

**California Regional Water Quality Control Board
Santa Ana Region**

February 10, 2012

ITEM: 11

SUBJECT: Consideration of Approval of the Dry Weather Comprehensive Bacteria Reduction Plans (CBRPs) Submitted in Compliance with the Middle Santa Ana River Watershed Bacterial Indicator TMDLs and in Compliance with the San Bernardino County Municipal Separate Storm Sewer System (MS4) Permit (Order No. R8-2010-0036), and the Riverside County Municipal Separate Storm Sewer System (MS4) Permit (Order No. R8-2010-0033)

Background

On August 26, 2005, the Regional Board adopted Resolution No. R8-2005-0001, amending the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) to incorporate Bacterial Indicator Total Maximum Daily Loads (TMDLs) for Middle Santa Ana River Watershed water bodies. Waterbodies addressed by the TMDLs include the following: Santa Ana River, Reach 3; Chino Creek, Reaches 1 and 2; Cucamonga Creek, Reach 1; Mill Creek (Prado Area); and Prado Park Lake. The TMDLs were approved by the State Water Resources Control Board on May 15, 2006, by the Office of Administrative Law on September 1, 2006, and by the US Environmental Protection Agency (USEPA) on May 16, 2007. The TMDLs, developed pursuant to Clean Water Act section 303(d), address Middle Santa Ana River (MSAR) watershed water bodies placed on the list of impaired waters due to excessive bacterial indicator densities.

In summary, the MSAR Bacterial Indicators TMDLs include the following components: dry season (April 1st through October 31st) numeric targets for fecal coliform and *E. coli*¹, to be met by 2015; wet season numeric targets (November 1st thru March 31st) for fecal coliform and *E. coli* to be met by 2025; fecal coliform and *E. coli* TMDLs, wasteload allocations (WLAs) for point source discharges and load allocations (LAs) for nonpoint source discharges; and, an implementation plan and schedule to achieve reductions in bacterial indicator densities. The named parties in the TMDLs (urban dischargers and agricultural dischargers) formed a task force to coordinate TMDL implementation actions. Table 1 shows all the TMDL required tasks, due dates and the status of each task as of December 2011.

In order to achieve compliance with the numeric targets, TMDLs, WLAs and LAs, the MSAR TMDLs require point source and nonpoint source dischargers to develop and implement bacterial indicator reduction plans. Implementation steps for San Bernardino County and Riverside County urban stormwater permittees and co-permittees included development and implementation of a watershed-wide water quality monitoring plan and an Urban Source Evaluation Plan (USEP). The TMDL monitoring program was approved by the Regional Board on June 29, 2007 (Resolution No. R8-2007-0046); the USEP was approved by the Regional Board on April 18, 2008 (Resolution No. R8-2008-0044). Both the monitoring program and the USEP program have been on-going since Regional Board approval (see Table 1).

¹ The TMDLs anticipated the Regional Board's consideration and approval of revised bacteria quality objectives based on *E. coli*. Recommendations for the approval of such objectives were developed by the Stormwater Quality Standards Task Force, including Regional Board staff and are scheduled to be considered by the Regional Board on March 16, 2012.

Table 1 -- Middle Santa Ana River Watershed Bacterial Indicator TMDL Implementation Plan/Schedule Due Dates and Status as of December 2011

Task	Description	Compliance Date-As soon As Possible but No Later Than	Status
1	Revise Existing Waste Discharge Requirements	February 28, 2008	MS4 permit revisions completed (Jan. 2010) CAFO permit revision scheduled for Sept. 2012 other permits - on-going as needed
2	Identify Agricultural Operators	June 30, 2007	To be complete by Sept. 2012
3	Develop Watershed-Wide Bacterial Indicator Water Quality Monitoring Program Implement Watershed-Wide Bacterial Indicator Water Quality Monitoring Program	November 30, 2007 Upon Regional Board approval Seasonal reports due May 31 and December 31 of each year Triennial reports due every 3 years beginning with first report due February 15, 2010.	Complete and approved by Regional Board March 2006 2011 Seasonal reports submitted Triennial report submitted Feb. 2010
4	Urban Discharges 4.1 Develop and Implement Bacterial Indicator Urban Source Evaluation Plan 4.2 San Bernardino County MS4: Revise Municipal Storm Water Management Program (MSWMP) 4.3 Riverside County MS4: Revise Drainage Area Management Plan (DAMP) 4.4 San Bernardino County MS4: Revise Water Quality Management Plan (WQMP) 4.5 Riverside County MS4: Revise Water Quality Management Plan (WQMP)	Plan/schedule due 4.1 November 30, 2007 4.2 Dependent on Task 4.1 results (see text) 4.3 Dependent on Task 4.1 results (see text) 4.4 Dependent on Task 4.1 results (see text) 4.5 Dependent on Task 4.1 results (see text)	Complete On-going On-going Revision of WQMP currently in progress Revision of WQMP currently in progress
5	Agricultural Discharges 5.1 Develop and Implement Bacterial Indicator Agricultural Source Evaluation Plan 5.2 Develop and Implement Bacterial Indicator Agricultural Source Management Plan	Plan/schedule due 5.1 November 30, 2007 5.2 Dependent on Task 5.1 results (see text)	Complete To be completed once Task 2 complete (ID Ag owners)
6	Review of TMDLs/WLAs/LAs	Once every 3 years to coincide with the Regional Board's triennial review, or more frequently as warranted	1 st review report submitted 2/2010; next review scheduled for July 2013

The TMDLs also include the requirement to submit a triennial report summarizing TMDL implementation activities and results. The Task Force submitted the first triennial report on February 15, 2010. The next report is due on July 2013.

