



**North Coast Regional Water Quality Control Board**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
NORTH COAST REGION**

**ORDER NO. R1-2015-0030  
NPDES NO. CA0025054**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT  
AND WASTE DISCHARGE REQUIREMENTS  
FOR DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS**

The following Discharger is subject to waste discharge requirements as set forth in this Order:

**Table 1. Co-Permittee Information**

<b>Co-Permittees</b>	County of Sonoma, City of Cloverdale, City of Cotati, City of Healdsburg, City of Rohnert Park, City of Santa Rosa, City of Sebastopol, Sonoma County Water Agency, City of Ukiah, Town of Windsor
<b>Name of Facility</b>	<b>Municipal Separate Storm Sewer Systems within the jurisdictional boundary of each municipality</b>
<b>Facility Address</b>	<b>Various (see Table 4)</b>
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, North Coast Region (Regional Water Board) have classified the above Co-Permittees as a medium municipal separate storm sewer system (MS4) pursuant to 40 CFR section 122.26(b)(7).	

The discharge by the Co-Permittee from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

**Table 2. Discharge Location**

<b>Discharge Point</b>	<b>Effluent Description</b>	<b>Discharge Point Latitude</b>	<b>Discharge Point Longitude</b>	<b>Receiving Water</b>
All MS4 discharge points within the jurisdictional boundary of each Co-Permittee	Storm Water and Non-Storm Water	Various	Numerous	Russian River and its tributaries

**Table 3. Administrative Information**

This Order was adopted by the Regional Water Quality Control Board on:	<b>October 8, 2015</b>
This Order shall become effective on:	<b>January 6, 2016</b>
This Order shall expire on:	<b>January 5, 2021</b>
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	<b>July 9, 2020</b>

I, Matthias St. John, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on **October 8, 2015**.

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Matthias St. John, Executive Officer

15\_0030\_Phase\_I\_Permit\_Renewal

**Table of Contents**

- I. CO-PERMITTEE INFORMATION**
- II. FINDINGS**
- III. DISCHARGE PROHIBITIONS**
- IV. RECEIVING WATER LIMITATIONS**
- V. STANDARD PROVISIONS**
- VI. SPECIAL PROVISIONS**
  - A. GENERAL REQUIREMENTS**
  - B. PUBLIC INFORMATION AND PARTICIPATION PROGRAM**
  - C. INDUSTRIAL/COMMERCIAL FACILITIES**
  - D. PLANNING AND LAND DEVELOPMENT**
  - E. STATE CONFORMITY**
  - F. DEVELOPMENT CONSTRUCTION**
  - G. PUBLIC AGENCY ACTIVITIES**
  - H. ILLICIT CONNECTIONS AND ILLICIT DISCHARGE ELIMINATION**
  - I. SPECIAL PROJECTS**
  - J. ANNUAL REPORTS**
  - K. REPORT OF WASTE DISCHARGE**

**List of Tables**

- TABLE 1: CO-PERMITTEE INFORMATION**
- TABLE 2: DISCHARGE LOCATION**
- TABLE 3: ADMINISTRATIVE INFORMATION**
- TABLE 4: CO-PERMITTEE INFORMATION**
- TABLE 5: SMALL PHASE II MS4 COMPLIANCE ACTION**
  
- TABLE 6: INDUSTRIAL/COMMERCIAL BMPs**
- TABLE 7: BMPs FOR CONSTRUCTION SITES LESS THAN ONE ACRE**
- TABLE 8: BMPs FOR CONSTRUCTION SITES ONE ACRE OR MORE**
- TABLE 9: BMPs FOR PUBLIC AGENCY FACILITY AND ACTIVITY MANAGEMENT**

**List of Attachments**

- ATTACHMENT A: DEFINITIONS**
- ATTACHMENT B: BENEFICIAL USES**
- ATTACHMENT C: JURISDICTIONAL BOUNDARY MAPS**
- ATTACHMENT D: STANDARD PROVISIONS**
- ATTACHMENT E: MONITORING AND REPORTING PROGRAM**
- ATTACHMENT F: FACT SHEET**

**I. CO-PERMITTEE INFORMATION**

The following Co-Permittees are subject to waste discharge requirements (WDRs) as set forth in this Order:

