (Below LAG) and Burbank Western Channel	Medium
	Bis(2-ethylhexyl)Phthalate	LAR Reach 1, Rio Hondo Reach 2, Arroyo Seco, Verdugo Wash, Burbank Western Channel, Bull Creek and Aliso Canyon Wash	Low
	Diazinon	LAR Reach 1 <sup>1</sup>	Medium
	Chlorodibromomethane	Burbank Western Channel	Low
	Mercury Total	LAR Reaches 1 through 4 and 6	Medium
	Selenium Total	LAR Reaches 5 and 6, Caballero Creek, Aliso Canyon Wash and Burbank Western Channel <sup>1</sup>	Low
	Thallium Total	LAR Reach 6	Low
	Benthic-Macroinvertebrates	Compton Creek and Arroyo Seco Reach 1	Medium
	Chlorine (Total)	Burbank Western Channel	Low
	Cyanide	LAR Reach 1, Rio Hondo River Reach 2 and Burbank Western Channel <sup>1</sup>	Medium
	pH	LAR Reaches 1 and 2	Medium

Category	Pollutant	Water Body	MS4 Linkage
	Sulfate, TDS	LAR Reaches 5 and 6	Low
	Chloride	LAR Reaches 5 and 6, Tujunga Wash	Low
	Oil <sup>1</sup>	LAR Reaches 2 and 5	Low
<b>Category 3</b>	2,3,7,8-TCDD (Dioxin)	LAR Reaches 3 and 6	High
	4,4'-DDD	LAR Reach 5	High
	Chlorpyrifos	Compton Creek	High
	Heptachlor	LAR Reaches 3 and 5	High
	Benzo(b)Fluoranthene	Burbank Western Channel	High
	beta-BHC	Burbank Western Channel	High
	Dibenzo(a,h)Anthracene	Burbank Western Channel	High
	Diazinon	LAR Reaches 4 and 5	Medium
	Dichlorobromomethane	LA River Reach 3 (below LA Glendale WRP)	Low
	Copper	Rio Hondo Reach 2 (Dissolved and Total) and Caballero Creek (Total)	High
	Lead Total	Rio Hondo Reach 2 and Caballero Creek	High
	Nickel Total	LAR Reaches 3 and 5, and Caballero Creek	High
	Selenium Total	LAR Reaches 3 and 4	Low
	Thallium Total	LAR Reaches 1 through 4, and Burbank Western Channel	Low
	Zinc Total	LAR Reach 1	High
	Chlorine (Total)	LAR Reaches 3 through 6, and Burbank Western Channel	Low
	Chloride	Compton Creek and Burbank Western Channel	Low
	Sulfate	LAR Reaches 3 and 4, and Aliso Canyon Wash	Low
TDS	LAR Reach 4, Burbank Western Channel, Tujunga Wash and Aliso Canyon Wash	Low	

1 – Could be delisted

## Prioritization (Step 4)

The Permit outlines a prioritization process that defines how pollutants in the various categories will be considered in scheduling. The factors to consider in the scheduling include the following based on the compliance approaches outlined in the Permit:

- Regional Board-adopted TMDLs with past due interim and/or final limits and those with interim and/or final limits within the Permit term (schedule according to TMDL schedule)

- Regional Board-adopted TMDLs with interim and/or final limits outside the Permit term (schedule according to TMDL schedule)
- Other receiving water exceedances.

USEPA TMDLs, 303(d) listings without a TMDL adopted, and other exceedances of RWLs do not contain milestones or an implementation schedule. As such, these Water Quality Priorities do not have a defined schedule for implementation. To address this issue for USEPA TMDLs, Part VI.E.3.c of the Permit (page 145) allows MS4 Permittees to propose a schedule in the EWMP. To address this issue for exceedances of RWLs associated with WBPCs not addressed through a TMDL (i.e., 303(d) listings and other exceedances of RWLs), Part VI.C.2.a of the Permit (page 49) specifies how interim numeric milestones and compliance schedules must be set for each WBPC based on its placement in one of the following groups that were developed as part of the EWMP:

- **Group 1:** Pollutants that are in the same class<sup>1</sup> as those addressed in a TMDL in the watershed and for which the water body is identified as impaired on the 303(d) List as of December 28, 2012;
- **Group 2:** Pollutants that are not in the same class as those addressed in a TMDL for the watershed, but for which the water body is identified as impaired on the 303(d) List as of December 28, 2012;
- **Group 3:** Pollutants for which there are exceedances of RWLs, but for which the water body is not identified as impaired on the 303(d) List as of December 28, 2012; or
- **USEPA TMDL:** Pollutants addressed by USEPA TMDL without an implementation plan/schedule.

As such, the process for setting numeric milestones and compliance schedules for the remaining water quality priorities is dependent upon whether or not the water body is identified as impaired on the 303(d) list as of December 28, 2012 and if the pollutants are considered to be in the same class as those pollutants addressed in a TMDL for the watershed. Based on the MS4 Permit Group 1 definition of class, two findings must be made to determine whether or not a pollutant is in the same class as a TMDL pollutant:

- The pollutant must have similar fate and transport mechanisms (e.g., sediment particle associated), and thus, can be addressed via the same types of control measures. These pollutants are in the same “BMP class” as other TMDL pollutants.
- The pollutant is in the same “scheduling class”, that is, it can be addressed within the same timeline already established in an existing TMDL. To be considered in the same scheduling class, the water quality priority must be present in a water body already being addressed by the TMDL

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<sup>1</sup> As defined in Part VI.C.2.a.i of the Permit (page 49), “Pollutants are considered in a similar class if they have similar fate and transport mechanisms, can be addressed via the same types of control measures, and within the same timeline already contemplated as part of the Watershed Management Program for the TMDL.” Due to the need to define the control measures and timelines for addressing the various pollutants per the permit requirements, “classes” are preliminary in nature and may be refined as part of EWMP development.

or upstream of a water body already being addressed by the TMDL and can be addressed on the same time frame as the TMDL pollutant.