Incorporation of the MSAR Water Bodies Bacterial Indicator TMDLs into MS4 Permits

As indicated in Table 1, the Bacterial Indicator TMDLs have been incorporated into both the Riverside County and the San Bernardino County MS4 permits. Recognizing the inherent difficulty in achieving bacteria TMDLs and the need for adaptive implementation of BMPs sufficient to meet the WLAs specified in the TMDLs, the permits include requirements for the permittees to develop dry weather comprehensive bacteria reduction plans (CBRPs) designed to achieve the dry weather WLAs. Upon approval by the Regional Board, the dry weather CBRPs serve as the final Water Quality-Based Effluent Limitations (WQBELs) for bacterial indicators during the dry season. The permits require these final WQBELs to be achieved by December 31, 2015, consistent with the schedule identified in the TMDLs. The permits also specify numeric WQBELs based on the WLAs. For dry weather, the permits specify that these numeric WLAs apply should Regional Board-approved CBRPs not be completed by January 1, 2016.

A comparable approach is anticipated with respect to wet weather WLA permit limitations. Pursuant to the TMDLs, wet weather compliance is required no later than December 31, 2025, well after the expiration of the current MS4 permits (2015). The permits anticipate this, however, and require that the dry weather CBRPs include a proposed schedule for development of wet weather CBRPs. The permits also incorporate numeric urban WLAs for wet weather that become applicable on January 1, 2026 should an appropriate alternative WQBEL (anticipated to be a Regional Board-approved wet weather CBRP) not be adopted by the Regional Board by December 31, 2025. These or modified requirements to assure wet weather WLA compliance will need to be included in future revisions of the MS4 permits. (Each CBRP notes that the MS4 permits will be revised again after 2015. They propose that a similar wet weather CBRP section be included in those MS4 permits to address the wet weather TMDLs and that the draft wet weather CBRPs would be due 24 months following adoption of those permits.)

In accordance with Section V.D.2.b.i. of the San Bernardino County MS4 permit and Section VI.D.1.c.i. of the Riverside County MS4 permit, each county submitted a draft CBRP by December 31, 2010. Consistent with the requirements of the permit, the draft CBRPs focused on dry weather WLA compliance. Regional Board staff reviewed the CBRPs and provided comments to the permittees in March 2011. Our comments highlighted inadequacies identified in the CBRPs and indicated that these inadequacies must be addressed. In summary, Board staff found that the draft CBRPs identified appropriate mechanisms for addressing bacterial indicator management, but failed to commit to specific plans and schedules for *implementing* these mechanisms. Proposed CBRP steps included but were not limited to evaluating the use of water conservation and pathogen control ordinances, evaluating street sweeping programs, evaluating irrigation and water conservation practices, and general development of an illicit discharge, detection and elimination program (IDDE). However, per the draft CBRPs, development of and commitment to more specific implementation plans and schedules was contingent upon the results of proposed evaluations and other considerations, including financial feasibility. Essentially, the draft CBRPs described plans to develop more plans for actions which may or may not be implemented. Board staff advised staff of both counties that

this approach did not provide the detail and commitment necessary to assure that the WLAs would be achieved in accordance with the schedules specified in the TMDLs.

The Counties submitted revised CBRPs on June 28, 2011 that addressed Regional Board staff comments. The CBRPs include descriptions of existing MS4 management activities and conditions in each county. Summaries of these descriptions are provided below, followed by a summary of the proposed CBRPs. Links to the CBRP program pages are as follows:

Riverside

County: http://www.swrcb.ca.gov/santaana/water_issues/programs/stormwater/riverside_permit_cbrp.shtml

San Bernardino

County: http://www.swrcb.ca.gov/santaana/water_issues/programs/stormwater/san_bernardino_permit_cbrp.shtml

Existing MS4 Permit Activities and Conditions for Riverside County

Review of the revised draft CBRP indicates that the Riverside County Stormwater Program and the co-permittees are currently implementing the following:

1. As required in the MS4 permit, Water Quality Management Plans (WQMPs) are prepared for new development and significant redevelopment. These WQMPs encourage the use of site design and source control BMPs to capture or treat dry weather flows (DWF). In the period from 2005 – 2009, WQMPs were completed for 7 significant redevelopment projects, covering 12.1 acres, in the Riverside County portion of the Middle Santa Ana River (MSAR) watershed. Information regarding WQMPs for new development was not provided.
2. Public education and outreach is performed to emphasize stormwater pollution prevention. During the period from 2005-2009, Riverside County permittees participated in 163 events resulting in more than 68,446 impressions.
3. Riverside County MS4 permittees have adopted ordinances to address the following:
 - a. Control discharges associated with municipal, commercial, and industrial activities, cleaning and servicing automobiles, machinery, portable toilets, and concrete mixing equipment
 - b. Sewage discharges to MS4 facilities
 - c. Runoff from material storage areas and uncovered receptacles, and discharges from swimming pools and fountains
 - d. Discharges associated with toxic materials, animal wastes, yard waste, and restaurant or food processing facilities

4. Riverside County and its permittees have adopted various water conservation ordinances to manage outdoor water use and reduce the volume of runoff during dry weather conditions.
5. MS4 permittees perform inspections of residential, commercial, and industrial facilities to evaluate compliance with stormwater ordinances, California's industrial stormwater permit, and with local water conservation and management ordinances. Sites within jurisdictions are prioritized for inspections. Restaurants usually receive high priority designations, since they have a high potential as a source of bacterial indicators.
6. Street sweeping is performed within all Riverside County jurisdictions within the MSAR watershed; however, the CBRP does not indicate the percentage of streets that are swept versus un-swept within the various jurisdictions.
7. MS4 facilities are inspected and cleaned to satisfy minimum facility maintenance requirements contained in the MS4 permit. While the CBRP indicates the volume of debris collected from MS4 facilities, it does not indicate the number or frequency of inspections or the percentage of MS4 facilities cleaned during given time periods.

Existing Activities and Conditions for San Bernardino County

Review of the revised draft CBRP indicates that the San Bernardino County Stormwater Program and the co-permittees are currently implementing the following:

1. As required in the MS4 permit, Water Quality Management Plans (WQMPs) are prepared for new development and significant redevelopment. These WQMPs encourage the use of site design and source control BMPs to provide capture or treatment of dry weather flows (DWF). In the period from 2005 – 2009, WQMPs were completed for 43 significant redevelopment projects, covering 133 acres, in the San Bernardino County portion of the Middle Santa Ana River (MSAR) watershed. Information regarding WQMPs for new development was not provided.
2. Public education and outreach is performed to emphasize stormwater pollution prevention. During the period from 2005-2009, San Bernardino County permittees participated in 393 events resulting in more than 1,343,973 impressions.
3. San Bernardino County MS4 permittees have adopted ordinances to address the following:
 - a. Control discharges associated with industrial activities
 - b. Prohibit illicit discharges
 - c. Control the discharge of materials other than stormwater
 - d. Require compliance with regulation
 - e. Conduct inspections, surveillance, and monitoring

4. Some but not all permittees in the MSAR watershed have adopted various water conservation ordinances to manage outdoor water use and reduce the volume of runoff during dry weather conditions. Those municipalities with ordinances include the cities of Chino, Ontario and Upland.

Cucamonga Valley Water District (CVWD) and Monte Vista Water District (MVWD) are not permittees, but have water conservation ordinances that affect some MSAR cities as follows:

CVWD - Fontana, Ontario, Rancho Cucamonga, Upland, and some unincorporated areas of San Bernardino County.

MVWD - Chino, Montclair, and some unincorporated areas of San Bernardino County (Note: Chino Hills water supply is managed by MVWD, but the CBRP does not indicate that the MVWD ordinances affect Chino Hills.)

5. MS4 permittees perform inspections of commercial and industrial facilities to evaluate compliance with stormwater ordinances and California's industrial stormwater permit. Sites within jurisdictions are prioritized for inspections. Restaurants usually receive high priority designations, since they have a high potential as a source of bacterial indicators.
6. Street sweeping is performed within all jurisdictions on a regular basis; however, the CBRP does not indicate the percentage of streets that are swept versus un-swept within the various jurisdictions.
7. MS4 facilities are inspected and cleaned to satisfy minimum facility maintenance requirements contained in the MS4 permit. While the CBRP indicates the volume of debris collected from MS4 facilities, it does not indicate the number or frequency of inspections or the percentage of MS4 facilities cleaned during given time periods.
8. In addition to these activities, the Bickmore Basin and the Kimball Basin, which also contain constructed wetlands, were constructed in the City of Chino to reduce urban runoff during dry weather conditions. These basins collect urban dry weather flows from the cities of Chino and Ontario, respectively.

Proposed Dry Weather Comprehensive Bacterial Reduction Plans (CBRPs) Components

The fundamental approach proposed in each County's CBRP to address the dry weather bacterial indicator TMDLs and ensure compliance with the urban dry weather WLAs is to target and eliminate and/or reduce dry weather flows. The MS4 agencies believe that dry weather discharges, such as excess landscape irrigation and other discharges related to residential activities, are controllable to a large extent and that their elimination or reduction represents the most viable approach to ensure compliance with the dry season WLAs. Once dry weather discharges are identified, they can be prioritized and appropriate mitigation from a suite of potential non-structural and structural BMP options can be selected and implemented.