**Table 4: Co-Permittee Information**

Permittee (WDID)	Legally Responsible Party
City of Cloverdale(1B15125SSON)	City Engineer 124 North Cloverdale Blvd., Cloverdale, CA 95425
City of Cotati (1B03048SSON)	City Engineer 201 West Sierra Avenue, Cotati, CA 94931 707-665-3637
City of Healdsburg (1B03046SSON)	City Engineer, 401 Grove Street, Healdsburg, CA 95448, 707-431-3346
City of Rohnert Park (1B03049SSON)	Director of Public Works 130 Avram Avenue, Rohnert Park, CA 94928 707-588-3301
City of Santa Rosa (1B96074SSON)	Mayor 100 Santa Rosa Avenue, Santa Rosa, CA 95401 707-543-4530
City of Sebastopol (1B03045SSON)	City Manager/Attorney 7210 Bodega Avenue, Sebastopol, CA 95472 707-823-1153
City of Ukiah (1B03187SMEN)	Director of Public Works 300 Seminary Avenue, Ukiah, CA 95482 707-463-6280
City of Windsor(1B03047SSON)	Town Engineer 8400 Windsor Road, Bldg. 100, Windsor, CA 95492 707-838-5978
County of Sonoma (1B0215SSON)	Chief Building Official 2550 Ventura Avenue, Santa Rosa, CA 95403 707-565-2502
Sonoma County Water Agency (1B02149SSON)	Chief Engineer 404 Aviation Blvd., Santa Rosa, CA 95403 707-521-1835

**II. FINDINGS**

The California Regional Water Quality Control Board, North Coast Region (hereinafter Regional Water Board), finds:

### **A. Nature of Discharge**

Storm water and non-storm water discharges consist of surface runoff generated from various land uses, which are conveyed via the municipal separate storm sewer system (MS4) and ultimately discharged into receiving waters. An MS4 is a conveyance or system of conveyances owned by a public entity and designed for collecting and conveying storm water, including roads, drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains. An MS4 is designed or used for collecting or conveying storm water. It is not a combined sanitary sewer, is not part of a Publicly Owned Treatment Works (POTW).

Discharges of storm water and non-storm water from an MS4, particularly in an urbanized area, have a high potential to convey pollutants to receiving waters. The higher percentage of impervious area in urbanized areas correlates to a greater pollutant loading, resulting in turbid water discharges, nutrient enrichment, bacterial contamination, and toxic compounds. Pollutants of concern in these discharges in the Russian River Watershed include: heavy metals, indicator bacteria, nutrients (e.g., phosphorus and nitrogen), pesticides, petroleum hydrocarbons, and trash.

### **B. Permit History**

The City of Santa Rosa, County of Sonoma and the Sonoma County Water Agency (SCWA) are defined as medium MS4s and designated as Phase I Co-Permittees. Prior to issuance of this Order, Regional Water Board Order No. R1-2009-0050 served as the National Pollutant Discharge Elimination System (NPDES) MS4 permit for storm water and non-storm water discharges within the jurisdictional boundaries of the City of Santa Rosa, County of Sonoma and the SCWA. Order No. R1-2009-0050 was adopted by the Regional Water Board on October 1, 2009, and became effective on January 1, 2010.

The City of Cotati, the City of Rohnert Park, the City of Healdsburg, the City of Sebastopol, the City of Ukiah, and the Town of Windsor were previously designated as Small Phase II MS4s in 2003. State Water Board Order No. 2003-0005-DWQ (2003 Order) served as the NPDES MS4 permit for storm water and non-storm water discharges within the jurisdictional boundaries of each municipality. The 2003 Order was adopted on April 30, 2003.

The City of Cloverdale and portions of unincorporated County of Sonoma were newly designated as MS4s in 2013.

In early 2013, Phase II municipalities within the Russian River Watershed were provided an option to align with the Phase I program in an effort for watershed wide consistency and collaboration among the Phase I and Phase II Co-Permittees. The City of Cloverdale, the City of Cotati, the City of Rohnert Park, the City of Healdsburg, the City of Sebastopol,

the City of Ukiah, the Town of Windsor, and the Phase II designated portions of the County of Sonoma elected to participate in the Phase I program.

Each Phase II MS4 electing to participate in the Phase I MS4 program was required to develop and submit an implementation plan for Regional Water Board approval. The implementation plan outlined all of the requirements in Order No. R1-2009-0050 with a proposed time frame for compliance. Additionally, each Phase II MS4 was required to continue implementing the individual Storm Water Management Plan (SWMP approved under the 2003 Order). The SWMP and implementation plan served as NPDES Permit coverage for those Phase II MS4s electing to participate in the Phase I MS4 program.

The City of Cotati, the City of Cloverdale, the City of Healdsburg, the City of Rohnert Park, the City of Sebastopol, the Town of Windsor, and the City of Ukiah are now hereby designated as Phase I MS4 Permittees. These Phase I Permittees, along with the City of Santa Rosa, the County of Sonoma, and the Sonoma County Water Agency, are hereinafter collectively referred to as Co-Permittees.

### C. Permit Application

On July 3, 2014, the City of Santa Rosa, the County of Sonoma, and the SCWA each submitted an individual Report of Waste Discharge (ROWD) and Form 200 as an application for renewal of waste discharge requirements that serve as an NPDES permit to discharge storm water and non-storm water through their MS4 to surface waters. The ROWD applications were submitted prior to the expiration of Order No. R1-2009-0050.

