California Regional Water Quality Control Board
Santa Ana Region

RESOLUTION NO. R8-2014-0031

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 City of Pomona, Order No. R8-2013-0043, NPDES No. CA8000410

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 the City of Pomona to comply with the dry season bacterial indicator wasteload allocations (WLAs) by December 31, 2015.

6. The City of Pomona lies within the Los Angeles Regional Board (Region 4) boundaries, but discharges urban runoff to the Middle Santa Ana River watershed waterbodies within the Santa Ana Region. As a result of discussions between the two Regional Boards and the City of Claremont, the Los Angeles Regional Board adopted a revised MS4 permit (Order No. R4-2012-0175) which required the City of Pomona to comply with the Middle Santa Ana River TMDL requirements.

7. On September 13, 2013, the Regional Board adopted a National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements (the Order) for the cities of Claremont and Pomona (Order No. R8-2013-0043, NPDES No. CA8000410).

8. The Order contains the MSAR bacterial indicator TMDL requirements for the City of Pomona.

9. Section III.B.2.b. of the Order requires the permittee 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.

10. On November 14, 2013, the City of Pomona submitted an initial draft dry weather CBRP, in accordance with the TMDL Compliance permit. Regional Board staff reviewed the draft.

11. On February 5, 2014, the City of Pomona submitted a final draft CBRP. The Regional Board has reviewed the final draft CBRP and finds that it complies with the guidelines outlined in the Order. 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 Order 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 the City of Pomona on February 5, 2014.

2. The City of Pomona CBRP will serve as the final Water Quality Based Effluent Limitations for the city for bacterial indicators during the dry season (annually April 1 through October 31).

3. The CBRP shall be implemented immediately upon approval.

4. The City of Pomona is in compliance with Section III.B.2.b. of the Order, 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 March 14, 2014.

Kurt V. Berchtold
Executive Officer

California Regional Water Quality Control Board
Santa Ana Region

March 14, 2014

ITEM: 12

SUBJECT: Approval of the Dry Weather Comprehensive Bacteria Reduction Plans (CBRPs) Submitted in Compliance with Waste Discharge Requirements for the Implementation of Bacterial Indicator Total Maximum Daily Loads for the Middle Santa Ana River Watershed Waterbodies Issued to the Cities of Claremont and Pomona (Order No. R8-2013-0043)

Background

The Middle Santa Ana River (MSAR) watershed water bodies were placed on the Clean Water Act Section 303(d) list of impaired water bodies due to excessive levels of bacterial indicators. To address this impairment, 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). 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 Regional Board on August 26, 2005, 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.

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 February 2014.

The urban wasteload allocations for municipalities within the Santa Ana Region are addressed through the Areawide Municipal Storm Water Permits (R8-2010-0033 and R8-2010-0036) and for the cities of Claremont and Pomona, it is addressed through Order No. R8-2013-0043 (the TMDL Compliance Order).

To achieve compliance with the numeric targets for WLAs and LAs, the MSAR TMDLs require point source and nonpoint source dischargers to develop and implement bacterial indicator reduction plans. Implementation steps for the dischargers (including the cities of Claremont and Pomona) 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).

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[1] The TMDLs anticipated the Regional Board's and State 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, which included Regional Board staff, and were approved by the Regional Board on June 15, 2012, and by the State Board on January 21, 2014.

Table 1 -- Middle Santa Ana River Watershed Bacterial Indicator TMDL Implementation Plan/Schedule Due Dates and Status as of February 2014

Task	Description	Compliance Date-As soon As Possible but No Later Than	Status
1	Revise Existing Waste Discharge Requirements	February 28, 2008	Riverside County and San Bernardino County MS4 permits revised Jan 2010. Los Angeles County MS4 permit revised November 2012. TMDL Compliance Order adopted September 2013. CAFO permit revised June 2013
2	Identify Agricultural Operators	June 30, 2007	Initial identification completed March 2013.
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	Complete and approved by Regional Board March 2006; has been periodically revised as needed. Seasonal reports regularly submitted in accordance with scheduled dates. Most recent Triennial Report submitted Feb. 2013.
4	Urban Discharges 4.1 Develop & 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 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 Complete Complete Complete Complete
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 Plan being developed.
6	Review of TMDLs/WLAs/LAs	Once every 3 years to coincide with the Regional Board's triennial review, or more frequently as warranted	Previous reviews completed as scheduled; next review scheduled for July 2016.

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, and the second triennial report on February 15, 2013. The next report is due on July 2016.

Incorporation of the MSAR Water Bodies Bacterial Indicator TMDLs into Permits

As indicated in Table 1, the Bacterial Indicator TMDLs have been incorporated into relevant permits for dischargers that are within the Santa Ana Regional Board's legally defined jurisdiction and discharge urban runoff to MSAR waterbodies. However, significant portions of the cities of Pomona and Claremont (Cities) discharge urban runoff to the MSAR waterbodies within the Santa Ana Region, though neither city is within the Santa Ana Regional Board's jurisdiction. Technically, the Cities are within the Los Angeles Regional Board's jurisdiction. To address the TMDLs and bacterial indicator contributions from the Cities, discussions were held between the two Regional Boards and the Cities. Based on these discussions, the Los Angeles Regional Board adopted a revised MS4 permit in November 2012 (Order No. R4-2012-0175), in which the Cities were required to comply with MSAR TMDL requirements.