Both San Bernardino and Riverside County propose a consistent approach in their respective CBRPs. This allows for greater sharing and coordination of resources to evaluate and implement effective BMPs. While the fundamental CBRP approach is consistent between the

counties, each revised draft CBRP does allow for jurisdictional and site-specific conditions to be taken into account as BMPs are identified and planned.

The MS4 agencies intend to demonstrate compliance with the dry season WLAs with one or more of the following methods:

1. Bacteria indicator water quality objectives are obtained in the receiving waters;
2. Controllable urban sources and discharges are in compliance with the WLAs;
3. MS4 facilities, outfalls are dry and therefore do not contribute to dry weather flows in receiving waters.

Each revised proposed CBRP consists of a three-step process that includes several elements² and key implementation activities. These steps/elements are shown below in Figure 2-4 “CBRP Implementation Strategy” (excerpted from the CBRP reports prepared by CDM on behalf of each county) and are summarized as follows:

Step 1 – Identify, Evaluate, and Prioritize MS4 Dry Weather Flow Sources

The permittees propose to conduct an inspection program aimed at identifying controllable urban dry weather flows transported in the MS4 to receiving water sampling locations (watershed-wide compliance sites) and to evaluate whether those dry weather flows contribute to exceedance of the bacterial indicator water quality objectives (fecal coliform and *E. coli*). Any identified dry weather flow contributing to elevated bacterial loads will be prioritized for specific mitigation measures that may include non-structural BMPs. If the MS4 agencies determine that non-structural BMPs would be ineffective to address these dry weather flows, then structural BMPs will be planned for implementation. Specific BMPs are listed below (Elements 1 – 4). The identification, evaluation and prioritized mitigation step entails an iterative process and represents an on-going commitment by the MS4 agencies to continue to investigate and evaluate bacterial densities in dry weather flows, and to consider and implement the most appropriate and effective mitigation.

This step recognizes that water resource management within the local jurisdictions of the co-permittees varies based upon many different factors, including, but not limited to, water supply relationships, governing policies, and geographic relationships. Accordingly, the permittees and co-permittees will evaluate these factors and BMPs as follows to see what modifications can be made to help reduce bacterial indicator densities in surface waters.

The specific Elements (BMPs) identified for Step 1 are as follows:

Element 1: Ordinances

- A. Water Conservation Ordinances:** MSAR permittees propose to evaluate existing ordinances and modify them where appropriate to reduce dry weather flows.

² The CBRP required Elements are derived directly from each MS4 permit and must be addressed as part of the CBRP. These Elements are tools for implementation of the CBRP and include both non-structural and structural BMPs. Each Element is discussed as part of the appropriate CBRP Step to which it is related.

- B. Pathogen Control Ordinances:** MSAR permittees propose to evaluate existing ordinances and consider adopting new ordinances as needed to improve management of animal wastes and control other known bacterial sources.

Element 2: Specific BMPs

- A. Transient Camps:** MSAR permittees propose to evaluate potential contributions of bacterial from transient camps and close camps if necessary to eliminate these bacterial sources.
- B. Illicit Discharge Detection and Elimination Program (IDDE):** This program is required in the MS4 permit and permittees propose to complete development of this program to reduce or eliminate dry weather flows³.
- C. Street Sweeping:** MSAR permittees propose to evaluate existing street sweeping programs and determine the potential to modify the programs to eliminate or reduce bacterial sources.
- D. Irrigation or Water Conservation Practices:** MSAR permittees propose to evaluate options for implementing irrigation and water conservation BMPs to reduce or eliminate dry weather flows and thus reduce entrainment of bacteria in MS4 facilities. This effort will be closely coordinated with respective water purveyor conservation activities.
- E. Water Quality Management Plan Revision:** MSAR permittees submitted their revised WQMP guidance to the Regional Board in July 2011. The guidance includes a framework intended to reduce dry weather flows using low impact development techniques thus reducing entrainment of bacteria in MS4 facilities.
- F. Septic System Management:** MSAR permittees propose to develop an inventory of septic systems, particularly in relation to their proximity to the MS4 and impaired water bodies and to implement an inspection and enforcement program and conduct education to septic system owners on proper system maintenance.
- G. Pet Waste Management:** MSAR permittees propose to evaluate existing programs and identify opportunities to enhance or implement additional waste management BMPs to reduce or eliminate animal waste discharges.

Element 3: Inspection Criteria (Urban Source Evaluation)

³ The IDDE program for Riverside County was submitted to the Regional Board per MS4 permit requirements on July 29, 2011. The San Bernardino County MS4 permit does not contain a specific due date for submittal of a proposed IDDE program; however, Regional Board staff expect to work with San Bernardino MS4 permittees to ensure that the IDDE proposed program is submitted in 2012.

The permittees and co-permittees will implement systematic and coordinated urban source evaluation activities within specific drainage areas. These activities will produce monitoring data and qualitative information that will be used to support decision-making processes with the objective of addressing controllable sources of bacterial indicators.

