- n. Structural and Non-Structural BMPs
- o. Identifying Site Inspection Priorities and Enforcing Control Measures
- p. Education and Training for Construction Site Operators
- 55. Since the publication of the storm water Phase II regulations in 1999, most municipal storm water programs have been organized to follow the six minimum control measures (e.g., public education, public involvement, illicit discharge detection and elimination, construction, post-construction, and municipal maintenance). Phase I municipal storm water programs include control measures for industrial and commercial facilities, program management, and monitoring/evaluation. The Permittees' proposed June 2006 SWMP addresses many of these measures; however, it does not address program management and does not fully address measures such as public education, post-construction, and industrial and commercial facilities. To ensure all major control measures are addressed and to provide consistency with other municipal storm water programs (including guidance from the California Stormwater Quality Association), the Permittees' SWMP will be revised to include the following:
  - a. Program Management
    - i. Legal Authority
    - ii. Fiscal Analysis
  - b. Core Program
    - i. Construction
    - ii. Industrial and Commercial
    - iii. Municipal Operations
    - iv. Illicit Connections/Illicit Discharges
    - v. Public Outreach
    - vi. Planning and Land Development (Development Standards)
    - vii. Monitoring Program
    - viii. Water Quality Based Program
    - ix. Program Effectiveness Assessment and Reporting
- 56. The Permittees are required to submit a revised SWMP by **8 September 2014**. The existing SWMP fulfills the Central Valley Water Board's permit application requirements subject to the condition that it will be improved and revised in accordance with the provisions of this Order. The revised SWMP will describe the framework for management of storm water discharges during the term of this Order. The revised SWMP will also describe the goals and objectives; legal authorities; source identification process; funding sources; fiscal analysis; assessment controls; BMPs evaluation and improvement process effectiveness assessment strategy; and monitoring plan of the Permittees' storm water management program. The revised SWMP will include program elements and control measures that each Permittee will implement to reduce the discharge of pollutants in storm water to the MEP, and to effectively prohibit non-storm water discharges into MS4s and watercourses within each Permittees' jurisdiction. The various components of the revised SWMP, taken as

- e) A description of whether the municipality can issue administrative orders and injunctions or if it must go through the court system for enforcement actions.
- g. **Fiscal Analysis:** Each Permittee shall secure the resources necessary to meet the requirements of this Order and shall prepare an annual fiscal summary as part of the SWMP Annual Report. This summary shall, for each fiscal year covered by this Order, identify the expenditures necessary to accomplish the activities of the SWMP. Such summary shall include a description of the source(s) of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.

#### **SWMP CORE PROGRAMS**

## 4. Construction Program

- a. The objectives of the Construction Program shall be to:
  - Provide adequate legal authority to control pollutants to the MS4 from construction sites:
  - ii. Require review of construction plans and grading permits consistent with Permittee requirements;
  - iii. Require BMPs to control sediment and pollutants from construction sites to the MS4:
  - iv. Maintain a tracking system (inventory) of active construction sites;
  - v. Inspect construction sites to ensure proper BMP implementation and compliance with local requirements and applicable Provisions of this Order;
  - vi. Bring forth enforcement actions for sites in violation of Permittee requirements and advise the Central Valley Water Board of potential violations of Construction General Permit requirements;
  - vii. Provide regular internal and external training on applicable components of the SWMP and related Permits; and
  - viii. Conduct an assessment as a part of the annual reporting process to determine the effectiveness of the Construction Program and identify any necessary modifications.