The MS4 permit included a provision that enables the Santa Ana Regional Board to oversee TMDL compliance by the Cities through the use of a designation agreement and adoption of an MSAR TMDL specific permit by the Santa Ana Regional Board. Following submittal of designation request letters by the Cities, the Executive Officers of the two Regional Boards executed a designation agreement in May 2013. Accordingly, the Santa Ana Regional Board adopted a permit (Order No. R8-2013-0043 or the TMDL Compliance Order) in September 2013 to regulate discharges of bacterial indicators in urban runoff from the Cities' MS4 facilities to surface waters that are tributary to the middle Santa Ana River and to facilitate implementation of bacterial indicator TMDLs for the MSAR watershed.

Recognizing the inherent difficulty in achieving bacterial indicator TMDLs and the need for adaptive implementation of BMPs sufficient to meet the WLAs specified in the TMDLs, Order No. R8-2013-0043 includes requirements for the Cities 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 permit requires these final WQBELs to be achieved by December 31, 2015, consistent with the schedule identified in the TMDLs. The TMDL Compliance Order also specifies numeric WQBELS based on the WLAs. For dry weather, the permit specifies 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 Order No. R8-2013-0043 (2018). The Order anticipates this and requires that the dry weather CBRPs include a proposed schedule for development of wet weather CBRPs. The Order also incorporates 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 TMDL Compliance Order. (The Claremont and Pomona CBRPs note that the Order will be revised again after 2018. They propose that a similar wet weather CBRP section be included in the renewal order to address the wet weather TMDLs and that the draft wet weather CBRPs would be due 24 months following adoption of that order.)

In accordance with Section III.B.2.b.ii. of the TMDL Compliance Order, each city submitted a draft CBRP in November 2013. Consistent with the requirements of the Order, the draft CBRPs focused on dry weather WLA compliance. Regional Board staff reviewed the draft CBRPs and found that they contained steps and tasks very similar to those described in the San Bernardino County and Riverside County CBRPs. Consequently, Regional Board staff had no comments. As required by the Order, each city submitted their respective final CBRP in February 2014.

The CBRPs include descriptions of existing MS4 management activities and conditions in each city. Summaries of these descriptions are provided below, followed by a summary of the proposed CBRPs. Links to the CBRP program pages are as follows:

City of Pomona:
http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/msar/cbrp/scb/CBRP_City_of_Pomona.pdf

City of Claremont:
http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/msar/cbrp/scb/CBRP_City_of_Claremont.pdf

Proposed Dry Weather Comprehensive Bacterial Reduction Plans (CBRPs) Components

The approach used by the Cities is almost identical to the approaches utilized by the San Bernardino and Riverside County municipal permittees in their CBRPs, which have already been approved by the Regional Board.

The fundamental approach proposed in each city'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 Cities 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 Cities propose a consistent approach in their respective proposed CBRPs. This allows for greater sharing and coordination of resources, with each other and the other MSAR TMDL Task Force members, to evaluate and implement effective BMPs. While the fundamental CBRP approach is consistent between the cities, each proposed CBRP does allow for jurisdictional and site-specific conditions to be taken into account as BMPs are identified and planned.

The Cities 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 and outfalls are dry and, therefore, do not contribute to dry weather flows in receiving waters.

Each proposed CBRP consists of a three-step process that includes several elements[2] 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 city) and are summarized as follows:

Step 1 – Identify, Evaluate, and Prioritize MS4 Dry Weather Flow Sources
The Cities 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 exceedances 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 Cities 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 these Cities 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 each city varies based upon many different factors, including, but not limited to, water supply relationships, governing policies, and geographic relationships. Accordingly, the Cities 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:** The Cities propose to evaluate existing ordinances and modify them where appropriate to reduce dry weather flows.

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

C. **Low Impact Development Ordinances:** The Cities propose to evaluate existing ordinances to lessen the water quality impacts of development by minimizing pollutant loading from impervious surfaces.

[2] The CBRP required elements are derived directly from the TMDL Compliance Order 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.

Element 2: Specific BMPs

A. **Transient Camps:** The Cities 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 TMDL Compliance Order and the Cities propose to complete development of this program to reduce or eliminate dry weather flows.

C. **Street Sweeping:** The Cities 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:** The Cities 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. **Planning and Land Development Program:** The Cities propose to implement a Planning and Land Development Program that incorporates low impact development (LID) practices to reduce runoff from new development and significant redevelopment activities.

F. **Septic System Management:** The Cities propose to develop an inventory of septic systems, particularly in relation to their proximity to the MS4s 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:** The Cities 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)

In coordination with other members of the MSAR TMDL Task Force, the Cities 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 Cities 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.