MS4 outfalls are categorized into Tier 1 sites and Tier 2 sites. Tier 1 sites are those MS4 outfalls that directly contribute flows to a receiving water watershed-wide compliance site and are therefore a high priority for evaluating bacterial indicator presence. Tier 2 sites are those MS4 outfalls or underground drains that contribute to a Tier 1 outfall. To the extent that Tier 2 sites are identified as a potential contributor to non-compliance, they will be evaluated for appropriate follow-on activities.

Step 2 – Evaluate and Select Structural BMP Projects

If implementation of non-structural BMPs as identified in Step 1 proves to be ineffective in reducing bacterial levels, Step 2 in each overall CBRP approach is to plan for implementation of structural BMPs. This step includes undertaking the regulatory permitting process as well as the appropriate local jurisdiction's Capital Improvement Project process (CIP). Specific actions to be undertaken in this Step and as specified in Element 4 include the following:

Element 4: Regional Treatment- the permittees propose to evaluate alternatives for implementing structural BMPs. This element includes completion of Use Attainability Analyses (UAAs) to support proper siting of structural BMP projects and describes a process for developing and implementing the Capital Improvement Project process for structural BMPs, including the completion of planning, design, and permitting phases for structural BMP projects or regional treatment projects.

Step 3 – Construct Structural BMP Projects – This step involves constructing approved structural BMPs as identified, prioritized, planned and permitted in Steps 1 and 2.

Chronological Implementation Schedule

It is important to emphasize that both the Riverside County and the San Bernardino County proposed CBRPs rely on continual evaluation of data with respect to bacterial indicator densities so that changes can be made to the CBRP strategy as appropriate. This adaptive management strategy, which has been incorporated into the overall CBRP process and approach, necessarily relies on frequent and timely reporting of CBRP implementation results as well as timely review by Regional Board staff. Results from implementation of the CBRP will be reported in Annual Reports prepared pursuant to the MS4 permits and in the Triennial Reports due in 2013 and 2016. Regional Board staff intends to continue to work closely with permittees as the CBRPs are implemented to ensure that appropriate steps and BMPs are implemented and implementation is done in a timely manner. Figure 2-4 depicts a flowchart of the CBRP iterative process.

Both the Riverside County and the San Bernardino County proposed CBRPs include consistent and coordinated detailed implementation schedules. The following activities have been completed or are proposed to be completed by the specified date:

July 29, 2011

Water Quality Management Plans (WQMPs) – Draft WQMP Guidance and Template revisions were submitted in accordance with MS4 permit requirements. Regional Board staff have reviewed the Draft WQMPs and provided comments. Final WQMPs are under development and expected to be approved by the Regional Board during summer 2012.

November 15, 2011

Annual Report – Annual Report submitted to Regional Board incorporating results of stormwater monitoring actions completed during reporting period.

January 29, 2012

Septic System Management – Evaluate the effects of septic systems on MS4 systems and establish a targeted plan for education, inspection and enforcement activities

Septic System Management – Complete educational activities

March 31, 2012

Tier 1 Source Evaluation–Revise the MSAR TMDL Monitoring Plan and QAPP as needed

June 30, 2012

Water Conservation Ordinances – Establish minimum dry weather flow management and enforcement requirements

Pathogen Control Ordinances–Establish minimum requirements for control of bacterial indicator sources

Street Sweeping Programs – Develop recommendations for modified street sweeping programs

July 29, 2012

Water Quality Management Plans – Incorporate revised WQMP guidance into WQMP training program and implement revised training program

September 30, 2012

Transient Camps–Report findings of transient camp identification and evaluation activities

Street Sweeping Programs–Establish a plan or schedule to implement modified street sweeping programs