- b. Each Permittee shall update its SWMP to reduce pollutants in runoff from construction sites during all construction phases to the MEP. At a minimum the Construction Program shall address the objectives listed above, as well as include the following control measures:
  - i. Source Identification;
  - ii. Threat to water quality prioritization;
  - iii. Progressive enforcement of non-compliant sites; and
  - Reporting of recalcitrant non-compliant sites to the Central Valley Water Board.
- c. Each Permittee shall continue to implement and enforce a program to control runoff from all construction sites. The program shall ensure the following minimum requirements are effectively implemented at construction sites:
  - Sediments generated on the project site shall be retained using adequate source control BMPs;
  - ii. Construction-related materials, wastes, spills, or residues shall be retained at the project site to avoid discharge to streets, drainage facilities, receiving waters, or adjacent properties by wind or runoff;
  - iii. Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained at the project site;
  - iv. Erosion from slopes and channels shall be controlled by implementing an effective combination of BMPs such as limiting grading during the wet season; inspecting graded areas during rain events; planting and maintenance of vegetation on slopes; and covering erosion susceptible slopes;
  - v. Prior to issuing a grading permit for a construction site, an erosion and sediment control plan must be submitted to the permitting agency that contains, at a minimum, the following:
    - a) If applicable to the site, a certification that a Notice of Intent has been submitted to the State Water Board;
    - b) A vicinity map showing nearby roadways, the construction site perimeter, and the geographic features and general topography surrounding the site;
    - c) A site map showing the construction project in detail, including the existing and planned paved areas and buildings; general topography

- both before and after construction; drainage patterns across the project area; and anticipated storm water discharge locations (i.e., the receiving water, a conduit to receiving water, and/or drain inlets);
- d) A description of BMPs to address contractor activities that generates pollutants including, at a minimum, vehicle washing, equipment maintenance, and waste handling;
- e) A description of the type and location of erosion and sediment control BMPs, including, but not limited to, limited grading during the wet season, and planting and maintenance of vegetation on slopes, to be employed at the site; and
- f) The name and telephone number of the qualified person responsible for implementing the Storm Water Pollution Prevention Plan (SWPPP);
- vi. If applicable, all environmental permits must be obtained from agencies such as the California Department of Fish and Wildlife, U.S. Army Corps of Engineers, and the Central Valley Water Board's 401 Water Quality Certification Program; and
- vii. The Permittees shall inspect construction sites within the MS4 Permit boundaries for compliance with local ordinances and SWMP and to confirm the Construction General Permit required SWPPP documents are on site. Sites shall be re-inspected at a frequency determined to be effective by the Permittees, based on the site's threat to water quality, and/or record of compliance until site completion and termination from coverage under the Construction General Permit. Sites in chronic noncompliance shall be reported to the Central Valley Water Board.
- d. The Permittees submitted a Grading Inspection Checklist to the Central Valley Water Board per WDR Order 5-01-130, Provision D.4. The checklist must be updated to include items in 4.c above. An updated copy shall be included in the Annual Report.

# 5. Commercial and Industrial Program:

- a. The objectives of the Commercial and Industrial Program shall be to:
  - i. Provide adequate legal authority to control pollutants from industrial and commercial facilities to the MS4;

- ii. Develop and maintain an inventory of industrial and commercial facilities located within the Permittees' jurisdiction;
- iii. Prioritize the industrial and commercial facilities within the inventory, based on their threat to water quality;
- iv. Conduct inspections of the industrial and commercial facilities that pose a significant threat to water quality with an inspection frequency based on the prioritization of the facility and conduct follow-up inspections to bring the facility into compliance;
- Implement a progressive enforcement policy to ensure that adequate enforcement is conducted, and, if necessary, to refer potential non-filers to the Central Valley Water Board;
- vi. Provide regular internal and external training on components of the SWMP and related Permits; and
- vii. Conduct an assessment as a part of the annual reporting process, determine the effectiveness of the Commercial and Industrial Program and identify any necessary modifications.
- b. Each Permittee shall update the Commercial and Industrial Program of its SWMP to reduce pollutants in runoff from commercial and industrial sites to the MEP. At a minimum, the Commercial and Industrial Program shall address the objectives listed above, as well as the following control measures:
  - At a minimum, the Permittees shall inventory restaurants, automotive service facilities, retail gasoline outlets, and industrial facilities not covered by the General Industrial Permit. The Permittees are required to inventory any additional facilities which may pose a threat to water quality.
  - ii. The Permittees must prioritize all facilities into high, medium, and low categories on the basis of the potential for water quality impact using criteria such as pollutant sources on site, pollutants of concern, proximity to a water body, and violation history of the facility. The different priority categories will be assigned different inspection frequencies, with the highest priority facilities receiving more frequent inspections. The Permittees must describe the process for prioritizing inspections and frequency of inspections. High priority facilities must be inspected a minimum of once per year. If any geographical areas are to be targeted for inspections due to high potential for storm water pollution, these areas must be listed in the SWMP. Further the SWMP must explain how the priority assigned to any one facility may be modified based on the site