The remaining Co-Permittees were also required to apply for waste discharge requirements prior to the expiration of Order No. R1-2009-0050. A determination was made that the implementation plans submitted in 2013 served as an equivalent to a ROWD and it was not necessary to re-submit the implementation plan. However, each municipality was responsible for submitting a Form 200 to initiate an application for coverage under this Order. Table 5 documents the date the Regional Water Board received each application.

**Table 5: Form 200 Submittal Date**

Municipality	Date Application Received
City of Cloverdale	September 8, 2014
City of Cotati	July 21, 2014
City of Healdsburg	June 25, 2014
City of Rohnert Park	June 30, 2014
City of Sebastopol	June 25, 2014
City of Ukiah	July 1, 2014
Town of Windsor	June 30, 2014

### D. Jurisdictional Boundary

Each Co-Permittee was required to submit a boundary map delineating their permit jurisdiction. For cities, the jurisdictional boundary is the city boundary. For the County of Sonoma, the jurisdictional boundary is defined as the unincorporated portion of the County of Sonoma within the Laguna de Santa Rosa watershed boundary, County Islands<sup>1</sup> within city boundaries of all other Co-Permittees, and portions of unincorporated Healdsburg, Graton, Occidental, Monte Rio, Forestville, and Guerneville. Jurisdictional boundaries are presented in Attachment C and are hereby the effective coverage area under which the terms and conditions of this Order apply.

**E. Geographical Coverage**

Municipal storm water and non-storm water discharges that discharge to receiving waters of the Russian River Watershed and its tributaries.

**F. Legal Authorities**

This Order is issued pursuant to the Clean Water Act section 402 and implementing regulations adopted by the U.S. EPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). This Order serves as an NPDES permit for point source discharges from the Co-Permittees' MS4 to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the California Water Code (commencing with section 13260).

**G. Background and Rationale for Requirements**

The Regional Water Board developed the requirements in this Order based on information submitted as part of the Co-Permittees' applications, through monitoring and reporting programs, and other available information. In accordance with 40 Code of Federal Regulation (CFR) section 124.8, a Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E are also incorporated into this Order.

**H. California Environmental Quality Act (CEQA)**

This action to adopt an NPDES Permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code, section 21100, et seq.) pursuant to California Water Code section 13389.

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<sup>1</sup> County island is defined as unincorporated urban pockets that are either completely or substantially surrounded by incorporated cities or city.

**I. Monitoring and Reporting Program**

Title 40 CFR section 122.48 requires that all NPDES permit specify requirements for recording and reporting monitoring results. California Water Code section 13267 authorizes the Regional Water Board to require technical and monitoring reports and section 13383 authorizes the Regional Water Board to establish monitoring, reporting and recordkeeping requirements. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

**J. Standard and Special Provisions**

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Co-Permittees.

**K. Notification of Interested Parties**

The Regional Water Board has notified the Co-Permittees and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharges and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

**L. Consideration of Public Comment**

The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharges authorized by this Order and the requirements contained herein. The Regional Water Board has prepared written responses to all timely comments, which are incorporated by reference as part of this Order. Details of the Public Hearing are provided in the Fact Sheet of this Order.

**M. Review by the State Water Board**

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the Regional Water Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day.

This Order serves as an NPDES permit pursuant to the Clean Water Act section 402 or amendments thereto, and becomes effective 90 days after the date of adoption, provided that the Regional Administrator, U.S. EPA, Region IX, does not express objections.

**THEREFORE, IT IS HEREBY ORDERED**, that this Order supersedes Order No.R1-2009-0050, except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder, the Co-Permittees shall comply with the requirements in this Order.

### III. DISCHARGE PROHIBITIONS

- A.** Discharges of storm water or non-storm water from the MS4 in a manner causing or contributing to a condition of pollution, contamination, or nuisance (as defined in the California Water Code section 13050), in waters of the state are prohibited.
- B.** Discharges from the MS4 shall be in compliance with the applicable discharge prohibitions contained in the Basin Plan, unless the Action Plan for Storm Water Discharges is implemented.
- C.** The Co-Permittees shall prohibit non-storm water discharges from entering into the MS4 unless such discharges are either authorized by an NPDES permit, or otherwise approved by the Regional Water Board Executive Officer in accordance with a non-storm water Best Management Practice (BMP) plan (BMP Plan). The non-storm water BMP Plans shall be developed to eliminate or minimize the discharge of pollutants to the MS4 to the maximum extent practicable.
  - 1.** The following categories of non-storm water discharges are not prohibited provided they meet all required conditions of this Order, comply with all conditions in the Executive Officer's approval, are not a significant source of pollutants, and are conducted as specified in the Co-Permittee's approved BMP Plan.
    - a.** Stream diversions permitted by the State or Regional Water Board where such flows are intentionally diverted into the MS4.
    - b.** Natural springs and rising groundwater that are intentionally diverted into the MS4.
    - c.** Uncontaminated groundwater infiltration into structures [as defined by 40 CFR 35.2005(20)] where flows are diverted into the MS4.
    - d.** Overflows from riparian habitats or wetlands where such flows are intentionally diverted into the MS4.