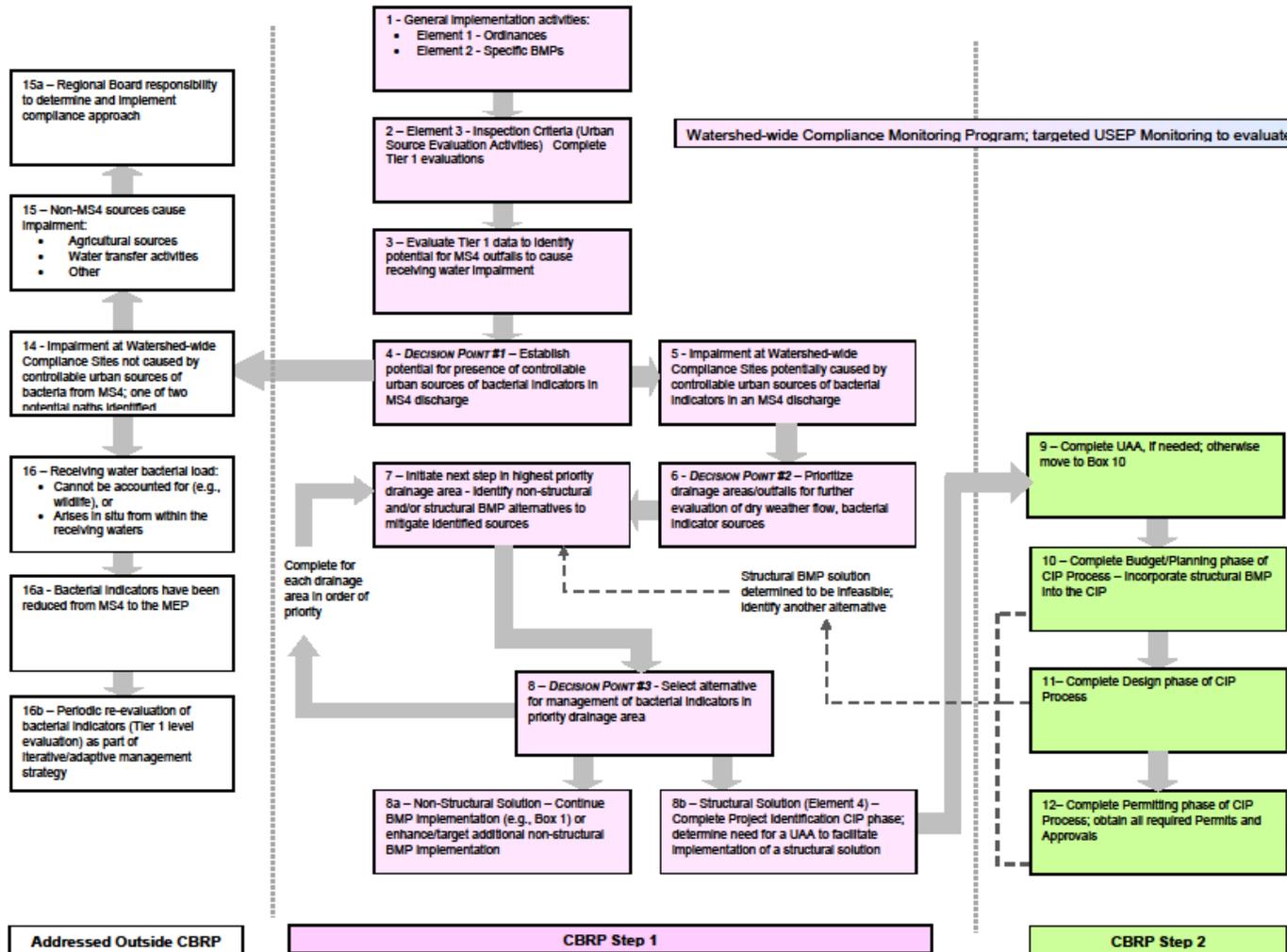
Pet Waste Management – Evaluate pet waste management BMPs and identify new or enhanced BMPs

November 15, 2012

Annual Report – Submit Annual Report to Regional Board incorporating results of CBRP actions completed during reporting period

Section 2 • CBRP Implementation Program

Figure 2-4. CBRP Implementation Strategy



December 31, 2012

Water Conservation Ordinances – Prepare draft revised ordinances for local jurisdictions

Pathogen Control Ordinances – Prepare draft revised ordinances for local jurisdictions

Transient Camps – Establish model program for local jurisdictions

Illicit Discharge, Detection, and Elimination Program (IDDE) – Develop program based on MS4 permit requirements and submit final guidance to Regional Board

Irrigation or Water Conservation Practices – Identify irrigation and water conservation BMP practices

Tier 1 Source Evaluation – Water quality sampling completed and results entered into database

January 29, 2013

Pathogen Control Ordinances – Revised ordinances adopted by local jurisdictions

Pet Waste Management – Implement new and enhanced BMPs within local jurisdictions

March 31, 2013

Irrigation and Water Conservation Practices – Establish plan and schedule for BMP practices within local jurisdictions

Prioritization of Drainage Areas – Prepare and submit Data Analysis Report with prioritized drainage areas

June 30, 2013

Transient Camps – Prepare mitigation plan and schedule for implementation by local jurisdictions

November 15, 2013

Annual Report – Submit Annual Report to Regional Board incorporating results of CBRP actions completed during reporting period

December 31, 2013

Water Conservation Ordinance – Revised ordinances adopted by local jurisdictions

November 15, 2014

Annual Report – Submit Annual Report to Regional Board incorporating results of CBRP actions completed during reporting period

December 31, 2014

Transient Camps – Complete targeted activities based on mitigation plans for local jurisdictions

Septic System Management – Complete inspections and implement enforcement actions as needed

Identify Alternatives for Reducing or Eliminating Controllable DWF or Bacterial Indicator Sources – Evaluate data and results of field surveys to develop actions to mitigate controllable dry weather flows or bacterial indicator sources for prioritized drainage areas. Submit results of evaluation with 2014 Annual Report

March 31, 2015

Identify and Select Mitigation Activities – Select mitigation actions and prepare documentation supporting selected actions. Submit results of selection process with 2015 Annual Report.

November 15, 2015

Annual Report – Submit Annual Report to Regional Board incorporating results of CBRP actions completed during reporting period

December 31, 2015

Identify and Select Non-Structural Mitigation Alternatives – Implement non-structural BMPs as needed. Submit results of implementation actions in 2015 Annual Report.