inspection findings and the facility's potential to discharge pollutants.

- iii. Each Permittee shall require implementation of pollutant reduction and control measures at high priority industrial and commercial facilities with the objective of effectively prohibiting non-storm water runoff and reducing pollutants in storm water runoff. Except as specified in other sections of this Order, pollutant reduction and control measures can be used alone or in combination, and can include Source and Treatment Control BMPs, which can be applied before, during, and/or after pollution generating activities.
- iv. Inspections must at a minimum:
  - a) Evaluate the facility's compliance with the requirement to select, design, install, and implement storm water control measures;
  - Conduct a visual observation for evidence of unauthorized discharges, illicit connections, and potential discharge of pollutants to storm water;
  - Verify whether the facility is required to obtain coverage under the General Industrial Permit, and whether the facility has in fact obtained such permit coverage; and
  - d) Evaluate the facility's compliance with any other relevant local storm water requirements.
- v. At a minimum, the Permittees must document the following for each inspection:
  - a) The inspection date and time; the name(s) and signature(s) of the inspector(s);
  - b) Weather information and a description of any discharges occurring at the time of the inspection;
  - c) Any previously unidentified discharges of pollutants from the site;
  - d) Any control measures needing maintenance or repairs;
  - e) Any failed control measures that need replacement;
  - f) Any incidents of noncompliance observed; and
  - g) Any additional control measures needed to comply with the Permit Requirements.

Further, inspection findings must be tracked to ensure inspections are conducted at the frequency required, to highlight and document the recidivism of noncompliant facilities, and to aid follow up and enforcement activities.

- vi. The Permittees must ensure that all necessary follow up and enforcement activities are conducted, as necessary, to require necessary implementation and maintenance of the control measures implemented by industrial/commercial facilities.
- vii. The Permittees must ensure that all staff whose primary job duties are implementing the industrial storm water program is trained to conduct facility inspections. The training must cover what is required under this permit in terms of storm water control measures, the requirements of other applicable Industrial storm water general permits or other related local requirements, the Permittees' site inspection and documentation protocols, and enforcement procedures. Follow-up training must be provided every other year to address changes in procedures, techniques, or staffing. Permittees must document and maintain records of the training provided and the staff trained.
- viii. The Permittees must conduct an assessment as a part of the Annual Report process to determine the effectiveness of the program and identify any necessary modifications.

### 6. Municipal Operations Program

- a. The objectives of the Municipal Operations Program shall be to:
  - Prevent sanitary sewer overflows (SSO) or spills from entering the storm drain system and respond quickly and appropriately if an SSO or spill does enter the storm drain system;
  - ii. Implement development standards that require source and treatment control BMPs to reduce pollutants from Permittee owned construction projects;
  - iii. Implement pollution prevention BMPs for public facilities (e.g., corporation yards) and Facility Pollution Prevention Plans (FPPs) for public facilities to minimize or eliminate pollutant discharges to the storm drain system;
  - iv. Implement a standard protocol for storage, usage, and disposal of pesticides, herbicides (including pre-emergents), and fertilizers on Permittee-owned property such as park sites, landscaped medians, and golf courses;