To define whether or not a pollutant can be addressed within the same time frame as a TMDL pollutant, it is necessary to consider whether the reductions that will be achieved by the control measures implemented for the TMDL pollutant are expected to be sufficient to achieve the needed reductions for the other pollutants. The “limiting pollutant” analysis of the RAA (**Section 5**) was used to evaluate whether control measures implemented for the Regional Board adopted TMDLs will be sufficient to meet the RWLs for WBPCs that have both the same BMP and scheduling class as the pollutants addressed by each respective Regional Board adopted TMDL. If the limiting pollutant is a TMDL pollutant, then other pollutants in the same class would be expected to be achieved by the final compliance date of the TMDL for the limiting pollutant. If the limiting pollutant is *not* a TMDL pollutant, then the limiting pollutant, and all other pollutants that are more limiting than the TMDL pollutant, do not have the ability to be considered on the same timeframe as those addressed in a TMDL.

In order to be in the same class as a TMDL pollutant, the WBPC must be in both the same “BMP class” and the same “scheduling class” as the TMDL pollutant. An evaluation of whether or not the WBPCs are in the same class as pollutants addressed in an existing TMDL is presented in **Table 9**. All WBPCs classified as Category 1C, 2, and 3 are captured in **Table 9**; except for WBPCs for which the MS4 has been determined to not be a source that may be causing or contributing to observed exceedances or WBPCs are reflective of a condition of pollution (not necessarily a result of MS4 discharge). Additionally, given that Part VI.E.3.c of the Permit (page 145) specifies how interim numeric milestones and compliance schedules must be set for USEPA TMDL WBPCs, USEPA TMDL WBPCs are separately classified.

**Table 9. Initial Classification for 303(d) Listings and Other Exceedances of RWLs Applicable to the Group (RB = Regional Board)**

Constituent	Water Body	Category	Relevant RB TMDL	RB TMDL in Watershed with Same BMP Class <sup>1</sup> ?	RB TMDL in Watershed with Same Scheduling Class?	Classification
Cyanide	LAR Reach 1	2A	LAR Metals TMDL	Yes	Yes	Group 1
	Rio Hondo Reach 2	2A	LAR Metals TMDL	Yes	Yes	Group 1
	Burbank Western Channel	2C	LAR Metals TMDL	Yes	Yes	Group 1
Zinc <sup>2</sup>	LAR Reach 1	3A	LAR Metals TMDL	Yes	Yes	Group 1
Diazinon	LAR Reach 1	2C	Harbors Toxics TMDL	Yes	Yes	Group 1
Oil	LAR Reach 2	2C	None	<b>No</b>	<b>No</b>	Group 2
	LAR Reach 5	2C	None	<b>No</b>	<b>No</b>	Group 2
2,3,7,8-TCDD (Dioxin)	LAR Reach 3	2A (Dry)/ 3A (Wet)	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 6	3C				
	Burbank Western Channel	2A				
Bis(2-ethylhexyl)Phthalate	LAR Reach 1	2A (Dry)/ 3A (Wet)	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 3	3C				
	LAR Reach 5	3C				
	Rio Hondo Reach 2	2C				
	Arroyo Seco	3C (Dry)/ 2C (Wet)				
	Verdugo Wash	2C				
	Burbank Western Channel	2A (Dry)/ 2C (Wet)				
	Bull Creek	2C				
	Aliso Canyon Wash	2C				

Constituent	Water Body	Category	Relevant RB TMDL	RB TMDL in Watershed with Same BMP Class <sup>1</sup> ?	RB TMDL in Watershed with Same Scheduling Class?	Classification
Diazinon	LAR Reach 4	3A	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 5	2A				
	Rio Hondo Reach 2	3C				
	Rio Hondo Reach 3	3A				
	Aliso Canyon Wash	3C				
Chloride	LAR Reach 5	2A	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 6	2A				
	Compton Creek	3A				
	Rio Hondo Reach 3	3C				
	Burbank Western Channel	3A				
	Tujunga Wash	2A				
Sulfate	LAR Reach 3	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 4	3A				
	LAR Reach 5	2A				
	LAR Reach 6	2A				
	Aliso Canyon Wash	3A				
TDS	LAR Reach 4	3A	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 5	2A				
	LAR Reach 6	2C				
	Burbank Western Channel	3A				
	Tujunga Wash	3A				
	Aliso Canyon Wash	3A				

Constituent	Water Body	Category	Relevant RB TMDL	RB TMDL in Watershed with Same BMP Class <sup>1</sup> ?	RB TMDL in Watershed with Same Scheduling Class?	Classification
Mercury Total	LAR Reach 1	2C (Dry)/ 3C (Wet)	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 2	2C				
	LAR Reach 3	2C (Dry)/ 3C (Wet)				
	LAR Reach 4	2C				
	LAR Reach 5	3C				
	LAR Reach 6	2C (Dry)/ 3C (Wet)				
	Compton Creek	3C				
	Rio Hondo Reach 3	3C				
	Arroyo Seco	3C				
	Verdugo Wash	3C				
	Burbank Western Channel	3A (Dry)/ 3C (Wet)				
	Tujung Wash	3C				
Caballero Creek	3C					
Thallium Total	LAR Reach 1	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 2	3C				
	LAR Reach 3	3C				
	LAR Reach 4	3C				
	LAR Reach 6	2C				
	Burbank Western Channel	3C				