- e.** Flows from firefighting training and equipment repair activities.
  - f.** Flows from firefighting.
  - g.** Fire hydrant testing.
  - h.** Discharge from potable water sources.
  - i.** Utility vault dewatering.
  - j.** Gravity flow from foundation, footing, and crawl drains.
  - k.** Air conditioning condensate.
  - l.** Water from crawl space pumps.
  - m.** Recycled water runoff.
  - n.** Potable water runoff.
  - o.** Dechlorinated/debrominated swimming pool discharges<sup>2</sup>.
  - p.** Non-commercial car washing by residents or non-profit organizations.
  - q.** Pooled storm water from treatment BMPs that are intentionally discharged to the MS4 as part of maintenance activities.
- 2.** Some categories of discharges listed in III.C.1. may require a separate NPDES permit depending on the nature of the discharge. Co-Permittees are responsible for ensuring that appropriate permits have been obtained prior to authorizing a non-storm water discharge.
  - 3.** The BMP Plan shall include categories of non-storm water discharges listed in III.C.1. and appropriate BMPs for each type of allowable discharge. The Plan must include evaluating infiltration to groundwater as a possible BMP for each type of discharge.
  - 4.** The BMP Plan shall address discharges or flows from firefighting only where such discharges or flows are identified as significant sources of pollution to receiving waters. At a minimum, the BMP Plan shall address BMPs to employ during firefighting activities, when possible.
  - 5.** By the effective date of the permit, all Co-Permittees, with the exception of the City of Cloverdale, shall implement an approved BMP Plan. Absent an approved BMP Plan, the Co-Permittees must prohibit the discharge of non-storm water from entering the MS4.

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<sup>2</sup> Chlorine residual in discharge shall not exceed 0.019 mg/L.

6. The City of Cloverdale must submit a BMP Plan by the effective date of this Order for the Executive Officer's approval. Until such a plan is approved, the City of Cloverdale must either prohibit non-storm water discharges or implement BMPs on an interim basis.
7. Upon request by a Co-Permittee, the Executive Officer may consider adding other categories of non-storm water discharges in addition to those listed in III.C.1.
8. If any of the discharges listed in III.C.1 are demonstrated to be a source of pollution that causes or contributes to an exceedance of applicable receiving water limitations, the Co-Permittee shall report those findings to the Regional Water Board within 72 hours of the occurrence. Based upon this determination the Co-Permittee shall either:
  - a. Effectively prohibit the non-storm water discharge to the MS4; or
  - b. Impose additional BMPs, subject to approval by the Executive Officer, on the non-storm water discharge such that it will not be a source of pollutants; or
  - c. Require or obtain coverage under a separate NPDES permit for discharge into the MS4; or
  - d. Require diversion of the discharge of non-storm water discharge to the sanitary sewer; or
  - e. Require treatment of the non-storm water discharge to levels found acceptable by the Regional Water Board prior to discharging to receiving water.

#### **IV. RECEIVING WATER LIMITATIONS**

- A. Discharges of storm water or non-storm water from an MS4 shall not cause or contribute to a violation of water quality standards in receiving water. Water quality standards includes water quality objectives in the Basin Plan and statewide water quality control plans and policies.
- B. Discharges of storm water and non-storm water from an MS4 shall not cause an alteration of natural temperature of receiving waters unless it can be demonstrated to the satisfaction of the Executive Officer that such alteration in temperature does not adversely affect beneficial uses. At no time or place shall discharges cause temperature to increase more than 5<sup>0</sup> Fahrenheit above natural receiving water temperature.
- C. The Co-Permittees shall comply with Discharge Prohibitions and Receiving Water Limitations through timely implementation of control measures and other actions to reduce pollutants in storm water and non-storm water discharges in accordance with this Order. If an exceedance of water quality standards persist, notwithstanding implementation of this Order, the Co-Permittee causing or contributing to the exceedance

shall assure compliance with water quality standards by complying with the following procedure:

1. Upon a determination by either a Co-Permittee or the Regional Water Board that discharges are causing or contributing to an exceedance of an applicable water quality standard, the Co-Permittee shall notify the Regional Water Board within 14 days of any such determination. The determination of an exceedance can be made from the results of the Monitoring and Reporting Program R1-2015-0030 or by other information obtained by a Co-Permittee.
  2. Thereafter, the Co-Permittee responsible for the exceedance shall submit a Receiving Water Limitations Compliance Report to the Regional Water Board for Executive Officer approval. The Receiving Water Limitations Compliance Report shall be submitted within 45 days of the Co-Permittee becoming aware of the exceedance.
  3. The Receiving Water Limitations Compliance Report shall describe BMPs currently being implemented and the additional BMPs that will be implemented to prevent or reduce the discharge of any pollutants that are causing or contributing to exceedances of the water quality standard.
  4. The Receiving Water Limitations Compliance Report shall include a BMP implementation schedule.
  5. Within 30 days following the approval of the Receiving Water Limitations Compliance Report, the approved or modified suite of BMPs, the implementation schedule, monitoring, and program effectiveness evaluation shall be implemented.
  6. Modifications to the Receiving Water Limitations Compliance Report required by the Regional Water Board Executive Officer shall be submitted within 30 days of notification unless otherwise directed.
- D. Co-Permittees will have to implement alternative BMPs or combinations of BMPs and will report the procedure set forth above for continuing or recurring exceedances of the same water quality standard unless otherwise directed. The Co-Permittee shall not be expected to continue using the same specific BMPs repetitively if they have been shown to be ineffective.

## **V. STANDARD PROVISIONS**

### **A. Federal Standards Provisions.**

Each Co-Permittee shall comply with all Standard Provisions included in Attachment D of this Order, in accordance with 40 CFR sections 122.41 and 122.42(c).

### **B. General Provisions**

1. Each Co-Permittee shall, at a minimum, adopt and implement applicable terms of this Order within the jurisdictional boundary of each Co-Permittee. The Co-Permittees shall be responsible for program coordination as described in this Order as well as compliance with applicable portions of this Order within each Co-Permittee's jurisdictional boundary. This Order shall be implemented no later than 90 days after the adoption date, unless a later date has been specified for a particular provision in this Order and provided the U.S.EPA has no objections.
2. Each Co-Permittee shall comply with the requirements of 40 CFR 122.26 and implement programs and control measures to reduce the discharges of pollutants in storm water to the maximum extent practicable and to meet water quality standards.

Each Co-Permittee is required to comply with all applicable compliance time frames specified in this Order. Co-Permittees can request an extension on compliance time frames with a valid justification for additional time acceptable to the Executive Officer.

### **C. Legal Authority**

1. Each Co-Permittee shall establish and maintain adequate legal authority, within its respective jurisdictional boundary, to control discharges to the MS4 through ordinance, statute, permit, contract, or similar means. This legal authority must, at a minimum, authorize or enable each Co-Permittee to:
  - a. Control the contribution of pollutants to the municipal storm sewer by storm water discharges associated with industrial and construction activity and the quality of storm water discharged from site of industrial and construction activity;
  - b. Prohibit through ordinance, order or similar means, illicit discharges to the MS4 including non-storm water discharges, except as allowed in an approved non-storm water BMP plan;
  - c. Control through ordinance or similar means, the discharge to an MS4 of spills, dumping and disposal of materials other than storm water;
  - d. Control through interagency agreements among Co-Permittees the contribution of pollutants from one portion of the MS4 to another portion of the MS4;
  - e. Require compliance with conditions in ordinances, permits, contracts or orders;



2. Reports shall include expenditures for the overall implementation of the storm water program and the following sub-categories, at a minimum:
  - a. Street Sweeping;
  - b. Monitoring;
  - c. Annual Reporting; and
  - d. Trash Management.

**E. Responsibilities of the Co-Permittee**

Each Co-Permittee is required to comply with the requirements of this Order applicable to the MS4 discharge within its jurisdictional boundary. Each Co-Permittee shall:

1. Comply with the requirements of this Order and any modifications thereto;
2. Participate in intra-agency coordination with departments and agencies, as necessary, to facilitate implementation of the requirements of this Order;
3. Report, in addition to the annual budget summary, any supplemental dedicated budgets for the same categories; and
4. Provide technical and administrative support for committees that will be organized to implement this Order and its requirements.

**F. Public Review**

All documents submitted to the Regional Water Board in compliance with the terms and conditions of this Order shall be made available to members of the public pursuant to the Freedom of Information Act (5 U.S.C. section 552 (as amended)) and the Public Records Action (California Government code section 6250 et seq.).

**VI. SPECIAL PROVISIONS**

**A. General Requirements**

**1. General**

This Order and the provisions herein are intended to assist the Co-Permittees in developing, implementing and achieving a timely, comprehensive, cost-effective

storm water pollution control program to reduce the discharge of pollutants in storm water to the maximum extent practicable and to meet water quality standards.