- v. Promote the use of integrated pest management methods and less toxic alternatives;
- vi. Clean and maintain catch basin inlets to prevent debris accumulation and flooding;
- vii. Ensure that catch basin inlets are properly stenciled or permanently imprinted, or have legible curb markers to discourage illicit discharges into the storm drain system, and promote the 24 hour hotline number;
- viii. Maintain and inspect detention basins and pump stations;
- ix. Conduct street sweeping activities;
- x. Clean and inspect Permittee-owned parking facilities to minimize the build-up and discharge of pollutants to the storm drain system;
- xi. Provide regular internal training on applicable components of the SWMP; and
- xii. Conduct an assessment as a part of the annual reporting process, determine the effectiveness of the Program Element and identify any necessary modifications.
- b. Each Permittee shall update the Municipal Operations Program component in its SWMP to effectively prohibit non-storm water discharges and prevent or reduce pollutants in runoff from all municipal land use areas, facilities, and activities to the MEP. At a minimum, the Municipal Operations Program shall address the objectives listed above, as well as the following control measures:
  - Sanitary sewer overflow and spill response;
  - ii. Construction requirements for municipal capital improvement projects;
  - Pollution prevention at Permittee facilities;
  - iv. Landscape and pest management;
  - v. Storm drain system maintenance;
  - vi. Street cleaning and maintenance;
  - vii. Parking facilities maintenance;
  - viii. Retention/detention basin construction and maintenance;

- ix. Public industrial activities management;
- x. Emergency procedures;
- xi. Non-emergency firefighting flows;
- xii. Training; and
- xiii. Effectiveness assessment.
- c. The Permittees submitted a summary of standard operation procedures (SOPs) of inspection maintenance schedules for drainage facilities per WDR Order 5-01-130, Provision D.14. The Permittees are required to update this SOP and schedule to include a process for prioritizing the inspection and maintenance of drainage facilities based upon water quality impacts. The updated SOPs shall be included in the Annual Report.

## 7. Illicit Discharge Detection and Elimination Program

- a. The objectives of the Illicit Discharge Detection and Elimination Program shall be to:
  - Provide adequate legal authority to control and/or prohibit pollutants from being discharged to the municipal storm drain system;
  - ii. Proactively detect illicit discharges and illegal connections through a variety of mechanisms including, but not limited to, public reporting, dry weather monitoring, and field crew inspections;
  - iii. Upon identification of an illegal connection, investigate and eliminate the connection through a variety of mechanisms including, but not limited to, permitting or plugging the connection;
  - iv. Upon identification of an illicit discharge, investigate the discharge and conduct any necessary follow up actions to mitigate the impacts of the discharge; and
  - v. Conduct an assessment as a part of the annual reporting process; determine the effectiveness of the Program Element and identify any necessary modifications.
- b. Each Permittee shall update the Illicit Discharge Detection and Elimination Program in the SWMP to actively seek and eliminate illicit discharges and connections. At a minimum, the Illicit Discharge Detection and Elimination Program shall address the objectives listed above and include the following

#### control measures:

- Detection of Illicit Discharges and Illegal Connections;
- ii. Illegal Connection Identification and Elimination;
- iii. Investigation/Inspection and Follow-up Procedures;
- iv. Enforcement of Local Codes and Ordinances;
- v. Training; and
- vi. Effectiveness Assessment.
- c. The Permittees submitted a proposed training program covering storm water pollution prevention and illicit discharge detection and elimination to the Central Valley Water Board per WDR Order 5-01-130, Provision D.11. Permittees are required to update the training program in the SWMP to include training necessary for personnel to meet the objectives described in Provision 7.
- d. The Permittees submitted a proposed program to further control illegal dumping to the Central Valley Water Board per WDR Order 5-01-130, Provision D.13. The Permittees are required to continue to implement this enhanced program as a part of the Illicit Discharge Detection and Elimination Program described in Provision 7.