Constituent	Water Body	Category	Relevant RB TMDL	RB TMDL in Watershed with Same BMP Class <sup>1</sup> ?	RB TMDL in Watershed with Same Scheduling Class?	Classification
Dibenzo(a,h)Anthracene	LAR Reach 3	3C		Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012		Group 3
	LAR Reach 5	3A				
	Rio Hondo Reach 3	3A				
Indeno(1,2,3-cd)Pyrene	LAR Reach 3	3C		Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012		Group 3
	LAR Reach 5	3A				
	Rio Hondo Reach 3	3A				
4,4-DDD	LAR Reach 5	3A		Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012		Group 3
4,4-DDE	LAR Reach 5	3A		Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012		Group 3
Nickel Total	LAR Reach 3	3C		Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012		Group 3
	LAR Reach 5	3A				
	Caballero Creek	3C				
Zinc <sup>2</sup>	LAR Reach 3	3A		Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012		Group 3
	LAR Reach 4	3C				
	Verdugo Wash	3C				
	Burbank Western Channel	3C				
	Tujunga Wash	3A				
	Caballero Creek	3C				

Constituent	Water Body	Category	Relevant RB TMDL	RB TMDL in Watershed with Same BMP Class <sup>1</sup> ?	RB TMDL in Watershed with Same Scheduling Class?	Classification
Cyanide	LAR Reach 3	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 4	3A				
	LAR Reach 5	3A				
	LAR Reach 6	3C				
	Bull Creek	3C				
	Aliso Canyon Wash	3C				
Benzo(a)Anthracene	LAR Reach 3	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
Chrysene	LAR Reach 3	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 4	3C				
	LAR Reach 6	3C				
	Rio Hondo Reach 3	3A				
Heptachlor	LAR Reach 5	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	Burbank Western Channel	3C				
Chlorine (Total)	LAR Reach 3	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	LAR Reach 4	3C				
	LAR Reach 5	3C				
	LAR Reach 6	3C				
	Burbank Western Channel	3A (Dry)/ 2C (Wet)				
Copper <sup>3</sup>	Rio Hondo Reach 2	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	Rio Hondo Reach 3	2A				
	Caballero Creek	3C				

Constituent	Water Body	Category	Relevant RB TMDL	RB TMDL in Watershed with Same BMP Class <sup>1</sup> ?	RB TMDL in Watershed with Same Scheduling Class?	Classification
Benzo(a)Pyrene	Rio Hondo Reach 3	3A	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	Burbank Western Channel	3A				
Benzo(b)Fluoranthene	Burbank Western Channel	3A	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
Benzo(k)Fluoranthene	Rio Hondo Reach 3	3A	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
Chlorpyrifos	Compton Creek	3A	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
beta-BHC	Burbank Western Channel	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
Cadmium	Burbank Western Channel	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	Tujunga Wash	3C				
	Caballero Creek	3C				
Lead <sup>4</sup>	Rio Hondo Reach 2	3C	Exceedances of RWLs have been observed, but the water body is not identified as impaired on the 303(d) List as of December 28, 2012			Group 3
	Caballero Creek	3C				
Total Phosphorus	Legg Lake	1C	Addressed in USEPA TMDL without a Regional Board Adopted Implementation Plan			USEPA TMDL
	Lake Calabasas	1C				
	Echo Park Lake	1C				
Total Nitrogen	Legg Lake	1C	Addressed in USEPA TMDL without a Regional Board Adopted Implementation Plan			USEPA TMDL
	Lake Calabasas	1C				
	Echo Park Lake	1C				
Trash	Echo Park Lake	1C	Addressed in USEPA TMDL without a Regional Board Adopted Implementation Plan			USEPA TMDL
PCBs (water and sediment)	Echo Park Lake	1C	Addressed in USEPA TMDL without a Regional Board Adopted Implementation Plan			USEPA TMDL

Constituent	Water Body	Category	Relevant RB TMDL	RB TMDL in Watershed with Same BMP Class <sup>1</sup> ?	RB TMDL in Watershed with Same Scheduling Class?	Classification
Chlordane (water and sediment)	Echo Park Lake	1C	Addressed in USEPA TMDL without a Regional Board Adopted Implementation Plan			USEPA TMDL
Dieldrin (water and sediment)	Echo Park Lake	1C	Addressed in USEPA TMDL without a Regional Board Adopted Implementation Plan			USEPA TMDL
Dichlorobromomethane	LAR Reach 3	3C	MS4 determined to not be a source that may be causing or contributing to observed exceedances (water reclamation plant effluent is identified source)			
Chlorodibromomethane	Burbank Western Channel	2A				
Selenium	LAR Reach 1	3A	MS4 determined to not be a source that may be causing or contributing to observed exceedances. As noted in the LAR Metals TMDL, originates from natural sources			
	LAR Reach 3	3C				
	LAR Reach 4	3C				
	LAR Reach 5	2A				
	LAR Reach 6	2A				
	Burbank Western Channel	2C				
	Caballero Creek	2C				
Aliso Canyon Wash	2C					
pH	LAR Reach 1	2B (Dry/ 3B (Wet)	Reflective of a condition of pollution, not necessarily a result of MS4 discharge			
	LAR Reach 2	2B (Dry/ 3B (Wet)				
	LAR Reach 3	3B				
	LAR Reach 5	3B				
	Rio Hondo Reach 2	3B				
	Rio Hondo Reach 3	2B				
	Burbank Western Channel	3B				

Constituent	Water Body	Category	Relevant RB TMDL	RB TMDL in Watershed with Same BMP Class <sup>1</sup> ?	RB TMDL in Watershed with Same Scheduling Class?	Classification
Dissolved Oxygen	LAR Reach 1	3B				Reflective of a condition of pollution, not necessarily a result of MS4 discharge
	LAR Reach 3	3B				
	LAR Reach 5	3B				
	LAR Reach 6	3B				
	Rio Hondo Reach 3	2B				
Benthic-Macroinvertebrates	Compton Creek	2B				Reflective of a condition of pollution, not necessarily a result of MS4 discharge
	Arroyo Seco	2B				

1 – Based on fate and transport mechanisms during wet weather.