## **2. Best Management Practice Substitution**

The Regional Water Board Executive Officer may approve any specific BMP substitution upon request by a Co-Permittee(s), if the Co-Permittee can document:

- a. The proposed alternative BMP program will meet or exceed the objective of the original BMP program in the reduction of storm water pollutants;
- b. The fiscal burden of the original BMP program is substantially greater than the proposed alternative and does not achieve a substantially greater improvement in storm water quality; and
- c. The proposed alternative BMP program will be implemented within a similar period of time.

Or

- a. The fiscal burden of the original BMP program is substantially greater than the proposed alternative and does not achieve a substantially greater improvement in storm water quality; and
- b. The proposed alternative BMP program will be implemented within a similar period of time.

## **3. Storm Water Program Management**

- a. Each Co-Permittee is required to have a designated storm water program manager. The program representative will serve as the main point of contact for Regional Water Board staff. The program manager must be employed by the municipality.
- b. The storm water program manager or designated representative is required to participate in storm water program management development opportunities including, but not limited to: Co-Permittee meetings, Regional Water Board staff meetings, trainings, project development, and peer review.

## **4. Collaborative Opportunity**

This Order allows Co-Permittees to work collaboratively to implement the requirements of this Order, where ever such opportunities exist. Working collaboratively is voluntary (except in the Monitoring and Reporting Program) and is

not a condition of compliance. However, Co-Permittees are encouraged to seek out collaborative opportunities to reduce the cost of implementing their storm water management programs, maximize resources, and leverage existing resources when available.

## **5. Progressive Enforcement**

### **a. General**

Each Co-Permittee shall develop and implement a Progressive Enforcement Policy to ensure that (1) regulated industrial/commercial facilities, (2) construction sites, (3) development and redevelopment sites with post-construction BMP requirements, and (4) illicit discharges/illicit connections are brought into compliance with all storm water and non-storm water requirements within a reasonable time period as specified below.

### **b. Follow-Up Inspection**

In the event that a Co-Permittee determines that a facility or site operator has failed to adequately implement all necessary BMPs, that Co-Permittee shall take progressive enforcement actions which, at a minimum, shall include a followup inspection and/or investigation.

### **c. Enforcement Action**

In the event that a Co-Permittee determines that a facility or site operator has failed to adequately implement BMPs after a follow-up inspection, the Co-Permittee shall take enforcement action as established through authority in the municipal code and ordinances, through the judicial system to bring the facility or site into compliance, or refer the case to the Regional Water Board, per the Interagency Coordination provisions below.

### **d. Records Retention**

Each Co-Permittee shall maintain records, per their existing records retention policies, and make them available on request to the Regional Water Board, including inspection reports, warning letters, notices of violations, and other enforcement actions, demonstrating Co-Permittee's effort to bring facilities into compliance.

### **e. Referral of Violations of Municipal Ordinances and California Water Code Section 13267**

A Co-Permittee may refer a violation(s) of the municipal storm water ordinances and/or California Water Code section 13260 by Industrial and Commercial facilities and construction site operators to the Regional Water Board, provided that the Co-Permittee has taken actions to implement the Progressive Enforcement Policy to achieve compliance with relevant ordinances. At a minimum, a Co-Permittee's actions must be documented with:

- i. Two followup inspections, and
- ii. Two written enforcement actions, or
- iii. A Co-Permittee may confer with the Regional Water Board at any point in this process to discuss violations and enforcement. Sections VI.A.5.e.i and ii may be bypassed in the event the violation(s) is serious in nature and the Co-Permittee determines the case needs joint authority enforcement.
- iv.

**f. Referral of Violations of the Industrial and Construction General Permits**

For these facilities or site operators in violation of municipal storm water ordinances and subject to the Industrial and/or Commercial General Permits, Co-Permittees may escalate referral of such violations to the Regional Water Board after one inspection and one notice of violation or directly after inspection if circumstances warrant joint authority enforcement. In making such referrals, Co-Permittees shall include, at a minimum, the following documentation:

- i. Name of the facility or site;
- ii. Operator of the facility or site;
- iii. Owner of the facility or site;
- iv. WDID Number;
- v. Records of communication with the facility/site operator regarding the violation(s), which shall include at least one inspection report; and
- vi. One written notice of violation.

**g. Investigation of Complaints Transmitted by the Regional Water Board Staff**

Each Co-Permittee shall initiate, by the end of the Co-Permittee's next business day, investigation of complaints transmitted by Regional Water Board staff for facilities within its jurisdictional boundary. The initial investigation shall include, at a minimum, a limited inspection of the facility to confirm validity of

the complaint and to determine if the facility is in compliance with municipal storm water ordinances and, if necessary, take enforcement action.