### 8. Public Outreach and Public Education Program (Public Outreach Program):

- a. The objectives of the Public Outreach Program shall be to:
  - i. Encourage the public to actively participate in the implementation of the storm water program as well as the various outreach events;
  - Promote the use of the 24-hour public reporting hotline;
  - iii. Implement a public education strategy for the overall program that includes developing and distributing materials, conducting a mixed media campaign, participating in community outreach events, and conducting public opinion surveys to gauge the level of awareness and behavior change within a community and/or target audience;
  - iv. Evaluate the ability to interface and coordinate with school education programs on a regional or local level;

- v. Implement a business outreach program; and
- vi. Conduct an assessment as a part of the annual reporting process, determine the effectiveness of the Public Outreach Program and identify any necessary modifications.
- b. The Permittees shall add a Public Outreach Program to its SWMP, incorporating the public outreach activities in the current SWMP. At a minimum, the Public Outreach Program shall address the objectives listed above and include the following control measures:
  - i. Public Participation
  - ii. Hotline/ website
  - iii. Public Outreach Implementation
  - iv. Public School Education
  - v. Business Outreach
  - vi. Effectiveness Assessment
- c. The Permittees shall incorporate a mechanism for public participation in the implementation of the SWMP (i.e., programs that engage the public in cleaning up creeks, removal of litter in river embankments, stenciling of storm drains, etc.).
- d. The Permittees submitted a public outreach program for users of pesticides and fertilizers per WDR Order 5-01-130, Provision D.16. The Permittees are required to update and implement this program to:
  - Coordinate with the County Agriculture Commission and Extension Service and environmental organizations, and interested stakeholders;
  - ii. Provide targeted information concerning proper pesticide use and disposal, potential adverse impacts on water quality, and alternative, less toxic methods of pest prevention and control, including IPM; and
  - iii. Continue coordination with household hazardous waste collection agencies.

### 9. Planning and Land Development Program:

- a. The objectives of the Planning and Land Development Program shall be to:
  - i. Incorporate water quality and watershed protection principles into the Permittees' policies and planning procedures;

- ii. Ensure that selected post-construction storm water controls will remain effective upon project completion by requiring a maintenance agreement and transfer or establishing a maintenance district zone for all priority development projects;
- iii. Provide a comprehensive review of development plans to ensure that storm water quality controls are properly selected to minimize storm water quality impacts;
- iv. Provide regular internal training on applicable components of the SWMP; and
- v. As a part of the annual reporting process, conduct an assessment (at least annually) to determine the effectiveness of the Program Element and identify any necessary modifications.
- b. Each Permittee shall update the Planning and Land Development Component of its SWMP to minimize the short and long-term impacts on receiving water quality from new development and redevelopment. At a minimum, the Planning and Land Development Program shall address the objectives listed above and include the following control measures:
  - i. New/Revised Development Standards;
  - ii. Plan Review Sign-Off;
  - iii. Maintenance Agreement and Transfer;
  - iv. Training: and
  - v. Effectiveness Assessment.
- 10. Water Quality Protection Principles In order to further reduce pollutants and runoff flows from new development and redevelopment, each Permittee shall encourage the following concepts:
  - a. Minimization of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible to maximize on-site infiltration of runoff (low impact development concepts).
  - b. Implementation of pollution prevention methods supplemented by pollutant source controls and treatment, and where practical, use of strategies that control the sources of pollutants or constituents (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into MS4s.
  - Preservation, and where possible, creation or restoration of areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones.

- d) BMP Type and Description.
- e) BMP Location (coordinates).
- f) Date of Acceptance.
- g) Date of O&M Certification.
- h) Inspection Dates and Summaries.
- i) Corrective Actions Taken.
- j) Date Certificate of Occupancy Issued.
- 15. **Targeted Employee Training-** Each Permittee shall periodically train its employees in targeted positions (whose jobs or activities are engaged in development planning) to ensure they can adequately implement the Planning and Land Development Program requirements.
- 16. **Outreach and Guidance for Developers-** Each Permittee, individually or in collaboration, shall develop and provide information to the development community promoting water quality protection principles and LID designs for new development and redevelopment projects.