2 – The LAR Metals TMDL states that “Dry-weather impairments related to zinc only occur in Rio Hondo Reach 1”. As a result, dry weather impairments related to zinc in other water bodies are not addressed by the Regional Board adopted TMDL.

3 – The LAR Metals TMDL does not address dry weather impairments related to copper or lead in Rio Hondo Reach 2, Rio Hondo Reach 3, or Caballero Creek.

## Approach to Identifying Milestones and Schedules

Based on the information presented in the previous section, the following approach to identifying milestones and schedules for USEPA TMDLs, 303(d) listings without a TMDL, and RWL exceedances was utilized.

1. For USEPA TMDLs, the milestones and schedules are consistent with Regional Board adopted TMDLs for similar pollutants within and outside of the ULAR watershed.
2. For Group 1 pollutants, the milestones and schedules are consistent with the TMDL milestones and schedules for the Regional Board adopted TMDL which shares the same class as the Group 1 pollutant.
3. For Group 2 pollutants, the schedule contains annual specific actions or milestones. Milestones are consistent with the TMDL milestones and schedules for the relevant TMDL. Specific actions are based on information generated from the RAA analysis, as presented in Section 7.
4. For Group 3 pollutants, the schedule contains specific actions and/or milestones. Milestones are consistent with the TMDL milestones and schedules for the relevant TMDL. Specific actions are based on the information generated from the RAA analysis and assessment of monitoring data, as presented in Section 7.

In many instances, the water quality priority analysis may indicate that either (1) a WBPC on the 2010 303(d) List meets the delisting requirements, (2) MS4 discharges are not considered to be a source, or (3) the WBPC is a condition rather than a “pollutant” with the potential to be discharged from the MS4. As a result, the aforementioned approach may not be applied to all WBPCs. Additionally, development of milestones is more complex and requires consideration of the Permit compliance mechanisms. This section describes a general approach to setting milestones for all groups and provides details specific to the milestones and scheduling for each group.

### General Approach to Setting Milestones

The Permit provides four options for complying with TMDL requirements and RWLs:

1. Monitoring data demonstrating water quality objectives are being met in the receiving waters at the compliance monitoring locations outlined in the CIMP.
2. Monitoring data demonstrates water quality objectives are being met at the outfall monitoring locations specified in the CIMP.
3. Monitoring and screening data demonstrates that no discharges are occurring from MS4 outfalls.
4. For interim TMDL requirements and RWL exceedances, implementing an approved EWMP.

Based on these compliance mechanisms, four different types of milestones were considered as appropriate for the WBPCs. To avoid a situation where other sources could impact the ability of the MS4 to demonstrate compliance (such as in the receiving water) or where water quality outcomes progress either faster or slower than projected by the modeling, demonstration of any of the four different types of milestones will result in compliance. Examples of types of milestones that were considered are shown in **Table 10**.

**Table 10. Examples of Milestone Types Considered**

Compliance Path	Interim Milestone Options	Final Milestone Options
RWL	% reduction in concentrations	Meeting water quality objectives
	% reduction in loads	Demonstration that MS4s not causing or contributing to exceedance
WQBEL	% reduction in concentrations or loads	Meeting required percent reductions from outfalls
	Increased number of outfalls meeting WQBELs	Meeting WQBELs at all monitored outfalls
No discharge	Specified reduction in number of outfalls with discharge	No discharge from screened outfalls
	Reduced amount of flow from outfalls with discharge	
EWMP (BMP-based)	% MS4 area treated	Implementation of EWMP program
	Implementation of specified # of BMPs by certain date	

## Detailed Approach to Setting Milestones

Details on the approach and justification for developing milestones and schedules for USEPA TMDL pollutants and Group 1, 2 and 3 pollutants is provided in the following subsections.

### USEPA TMDLs

The USEPA Lakes TMDLs established WLAs for total phosphorus and total nitrogen within Legg Lake, Lake Calabasas, and Echo Park Lake. However, the existing loading rates used to establish the WLAs for total phosphorus and total nitrogen were not established using data collected near inflows to the lake, but instead estimated. As such, if the assumptions used to establish existing loading rates underestimated the existing loading rates, a reduction in loading would be required. To determine the accuracy of the existing loading rates, the results of monitoring conducted will be evaluated three and a half years after TMDL adoption (September 2015). After the evaluation of the monitoring results, revised existing loading rates will be established.

The Regional Board adopted TMDL most similar to the USEPA Lakes TMDLs established to address nutrient-related impairments in Legg Lake, Lake Calabasas, and Echo Park Lake is the Machado Lake Nutrient TMDL. As a result, the compliance schedule used in the Machado Lake Nutrient TMDL is used as the foundation to establish the compliance schedule for the USEPA Lakes TMDLs established to address nutrient-related impairments in Legg Lake, Lake Calabasas, and Echo Park Lake. Similarly, the Regional Board adopted TMDL most similar to the USEPA Lakes TMDLs established to address organochlorine pesticides and PCB-related impairments in Echo Park Lake is the Machado Lake Toxics TMDL. As a result, the compliance schedule used in the Machado Lake Toxics TMDL will be used as the foundation to establish the compliance schedule for the USEPA Lakes TMDLs established to address organochlorine pesticides and PCB-related impairments in Echo Park Lake. The Machado Lake Nutrient TMDL and Machado Lake Toxics TMDL do not include interim or final WQBELs and/or RWLs with compliance deadlines during the Permit term. As such, interim milestones and dates for their achievement have been established during the Permit including a 31% milestone that was established for the Metals TMDL.