**h. Assistance with Regional Water Board Enforcement Actions**

As requested by the Regional Water Board Executive Officer, Co-Permittees shall assist Regional Water Board enforcement actions by:

- i.** Assisting in identification of current owners, operators, and lessees of properties and sites;
- ii.** Providing staff, when available, for joint inspection with Regional Water Board inspectors;
- iii.** Testifying as witnesses, as needed in Regional Water Board enforcement hearings; and
- iv.** Providing copies of inspection reports and documentation demonstrating application of the Progressive Enforcement Policy.

**B. Public Information and Participation Program (PIPP)**

**1. General**

Each Co-Permittee shall develop and implement a Public Information and Participation Program (PIPP) that includes the requirements listed in this sections VI.B.2-VI.B.4 of the Order. The objectives of the PIPP are as follows:

- a.** To increase the knowledge of the target audience about the MS4, the adverse impacts of storm water pollution on receiving waters and potential solutions to mitigate the impacts;
- b.** To change the waste disposal and storm water pollution generating behavior of target audiences by developing and encouraging the implementation of appropriate alternatives; and
- c.** To involve and engage communities within the Russian River watershed to participate in mitigating the impacts to storm water pollution.

**2. Residential Outreach Program**

- a.** Working in conjunction with a collaborative approach or individually, each Co-Permittee shall implement the following activities:
  - i.** Develop and distribute an “only rain down the drain” or similar themed campaign with the goal of providing general storm water pollution prevention education. The campaign shall focus on educating the general population that water entering the gutters and storm drain is not treated and goes directly to creeks and rivers.
  - ii.** Develop and distribute residential educational materials on the proper handling and disposal of the following types of wastes:
    - (a)** Vehicle waste fluids;
    - (b)** Household waste materials, including pharmaceuticals, hazardous waste, trash, cleaning paint brushes, etc;
    - (c)** Construction waste materials, including proper cleanup of equipment;
    - (d)** Pesticides and fertilizers wastes;
    - (e)** Green waste;
    - (f)** Trash; and
    - (g)** Animal waste.
  - iii.** Develop and implement an outreach program to residents on proper lawn care and water conservation practices. This outreach shall include proper pesticide/fertilizer application and the prevention of discharge pollutants to the storm drain through proper irrigation.
  - iv.** Develop and distribute educational material on proper methods of residential car washing to prevent pollutants from entering the MS4.
  - v.** Conduct storm water pollution prevention public service announcements and advertising campaigns.
  - vi.** Work with local watershed groups or committees to educate the public about storm water pollution prevention.
  - vii.** Organize or participate in events targeted to residents to educate and involve the community in storm water and non-storm water pollution prevention and cleanup.
- b.** Maintain storm water websites or provide links to storm water websites via the Co-Permittee’s website, which shall include educational materials and

opportunities for the public to participate in storm water pollution prevention and cleanup activities.

- c. When developing the PIPP, Co-Permittees shall use effective strategies to educate and involve ethnic communities in storm water pollution prevention through culturally effective methods. The target ethnic community shall be identified by the Co-Permittees based on best available data. The methods selected shall be based on current research and professional experience. Rationale used to make these determinations shall be documented and reported.
- d. Each Co-Permittee shall determine the most appropriate and effective method of distributing residential outreach materials to the community within their jurisdictional boundary.
- e. Each Co-Permittee shall develop their Residential Outreach Program during the first year of this Order and implement the program at the start of the second year.

### **3. Children Outreach Program**

- a. Working in conjunction with a collaborative approach or individually, each Co-Permittee shall develop a Children Outreach Program Plan to provide school aged children (grades K-12) with educational information on storm water pollution. The plan must include the following elements:
  - i. Educational Materials: Develop age appropriate educational materials to distribute to children for the purpose of promoting healthy watershed concepts, including but not limited to: general watershed education, local aquatic species, “only rain down the drain” storm water pollution prevention concept, an anti-littering campaign, and the importance of pet waste management;
  - ii. Locations and Special Events: Identify locations and frequencies at which materials will be distributed. The plan should consider a variety of locations and special events in which educational materials can be distributed. Locations and special events must be included to target children within in each Co-Permittee’s jurisdictional boundary;
  - iii. Interactive Opportunities: Identify interactive educational opportunities for children to learn about storm water pollution; and

iv. Partnerships: Identify opportunities to partner with other community groups with an objective of maximizing the ability to provide educational opportunities to children.

b. Each Co-Permittee shall develop their Children Outreach Program Plan during the first two years of this Order and implement the program at the start of the third year.

#### **4. Effectiveness Assessment**

Working in conjunction with a collaborative approach or individually, each Co-Permittee shall conduct a public survey to assess whether the PIPP is effective in increasing the understanding of storm water, storm water pollution, and storm water pollution prevention. The results of the survey shall be reported no later than four years after the effective date of this Order.