Implementation Schedule

It is important to emphasize that both of the Cities' 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 TMDL Compliance Order and in the Triennial Reports due in 2016 and 2019. Regional Board staff intends to continue working closely with the Cities as the CBRPs are implemented to ensure that appropriate steps and BMPs are implemented and implementation is done in a timely manner. Figures 1 and 2 depicts the flowchart of the CBRP iterative process for the Cities of Claremont and Pomona, respectively.

The CBRPs proposed by the Cities' include consistent and coordinated detailed schedules for implementing and completing the components, steps, and elements of the CBRPs. Further, it should be noted that the Cities have been participating and supporting the MSAR TMDL Task Force for several years and have already begun to implement many of the tasks and activities described in the CBRPs.

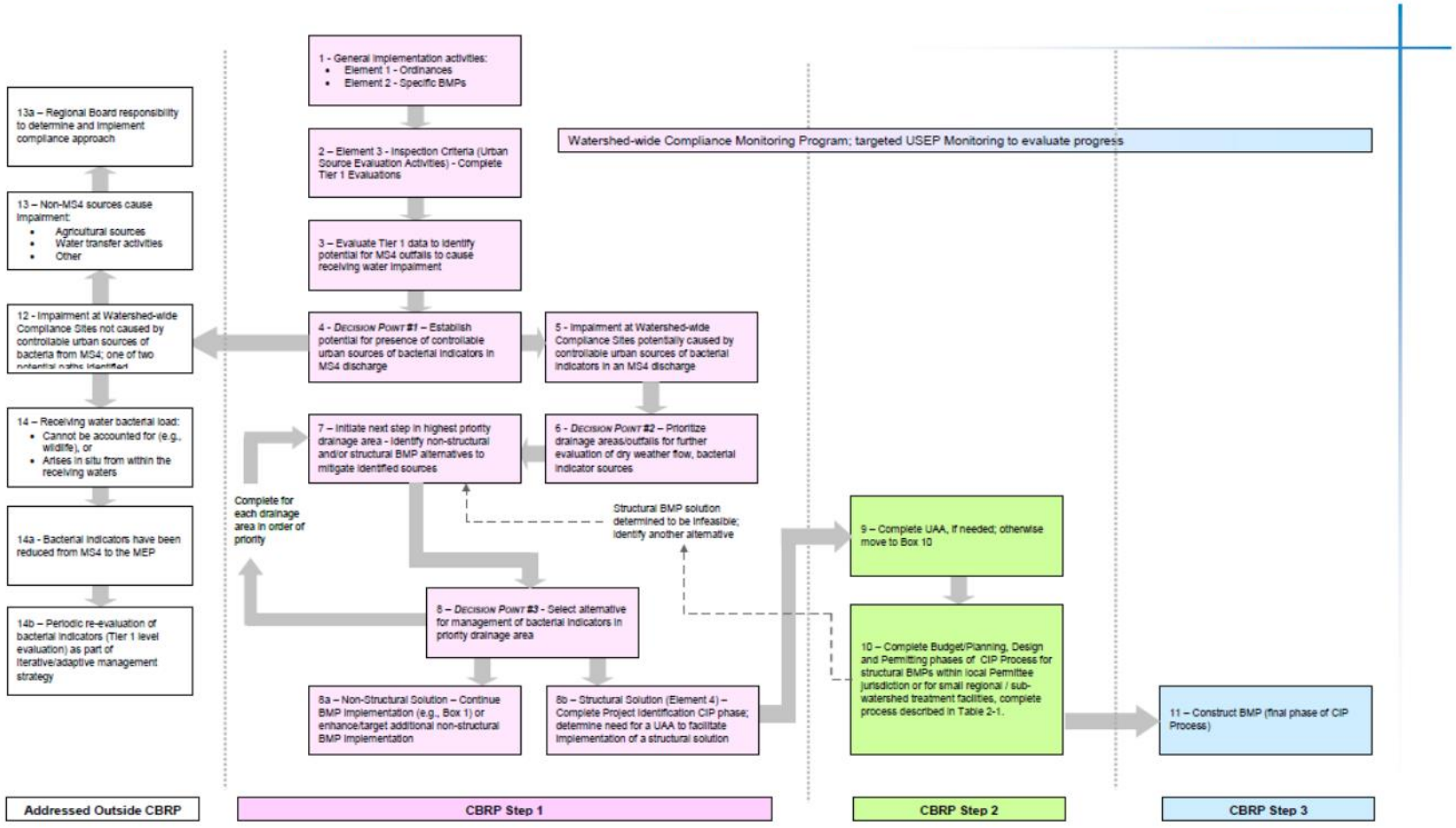
Board staff have reviewed the revised CBRP submittals and the proposed schedule. We believe that the submittals identify an appropriate approach to the identification and control of bacteria indicator densities during dry weather and provide reasonable assurance that the dry weather urban wasteload allocations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

Staff Recommendation:

Adopt Resolution No. R8-2014-0030 approving the City of Claremont CBRP.

Adopt Resolution No. R8-2014-0031 approving the City of Pomona CBRP.

Figure 1 – City of Claremont CBRP Program Flowchart



CDM Smith

Figure 2 – City of Pomona CBRP Program Flowchart