The implementation actions which will be taken to address the WBPCs included in the LAR Trash TMDL will also address the WBPCs that are addressed by USEPA Lakes TMDL established to address trash-related impairment in Echo Park Lake. As a result, the schedule for trash in Echo Park Lake is consistent with the LAR Trash TMDL, which already includes interim requirements and numeric milestones and the date(s) for their achievement.

### Group 1: 303(d) Listed WBPCs in the Same Class as a Regional Board TMDL

For the ULAR WMA, the Group 1 WBPCs that are in the same class as Regional Board adopted TMDLs are summarized in **Table 11**; therefore, the Permit requires that these Group 1 WBPCs be assigned interim and final numeric milestones on a schedule which coincides with the current interim and final milestone dates for the applicable Regional Board adopted TMDL. However, the water quality priority analysis indicated that all Group 1 WBPCs not already being addressed by a TMDL are either (1) a WBPC on the 2010 303(d) List that meets the delisting requirements and/or (2) a WBPC for which MS4 discharges are not considered to be a source; therefore, a schedule was not created.

**Table 11. 303(d) Listed WBPCs in the Same Class as Those Addressed in a TMDL**

Constituent	Water Body	RB TMDL in Same Class	Notes
Cyanide	LAR Reach 1	LAR Metals TMDL	MS4 determined to not be a source that may be causing or contributing to observed exceedances (known to have potential laboratory analysis quality assurance/quality control issues).
	Rio Hondo Reach 2	LAR Metals TMDL	MS4 determined to not be a source that may be causing or contributing to observed exceedances (known to have potential laboratory analysis quality assurance/quality control issues).
	Burbank Western Channel	LAR Metals TMDL	MS4 determined to not be a source that may be causing or contributing to observed exceedances (known to have potential laboratory analysis quality assurance/quality control issues). Meets criteria to delist.
Zinc	LAR Reach 1	LAR Metals TMDL	Meets criteria to delist for dry weather impairment and wet weather impairment is being addressed by the LAR Metals TMDL
Diazinon	LAR Reach 1	Harbors Toxics TMDL	Meets criteria to delist

### Group 2: 303(d) Listed WBPCs Not in the Same Class as a Regional Board TMDL

The only WBPCs identified in the initial classification in Group 2 are the oil listings in Los Angeles River Reach 2 and Los Angeles River Reach 5. For these WBPCs, the water quality priority analysis indicated that these WBPCs could be delisted and rarely exceed in the receiving water. However, because MS4 discharges may have caused or contributed to the exceedances, a schedule has been established to support continual attainment of the RWLs. The interim and final schedule milestones are based on the dry and wet weather schedule for the LA River Metals TMDL.

### Group 3: Other Receiving Water Limitation Exceedances

The majority of the WBPCs in the ULAR WMA fall into Group 3. For the WBPCs that are in the same class as a Regional Board adopted TMDL, the limiting pollutant analysis indicates that all WBPCs will be addressed through control measures to implement the Regional Board adopted TMDLs. As a result, the

schedule developed for these constituents is consistent with the Regional Board adopted TMDLs and the scheduling for the RAA (Section 6) and EWMP Implementation Strategy (Section 7) are consistent.

Category 2 WBPCs that meet the requirements to be removed from the 303(d) List and Category 3 WBPCs are the lowest priority given their relatively low exceedance frequency. However, for these WBPCs, where MS4 discharges may have caused or contributed to the exceedances, a schedule has been established to support continual attainment of the RWLs. The interim and final schedule milestones are based on the dry and wet weather schedule for the LA River Metals TMDL. The final dry and wet weather milestones are January 11, 2024 and January 11, 2028, respectively.

For Category 2 and 3 WBPCs where either MS4 discharges are not considered to be a source or the WBPC is a condition rather than a “pollutant” with the potential to be discharged from the MS4, a schedule was not created.

## Numeric Milestones and Compliance Schedule

Part VI.C.5.c of the Permit discusses the compliance schedule requirements associated with the EWMP. The compliance schedule for the ULAR EWMP was developed based on TMDL milestones (i.e., interim and final numeric limits) and other representative Regional Board adopted TMDLs where appropriate. Interim and final compliance dates in the LARWQCB adopted TMDLs are the primary drivers for the ULAR RAA and EWMP implementation schedule. **Table 12** presents the compliance schedule for USEPA TMDLs, 303(d) listings, and other RWL exceedances which fall under Category 1 and Category 2. For simplicity, only the year of each milestone is shown; however, the exact date remains consistent with the milestone dates included in the relevant LARWQCB adopted TMDL. **Table 13** presents the dry weather compliance milestones applicable to WBPCs in the EWMP which use the LAR Bacteria TMDL as the foundation for establishing the compliance schedule.

**Table 14** presents the compliance schedule for the Category 2 WBPCs that meet the requirements to be removed from the 303(d) List and Category 3 WBPCs. **Table 15** presents the list of the remaining Category 2 and 3 WBPCs where either MS4 discharges are not considered to be a source or the WBPC is a condition rather than a “pollutant” with the potential to be discharged from the MS4. Available data will be assessed and, if the MS4 discharges are identified as causing or contributing to exceedances for WBPCs identified in **Table 15**, the EWMP will be revised consistent with Part VI.c.2.a.iii (page 51) of the Permit.