#### MONITORING PROGRAM

- 17. **Monitoring and Reporting Program**: The Permittees shall comply with Monitoring and Reporting Program No. R5-2013-0153, which is part of this Order, and any revisions thereto approved by the Central Valley Water Board.
- 18. **Additional Studies:** The Permittees shall conduct any additional studies described herein, within the Monitoring and Reporting Program, or as described in the revised SWMP, once approved by the Central Valley Water Board.
- 19. **Program Effectiveness Assessment** 
  - a. The Permittees shall assess the effectiveness of their SWMP in their Annual Reports. The assessment shall identify the direct and indirect measurements that the Permittees used to track the effectiveness of their programs as well as the outcome levels at which the assessment is occurring consistent with this Order. Direct and indirect measurements shall include, but not limited to, conformance with established Performance Standards, quantitative monitoring to assess the effectiveness of Control Measures, measurements or estimates of pollutant load reductions or increases from identified sources, raising awareness of the public, and/or detailed accounting/documentation of SWMP accomplishments.
  - b. The Permittees shall track the long-term progress of their SWMP towards achieving improvements in receiving water quality.

- c. The Permittees shall use the information gained from the program effectiveness assessment to improve their SWMPs and identify new BMPs, or modification of existing BMPs. This information shall be reported within the Annual Reports consistent with this Order.
- d. Long Term Effectiveness Assessment (LTEA) Strategy: The Permittees shall collaborate to develop a LTEA strategy, which shall build on the results of the Permittees' Annual Reports and the initial program effectiveness assessments. The LTEA shall be submitted to the Central Valley Water Board no later than 180 days prior to the permit expiration date of 6 December 2018 and shall identify how the Permittees will conduct a more comprehensive effectiveness assessment of the storm water program as part of the SWMP. The strategy will address the storm water program in terms of achieving both programmatic goals (raising awareness, changing behavior) and environmental goals (reducing pollutant discharges, improving environmental conditions).

#### **ADDITIONAL REQUIREMENTS**

- 20. This Order may be modified, or alternatively, revoked or reissued, prior to the expiration date as follows: a) to address significant changed conditions identified in the technical reports required by the Central Valley Water Board which were unknown at the time of the issuance of this Order; b) to incorporate applicable requirements of statewide water quality control plans adopted by the State Water Board or amendments to the Basin Plan approved by the State Water Board; c) to comply with any applicable requirements, guidelines, or regulations issued or approved under Section 402(p) of the CWA, if the requirement, guideline, or regulation so issued or approved contains different conditions or additional requirements not provided for in this Order, or d) if new information is provided that indicates a potential groundwater quality problem. The Order as modified or reissued under this paragraph shall also contain any other requirement of the CWA when applicable.
- 21. Each Permittee shall comply with all applicable items of the "Standard Provisions and Monitoring Requirements for Waste Discharge Requirements (NPDES)," dated February 2004, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provisions."
- 22. This Order expires on **6 December 2018**. The Permittees must file a Report of Waste Discharge (RWD) in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for reissuance of waste discharge requirements. U.S. EPA 40 CFR Part 122 Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems states the fourth year annual report may be used as the RWD reapplication package. The reapplication package must identify any

Specific requirements that must be addressed in the Annual Reports are listed below.