Schedule for Activities to Be Determined

Illicit Discharge, Detection, and Elimination Program – Implement inspection program in accordance with established plan and schedule

Street Sweeping – Implement modified programs in accordance with modified plans and schedules

Irrigation and Water Conservation Practices – Implement BMP practices in accordance with established plan and schedule

Board staff have reviewed the revised CBRP Submittals and the proposed schedule. We believe that the submittals identify an appropriate approach to the identification and control of bacteria indicator densities during dry weather and provide reasonable assurance that the dry weather urban wasteload allocations will be achieved in accordance with the schedules identified in the TMDLs and the MS4 permits.

Staff Recommendation:

Adopt Resolution No. R8-2012-0015 approving the Riverside County CBRP.

Adopt Resolution No. R8-2012-0016 approving the San Bernardino County CBRP.

**California Regional Water Quality Control Board
Santa Ana Region**

RESOLUTION NO. R8-2012-0015

Resolution Approving the Dry Weather Comprehensive Bacteria Reduction Plan Submitted Pursuant to the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the Riverside County Flood Control And Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region, Order No. R8-2010-0033, NPDES No. CAS618033

WHEREAS, the California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), finds that:

1. An updated Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) was adopted by the Regional Board on March 11, 1994, approved by the State Water Resources Control Board (SWRCB) on July 21, 1994 and approved by the Office of Administrative Law on January 24, 1995.
2. Amendments to the Basin Plan to incorporate Middle Santa Ana River Bacterial Indicator Total Maximum Daily Loads (TMDLs) were approved by the Regional Board on August 26, 2005, by the SWRCB on May 15, 2006, by OAL on September 1, 2006 and by the US Environmental Protection Agency on May 16, 2007.
3. The Middle Santa Ana River Watershed (MSAR) Bacterial Indicator TMDLs were developed, adopted, and approved in accordance with Clean Water Act Section 303(d) and Water Code Section 13240 *et seq.* The amendment integrated the TMDLs into Chapter 5, "Implementation", of the Basin Plan.
4. The MSAR Bacterial Indicator TMDLs specify dry season TMDLs, numeric targets, wasteload allocations and load allocations to be met by December 31, 2015. The TMDLs specify wet season TMDLs, numeric targets, wasteload allocations and load allocations to be met by December 31, 2025.
5. The MSAR Bacterial Indicator TMDLs require Riverside County municipal separate sewer system (MS4) dischargers to comply with the dry season bacterial indicator wasteload allocations (WLAs) by December 31, 2015.
6. Specific agencies within the Santa Ana Region and Riverside County required to comply with the MSAR TMDLs include Riverside County Flood Control and Water Conservation District (RCFCD), the County of Riverside, and the cities of Riverside, Corona, and Norco.
7. On January 29, 2010, the Regional Board adopted a revised National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge

draft

Requirements municipal separate storm sewer system permit (MS4 permit) for specified Riverside County municipalities within the Santa Ana Region (Order No. R8-2010-0033, NPDES No. CAS618033).

8. MSAR bacterial indicator TMDL requirements were incorporated into the revised MS4 permit.
9. Subsequent to adoption of the MSAR TMDLs and the Riverside County MS4 permit by the Regional Board, the cities of Eastvale and Jurupa Valley were incorporated. These two cities encompass geographic areas within the MSAR watershed that were formerly unincorporated areas of Riverside County. Eastvale and Jurupa Valley are now included as specified municipalities, Co-Permittees, and dischargers in the MSAR TMDLs and are subject to the TMDL-related requirements in the MS4 permit
10. Section VI.D.1.c. of the MS4 permit requires the permittees to prepare a Comprehensive Bacteria Reduction Plan (CBRP) designed to achieve compliance with the dry weather urban wasteload allocations specified in the MSAR TMDLs. Upon Regional Board approval of the CBRP, the CBRP serves as the final Water Quality Based Effluent Limit (WQBEL) for bacterial indicators.
11. On December 30, 2010, RCFCD and the Co-Permittees submitted a draft dry weather CBRP, in accordance with the Riverside County MS4 permit. Regional Board staff reviewed the draft CBRP and on March 30, 2011, provided comments to RCFCD and the Co-Permittees.
12. On June 28, 2011, RCFCD and the Co-Permittees submitted a revised CBRP. The Regional Board has reviewed the revised CBRP and finds that it complies with the guidelines outlined in the MS4 permit. Provided that it is implemented appropriately and in a timely manner, the CBRP provides reasonable assurance that the dry weather urban wasteload allocations will be achieved in accordance with the schedules identified in the MS4 permit and the MSAR TMDLs.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Regional Board approves the CBRP and associated schedule for implementation as submitted by RCFCD and the Co-Permittees on June 28, 2011.
2. The Riverside County CBRP will serve as the final Water Quality Based Effluent Limitations for bacterial indicators during the dry season (annually April 1 through October 31).
3. The CBRP shall be implemented immediately upon approval.