**Table 12. Compliance Schedule for Category 1 and 2 Water Quality Priorities that are not Included in a Regional Board Adopted TMDL**

Constituent	WQP Category and Water Body	Compliance Schedule Source	Weather Condition	Compliance Dates and Compliance Milestones (Bolded numbers indicated milestone deadlines within the current Permit term) <sup>1 2</sup>									
				2013	2014	2015	2016	2019	2020	2024	2028	2032	2037
2,3,7,8-TCDD (Dioxin)	C2: Reach 3	LAR Bacteria TMDL	Dry	See Table 13 for Interim and Final Compliance Milestones									
	C2: Burbank Western Channel		Wet										Final
Mercury Total	C2: LAR Reach 1	LAR Metals TMDL	Dry					75%	100%				
	C2: LAR Reach 2												
	C2: LAR Reach 3		Wet							50%	100%		
	C2: LAR Reach 4 C2: LAR Reach 6												
Copper	C2: RH Reach 3	LAR Metals TMDL	Dry					75%	100%				
			Wet							50%	100%		
Thallium Total	C2: LAR Reach 6	LAR Metals TMDL	Dry					75%	100%				
Diazinon	C2: Reach 5	Harbors Toxics	All										Final
Total Phosphorus	C1 (USEPA): Legg Lake C1 (USEPA): Lake Calabastas C1 (USEPA): Echo Park Lake	Machado Lake Nutrient TMDL	All						<b>Base-line</b>	<b>Interim</b>	50%	100%	
Total Nitrogen	C1 (USEPA): Legg Lake C1 (USEPA): Lake Calabastas C1 (USEPA): Echo Park Lake	Machado Lake Nutrient TMDL	All						<b>Base-line</b>	<b>Interim</b>	50%	100%	
Trash	C1 (USEPA): Echo Park Lake	LAR Trash TMDL	All	<b>80%</b>	<b>90%</b>	<b>96.7%</b>	<b>100%</b>						
PCBs (water and sediment)	C1 (USEPA): Echo Park Lake	Machado Lake Toxics TMDL	All						<b>Interim</b>	<b>Final</b>			
Chlordane (water and sediment)	C1 (USEPA): Echo Park Lake	Machado Lake Toxics TMDL	All						<b>Interim</b>	<b>Final</b>			
Dieldrin (water and sediment)	C1 (USEPA): Echo Park Lake	Machado Lake Toxics TMDL	All						<b>Interim</b>	<b>Final</b>			

<sup>1</sup>The Permit term is assumed to be five years from the Permit effective date or December 27, 2017.

<sup>2</sup>Attainment of the percentages may be demonstrated either as a reduction in exceedance frequency at time of EWMP approval or percent area meeting the RWL or in the case of the USEPA adopted TMDLs reduction from the baseline at the time of TMDL promulgation or percent area meeting the WQBEL or RWL.

**Table 13. Dry Weather Compliance Milestones for 2,3,7,8-TCDD (Dioxin) with and without the use of a LA River Bacteria Load Reduction Strategy (LRS) based Approach to Dry Weather**

Waterbodies		Compliance Dates and Compliance Milestones											
		2022	2023	2024	2025	2028	2029	2030	2031	2032	2035	2036	2037
LAR Reach 3 and Burbank Western Channel	w/o LRS							3/23					
								Final					
	w LRS							3/23					3/23
								Interim					Final

**Table 14. Compliance Schedule based on the LA River Metals TMDL for Category 2 and 3 Water Quality Priorities that Do Not Meet the 303(d) Listing Requirements<sup>1</sup>**

Constituent	WQP Category and Water Body	Weather Condition	Dry Weather Schedule <sup>2</sup>		Wet Weather Schedule <sup>2</sup>		Notes
			Interim	Final	Interim	Final	
			2020	2024	2024	2028	
2,3,7,8-TCDD (Dioxin)	C3: LAR Reach 6	Dry	75%	100%			Only 1 of 4 exceedances in last 10 years in LAR Reach 6
Mercury Total	C3 (Dry): LAR Reach 5	Dry/Wet	75%	100%	50%	100%	Only 6 of 156 exceedances in last 10 years in LAR Reach 5, 1 of 16 exceedances in last 10 years in CC during dry weather, 1 of 2 exceedances in last 10 years in CC during wet weather, 2 of 74 exceedances in last 10 years in RH Reach 3, 1 of 6 exceedances in last 10 years in AS, 1 of 6 exceedances in last 10 years in VW, 17 of 244 exceedances in last 10 years in BWC during dry weather, 1 of 7 exceedances in last 10 years in BWC during wet weather, 1 of 15 exceedances in last 10 years in TW, and 1 of 12 exceedances in last 10 years in Caballero Creek
	C3 (Dry/Wet): CC						
	C3 (Dry): RH Reach 3						
	C3 (Wet): AS						
	C3 (Wet): VW						
	C3 (Dry/Wet): BWC						
	C3 (Dry): TW						
C3 (Dry): Caballero Creek							
Thallium Total	C3: LAR Reach 1	Dry	75%	100%			Only 3 of 91 exceedances in last 10 years in LAR Reach 1, 2 of 112 exceedances in last 10 years in LAR Reach 2, 4 of 177 exceedances in last 10 years in LAR Reach 3, 2 of 128 exceedances in last 10 years in LAR Reach 4, and 1 of 61 exceedances in last 10 years in BWC
	C3: LAR Reach 2						
	C3: LAR Reach 3						
	C3: LAR Reach 4						
	C3: BWC						
Dibenzo(a,h)Anthracene	C3: LAR Reach 3	Dry	75%	100%			Only 8 of 122 exceedances in last 10 years in LAR Reach 3, 1 of 75 exceedances in last 10 years in LAR Reach 5, and 2 of 43 exceedances in last 10 years in RH Reach 3
	C3: LAR Reach 5						
	C3: RH Reach 3						