- An Executive Summary discussing the effectiveness of the SWMP to reduce storm water pollution to the MEP and to achieve compliance with water quality objectives in receiving waters;
- 2. A summary of activities conducted by the Permittees;
- 3. Identification of BMPs and a discussion of their effectiveness at reducing urban runoff pollutants; and
- 4. A summary of the monitoring data and an assessment of each component of the MRP. To comply with Provisions C.1 and C.2 of the Order No. R5-2013-0153, the Permittees shall compare receiving water and discharge data with applicable water quality standards. The lowest applicable standard from the Basin Plan, California Toxics Rule (CTR), and California Title 22 (Title 22), and constituent specific concentrations limits (e.g., mercury) shall be used for comparison. When the data indicate that discharges are causing or contributing to exceedances of applicable water quality standards or constituent specific concentrations limits, the Permittees shall prepare a Report of Water Quality Exceedance and identify potential sources of the problems, and recommend future monitoring and BMP implementation measures to identify and address the sources.
- 5. Raw data are required to be submitted in electronic format.
- 6. For each monitoring program requirement, the Annual Reports shall include the following results and information:
  - a. All physical, chemical and biological data collected in the assessment:
  - All graphs, charts, statistical analysis, modeling, and any other analytical analyses in support of the Permittees' evaluation of the data and conclusions derived from that analysis; and
  - c. Documentation of quality assurance and control procedures (QA/QC).
- 7. An effectiveness assessment for each core program, as defined in the SWMP, shall be conducted annually, shall be built upon each consecutive year, and shall identify any necessary modifications. The SWMP shall describe, in detail, the performance standards or goals to

use to gauge the effectiveness of the storm water management program. The primary questions that must be assessed for each core program include the following:

- a. Level 1 Outcome: Was the core program implemented in accordance with the Order provisions, SWMP control measures and performance standards?
- b. Level 2 Outcome: Did the core program raise the target audience's awareness of an issue?
- c. Level 3 Outcome: Did the core program change a target audience's behavior, resulting in the implementation of recommended BMPs?
- d. Level 4 Outcome: Did the core program reduce the load of pollutants from the sources to the storm drain system?
- e. Level 5 Outcome: Did the core program enhance or change the urban runoff and discharge quality?
- f. Level 6 Outcome: Did the core program enhance or change receiving water quality?
- 8. A summary of any Reports of Water Quality Exceedance (RWQEs) that have been completed during the year, and a status update for those in progress. The summary shall include the conclusions and recommendations of completed RWQEs and the status of any additional BMP implementation pursuant to RWQEs;
- 9. Pursuant to 40 CFR 122.42(c)(7), the Permittees shall identify water quality improvements in, or degradation of, urban storm water;
- For each monitoring component, photographs and maps of all monitoring station locations and descriptions of each location;
- 11. Recommendations to improve the monitoring program, BMPs, performance standards, and the SWMP to address potential receiving water quality exceedances and potential pollutant sources, and to meet the MEP standard;
- 12. Provide operating data from all city and county pump stations (permanent and temporary) used to discharge storm water to surface

### E. Special Studies

## 1. Copper and Zinc Investigation and Reduction Plan

By 8 September 2014 the Permittees shall submit for Executive Officer approval, a work plan and time schedule for the development of a copper and zinc investigation and reduction plan to evaluate the extent and cause of copper and zinc in the storm water discharge and to implement management actions to eliminate or reduce sources.

### 2. Monitoring Program and Monitoring Data Assessment Methodology

By 8 September 2014 the Permittees shall submit for Executive Officer approval, a proposal for modification of the monitoring program and monitoring data assessment methodology to provide a better overall assessment of the effectiveness of the SWMP. The assessment shall include a means of analyzing trends, identifying improvements to or degradation of receiving water quality, and calculating pollutant load reduction. The methodology shall insure the data collected are of the appropriate type and quality to provide meaningful assessment of the potential impacts of the MS4 on the receiving waters.

#### III. STANDARD MONITORING PROVISIONS

All monitoring activities shall meet the following requirements:

A. Monitoring and Records [40 CFR 122.41(j)(1)]

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

B. Monitoring and Records [40 CFR 122.41(j)(2)] [California Water Code §13383(a)]

The Permittees shall retain records of all monitoring information, including all calibration and maintenance of monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the Report of Waste Discharge and application for this Order, for a period of at least five (5) years from the date of the sample, measurement, report, or application. This period may be extended by request of the Central Valley Water Board or U.S. EPA at any time and shall be extended during the course of any unresolved litigation regarding this discharge.