4. RCFCD, the County of Riverside, and the Cities of Riverside, Corona, Norco, Eastvale, and Jurupa Valley are in compliance with Section VI.D.1.c of the Riverside County MS4 permit, provided that the CBRP is implemented in a timely manner.
5. Based upon completion of the tasks and activities described in the CBRP, and analysis of BMP effectiveness, the CBRP shall be updated as necessary.
6. The Regional Board's Executive Officer is hereby delegated authority to approve subsequent revisions to the CBRP plans and schedule set forth in the attachments. The updated CBRP shall be implemented upon approval by the Executive Officer.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Santa Ana Region, on February 10, 2012.

Kurt V. Berchtold
Executive Officer

**California Regional Water Quality Control Board
Santa Ana Region**

RESOLUTION NO. R8-2012-0016

Resolution Approving the Dry Weather Comprehensive Bacteria Reduction Plan Submitted Pursuant to the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the San Bernardino County Flood Control District, the County of San Bernardino, and the Incorporated Cities of San Bernardino County within the Santa Ana Region, Order No. R8-2010-0036, NPDES No. CAS618036

WHEREAS, the California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board), finds that:

1. An updated Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) was adopted by the Regional Board on March 11, 1994, approved by the State Water Resources Control Board (SWRCB) on July 21, 1994 and approved by the Office of Administrative Law on January 24, 1995.
2. Amendments to the Basin Plan to incorporate Middle Santa Ana River Bacterial Indicator Total Maximum Daily Loads (TMDLs) were approved by the Regional Board on August 26, 2005, by the SWRCB on May 15, 2006, by OAL on September 1, 2006 and by the US Environmental Protection Agency on May 16, 2007.
3. The Middle Santa Ana River Watershed (MSAR) Bacterial Indicator TMDLs were developed, adopted, and approved in accordance with Clean Water Act Section 303(d) and Water Code Section 13240 *et seq.* The amendment integrated the TMDLs into Chapter 5, "Implementation", of the Basin Plan.
4. The MSAR Bacterial Indicator TMDLs specify dry season TMDLs, numeric targets, wasteload allocations and load allocations to be met by December 31, 2015. The TMDLs specify wet season TMDLs, numeric targets, wasteload allocations and load allocations to be met by December 31, 2025.
5. The MSAR Bacterial Indicator TMDLs require San Bernardino County municipal separate sewer system (MS4) dischargers to comply with the dry season bacterial indicator wasteload allocations (WLAs) by December 31, 2015.
6. Specific agencies within the Santa Ana Region and San Bernardino County required to comply with the MSAR TMDLs include San Bernardino County Flood Control District (SBCFCD), the County of San Bernardino, and the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Rancho Cucamonga, Rialto, and Upland.

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7. On January 29, 2010, the Regional Board adopted a revised National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements municipal separate storm sewer system permit (MS4 permit) for specified San Bernardino County municipalities within the Santa Ana Region (Order No. R8-2010-0036, NPDES No. CAS618036).
8. MSAR bacterial indicator TMDL requirements were incorporated into the revised MS4 permit.
9. Section V.D.2.b. of the MS4 permit includes provisions that provide SBCFCD and its Co-Permittees with an alternative to compliance with numeric bacterial indicator Water Quality Based Effluent Limitations. This alternative involves the development, submittal, and implementation of a Comprehensive Bacteria Reduction Plan (CBRP) in accordance with a schedule and guidelines outlined by the Regional Board in the MS4 permit. The CBRP is required to identify the means by which numeric wasteload allocations will be met.
10. On December 30, 2010, SBCFCD and the Co-Permittees submitted a draft CBRP, in accordance with the San Bernardino County MS4 permit. Regional Board staff reviewed the draft CBRP and on March 30, 2011, provided comments to SBCFCD and the Co-Permittees.
11. On June 28, 2011, SBCFCD and the Co-Permittees submitted a revised CBRP. The Regional Board has reviewed the revised CBRP and finds that it complies with the guidelines outlined in the MS4 permit. Provided that it is implemented appropriately and in a timely manner, the CBRP provides reasonable assurance that the dry weather urban wasteload allocations will be achieved in accordance with the schedules identified in the MS4 permit and the MSAR TMDLs.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The Regional Board approves the CBRP and associated schedule for implementation as submitted by SBCFCD and the Co-Permittees on June 28, 2011.
2. The San Bernardino County CBRP will serve as the final Water Quality Based Effluent Limitations for bacterial indicators during the dry season (annually April 1 through October 31).
3. The CBRP shall be implemented immediately upon approval.
4. SBCFCD, the County of San Bernardino, and the Cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Rancho Cucamonga, Rialto, and Upland are in compliance with Section V.D.2.b of the San Bernardino County MS4 permit, provided that the CBRP is implemented in a timely manner.

5. Based upon completion of the tasks and activities described in the CBRP, and analysis of BMP effectiveness, the CBRP shall be updated as necessary.
6. The Regional Board's Executive Officer is hereby delegated authority to approve subsequent revisions to the CBRP plans and schedule set forth in the attachments. The updated CBRP shall be implemented upon approval by the Executive Officer.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Santa Ana Region, on February 10, 2012.

Kurt V. Berchtold
Executive Officer