Constituent	WQP Category and Water Body	Weather Condition	Dry Weather Schedule <sup>2</sup>		Wet Weather Schedule <sup>2</sup>		Notes
			Interim	Final	Interim	Final	
			2020	2024	2024	2028	
Indeno(1,2,3-cd)Pyrene	C3: LAR Reach 3 C3: LAR Reach 5 C3: RH Reach 3	Dry	75%	100%			Only 3 of 56 exceedances in last 10 years in LAR Reach 3, 1 of 75 exceedances in last 10 years in LAR Reach 5, and 1 of 36 exceedances in last 10 years in RH Reach 3
4,4-DDD	C3: LAR Reach 5	Dry	75%	100%			Only 2 of 72 exceedances in last 10 years in LAR Reach 5
4,4-DDE	C3: LAR Reach 5	Dry	75%	100%			Only 4 of 72 exceedances in last 10 years in LAR Reach 5
Nickel Total	C3: LAR Reach 3 C3: LAR Reach 5 C3: Caballero Creek	Dry	75%	100%			Only 2 of 140 exceedances in last 10 years in LAR Reach 3, 1 of 72 exceedances in last 10 years in LAR Reach 5, and 1 of 41 exceedances in last 10 years in Caballero Creek
Benzo(a)Anthracene	C3: LAR Reach 3	Dry	75%	100%			Only 1 of 75 exceedances in last 10 years in LAR Reach 3
Chrysene	C3: LAR Reach 3 C3: LAR Reach 4 C3: LAR Reach 6 C3: RH Reach 3	Dry	75%	100%			Only 1 of 75 exceedances in last 10 years in LAR Reach 3, 1 of 38 exceedances in last 10 years in LAR Reach 4, 1 of 15 exceedances in last 10 years in LAR Reach 6, and 1 of 43 exceedances in last 10 years in RH Reach 3
Heptachlor	C3: LAR Reach 5 C3: BWC	Dry	75%	100%			Only 2 of 72 exceedances in last 10 years in LAR Reach 5 and 1 of 131 exceedances in last 10 years in BWC
Copper <sup>3</sup>	C3: RH Reach 2 C3: Caballero Creek	Dry	75%	100%			Only 1 of 2 exceedances in last 10 years in RH Reach 2 and 4 of 41 exceedances in last 10 years in Caballero Creek
Benzo(a)Pyrene	C3: RH Reach 3 C3: BWC	Dry	75%	100%			Only 1 of 43 exceedances in last 10 years in RH Reach 3 and 2 of 137 exceedances in last 10 years in BWC
Benzo(b)Fluoranthene	C3: BWC	Dry	75%	100%			Only 5 of 135 exceedances in last 10 years in BWC
Benzo(k)Fluoranthene	C3: RH Reach 3	Dry	75%	100%			Only 1 of 43 exceedances in last 10 years in RH Reach 3
Chlorpyrifos	C3: CC	Dry	75%	100%			Only 1 of 4 exceedances in last 10 years in CC
beta-BHC	C3: BWC	Dry	75%	100%			Only 1 of 131 exceedances in last 10 years in BWC
Cadmium	C3: BWC C3: TW C3: Caballero Creek	Dry	75%	100%			Only 1 of 298 exceedances in last 10 years in BWC, 1 of 38 exceedances in last 10 years in TW, and 2 of 41 exceedances in last 10 years in Caballero Creek
Lead <sup>3</sup>	C3: RH Reach 2 C3: Caballero Creek	Dry	75%	100%			Only 1 of 2 exceedances in last 10 years in RH Reach 2 and 2 of 41 exceedances in last 10 years in Caballero Creek

Constituent	WQP Category and Water Body	Weather Condition	Dry Weather Schedule <sup>2</sup>		Wet Weather Schedule <sup>2</sup>		Notes
			Interim	Final	Interim	Final	
			2020	2024	2024	2028	
Zinc <sup>4</sup>	C3: LAR Reach 1	Dry	75%	100%			Meets criteria to delist for dry weather impairment <sup>2</sup> and wet weather impairment is being addressed by the LAR Metals TMDL
	C3: LAR Reach 3						Only 7 of 415 exceedances in last 10 years in LAR Reach 3, 1 of 284 exceedances in last 10 years in LAR Reach 4, 1 of 41 exceedances in last 10 years in VW, 2 of 321 exceedances in last 10 years in BWC, 4 of 70 exceedances in last 10 years in TW, and 2 of 41 exceedances in last 10 years in Caballero Creek
	C3: LAR Reach 4						
	C3: VW						
	C3: BWC	Dry	75%	100%			
C3:TW							
	C3: Caballero Creek						
Diazinon	C2: LAR Reach 1	Wet			50%	100%	Meets criteria to delist
	C3 (Dry): LAR Reach 4						Only 1 of 7 exceedances in last 10 years in LAR Reach 4, 1 of 4 exceedances in last 10 years in RH Reach 2, 3 of 60 exceedances in last 10 years in RH Reach 3, and 1 of 4 exceedances in last 10 years in ACW
	C3 (Wet): RH Reach 2	Dry/Wet	75%	100%	50%	100%	
	C3 (Dry): RH Reach 3						
	C3 (Wet): ACW						

1 – CC (Compton Creek), RH (Rio Hondo), AS (Arroyo Seco), VW (Verdugo Wash), BWC (Burbank Western Channel), TW(Tujunga Wash), ACW (Aliso Canyon Wash), MC (McCoy Canyon Creek), DC (Dry Canyon Creek), BeC (Bell Creek), and BuC (Bull Creek)

2 – Attainment of the percentages may be demonstrated either as a reduction in exceedance frequency at time of EWMP approval or percent area meeting the RWL.

3 – The LAR Metals TMDL does not address dry weather impairments related to copper or lead in Rio Hondo Reach 2, Rio Hondo Reach 3, or Caballero Creek.

4 – The LAR Metals TMDL states that “Dry-weather impairments related to zinc only occur in Rio Hondo Reach 1”. As a result, dry weather impairments related to zinc in other water bodies are not addressed by the Regional Board adopted TMDL and are, therefore, addressed by this EWMP.

**Table 15. Water Quality Priorities where either MS4 discharges are not Considered to be a Source or the Water Body Pollutant Combination is a Condition Rather than a “pollutant” with the Potential to be Discharged from the MS4<sup>1</sup>**

Constituent	WQP Category and Water Body	Weather Condition	Notes
Chloride	C2: LAR Reach 5 C2: LAR Reach 6 C3: CC C3: RH Reach 3 C3: BWC C2: TW	Dry	MS4 determined to not be a source that may be causing or contributing to observed exceedances (determined to be a natural source, per Source Assessment). <sup>2</sup>
Cyanide	C2: LAR Reach 1 C2: RH Reach 2	All	MS4 determined to not be a source that may be causing or contributing to observed exceedances (known to have potential laboratory analysis quality assurance/quality control issues). <sup>2</sup>
	C2: BWC C3 (Dry): LAR Reach 3 C3 (Dry): LAR Reach 4 C3 (Dry): LAR Reach 5 C3 (Dry): LAR Reach 6 C3 (Wet): BuC C3 (Wet): ACW	Dry Dry/Wet	
Sulfate	C3: LAR Reach 3 C3: LAR Reach 4 C2: LAR Reach 5 C2: LAR Reach 6 C3: ACW	Dry	MS4 determined to not be a source that may be causing or contributing to observed exceedances (determined to be a natural source, per Source Assessment). <sup>2</sup>
TDS	C3: LAR Reach 4 C2: LAR Reach 5 C2: LAR Reach 6 C3: BWC C3: TW C3: ACW	Dry	MS4 determined to not be a source that may be causing or contributing to observed exceedances (determined to be a natural source, per Source Assessment). <sup>2</sup>

Constituent	WQP Category and Water Body	Weather Condition	Notes
Bis(2-ethylhexyl)Phthalate	C2: LAR Reach 1 C2: RH Reach 2 C2: AS C2: VW C2: BWC C2: BuC C2: ACW C3: LAR Reach 3 C3: LAR Reach 5	Dry/Wet	MS4 determined to not be a source that may be causing or contributing to observed exceedances (known to have potential laboratory analysis quality assurance/quality control issues). <sup>2</sup>
Oil	C2: LAR Reach 2 C2: LAR Reach 5	Dry/Wet	MS4 determined to not be a source that may be causing or contributing to observed exceedances (determined to be a natural source, as described in Appendix 3.B) <sup>2</sup>
Chlorine (Total)	C3: LAR Reach 3 C3: LAR Reach 4 C3: LAR Reach 5 C3: LAR Reach 6 C2: BWC	Dry/Wet	MS4 determined to not be a source that may be causing or contributing to observed exceedances (water reclamation plant effluent is identified source). <sup>2</sup>
Dichlorobromomethane	C3: LAR Reach 3	Dry/Wet	MS4 determined to not be a source that may be causing or contributing to observed exceedances (water reclamation plant effluent is identified source). <sup>2</sup>
Chlorodibromomethane	C3: BWC	Dry/Wet	MS4 determined to not be a source that may be causing or contributing to observed exceedances (water reclamation plant effluent is identified source). <sup>2</sup>
Selenium	C3: LAR Reach 1 C3: LAR Reach 3 C3: LAR Reach 4 C2: LAR Reach 5 C2: LAR Reach 6 C2: BWC C2: Caballero Creek C2: ACW	Dry/Wet	MS4 determined to not be a source that may be causing or contributing to observed exceedances. As noted in the LAR Metals TMDL, originates from natural sources. <sup>2</sup>

Constituent	WQP Category and Water Body	Weather Condition	Notes
pH	C2: LAR Reach 1 C2: LAR Reach 2 C3: LAR Reach 3 C3: LAR Reach 5 C2: LAR Reach 6 C3: RH Reach 2 C2: RH Reach 3 C3: BWC	Dry/Wet	Reflective of a condition of pollution, not necessarily a result of MS4 discharge.
Dissolved Oxygen	C3: LAR Reach 1 C3: LAR Reach 3 C3: LAR Reach 5 C3: LAR Reach 6 C2: RH Reach 3	Dry/Wet	Reflective of a condition of pollution, not necessarily a result of MS4 discharge.
Benthic-Macroinvertebrates	C2: CC C2: AS	Dry	Reflective of a condition of pollution, not necessarily a result of MS4 discharge.

1 – CC (Compton Creek), RH (Rio Hondo), AS (Arroyo Seco), VW (Verdugo Wash), BWC (Burbank Western Channel), TW(Tujunga Wash), ACW (Aliso Canyon Wash), MC (McCoy Canyon Creek), DC (Dry Canyon Creek), BeC (Bell Creek), and BuC (Bull Creek)

2 – Available data will be assessed to determine if MS4 discharges are causing or contributing to exceedances.