### **C. Industrial/Commercial Facilities**

#### **1. Business Assistance Program**

Each Co-Permittee shall implement a Business Assistance Program within their jurisdictional boundary to provide information on proper BMP implementation on targeted industrial/commercial facilities to facilitate their efforts to reduce the discharge of pollutants in storm water runoff. The Business Assistance Program shall include:

a. A website with telephone and e-mail contact information to provide information regarding the responsibilities of businesses to reduce the discharge of pollutants, pollution prevention methods and BMPs, and available guidance material; and

b. At least once during the five year permit term, each Co-Permittee shall distribute resources for storm water pollution prevention educational materials for employee training to operators of:

- i. Automotive parts retail facilities;
- ii. Commercial car washing operations;
- iii. Mobile carpet cleaning services;
- iv. Power washers;
- v. Portable sanitary service providers; and
- vi. Commercial pesticide applicator services.

## 2. Industrial/Commercial Critical Sources

### a. General

Using local ordinances, each Co-Permittee shall require implementation of pollutant reduction and control measures at industrial and commercial facilities with the objective of reducing pollutants in storm water runoff. Except where specified otherwise in this Order, pollutant reduction and control measures may include structural treatment control, source control BMPs, and operation and maintenance procedures, which may be applied before, during, and/or after pollutant generating activities. At a minimum, the Industrial/Commercial Facilities Program shall include requirements to:

- i. Identify applicable facilities;
- ii. Track facilities;
- iii. Conduct inspections;
- iv. Educate; and
- v. Assess compliance with municipal ordinances at industrial and commercial facilities that are critical sources of pollutants in storm water runoff.

### b. Inventory of Critical Source Facilities

- i. Each Co-Permittee shall maintain an inventory of facilities within its jurisdictional boundary that are identified as critical sources of storm water pollution. Critical sources to be tracked include:

- (a) Restaurants;
- (b) Automotive service facilities including those in dealerships;
- (c) Auto-dismantlers;
- (d) Retail gasoline stations;
- (e) Nurseries and landscape material retailers; and
- (f) Other facilities specifically identified by the Co-Permittee or Regional Water Board staff found to be discharging pollutants to the MS4 in levels that may result in a water quality standard exceedance.

- ii. Each Co-Permittee shall include the following minimum fields of information for each critical source industrial and commercial facility:

- (a) Name of facility;

- (b)** Name of owner/operator and contact information;
- (c)** Address of the facility;
- (d)** A narrative description of the activities performed and/or principal products produced;
- (e)** North American Industry Classification System (NAICS) code;
- (f)** Standards Industrial Classification (SIC) code; and
- (g)** Sources of exposure to storm water.

**iii.** Each Co-Permittee shall have a complete inventory no later than one year after the effective date of this Order. Each Co-Permittee shall update its inventory of critical sources at least annually thereafter. The update shall be accomplished through collection of new information obtained through field activities or through other readily inter- and intra-agency informational databases (e.g., business licenses, pretreatment permits, sanitary sewer connection permits, and similar information).

**c. Educate Industrial/Commercial Facilities**

At least once during the five-year period of this Order, each Co-Permittee shall notify the owner/operator of all inventoried critical sources of the BMP requirements applicable to the site/facility. The minimum BMP requirements are described as follows:

- i.** Each Co-Permittee shall require each inventoried critical source facility within their jurisdictional boundary to implement and maintain source control BMPs listed in Table 7, unless the pollutant generating activity does not occur. Table 7 references BMPs as described in Appendix D, California Storm Water Industrial and Commercial BMP Handbook (2014). Equivalent BMPs may be substituted for those listed in Table 7.
- ii.** Each Co-Permittee shall distribute storm water pollution prevention educational materials to operators of all critical source facilities.
- iii.** For critical sources that discharge to a Clean Water Act section 303(d) listed impaired water body, each Co-Permittee shall require operators of facilities identified by a Co-Permittee or Regional Water Board staff to implement additional controls as needed to reduce pollutants in storm water runoff that may be causing or contributing to exceedances in water quality standards.

**d. Inspect Industrial/Commercial Critical Sources**

**i. Frequency of Mandatory Industrial/Commercial Critical Source Inspections**

Each Co-Permittee shall inspect all critical source facilities twice during the five-year term of this Order. The first inspection shall occur no later than two years after the effective date of this Order. A minimum interval of six months between the first and the second inspection is required.

**ii. Scope of Mandatory Industrial/Commercial Critical Source Facility Inspection**

- (a)** Each Co-Permittee shall inspect all critical source facilities to confirm that the operator is implementing source control BMPs in compliance with municipal ordinances and this Order, equivalent to those listed in Table 6, unless such activity is not conducted. This list of BMPs may not be applicable in its entirety at all projects and judgment is necessary to implement site-appropriate BMPs. The Co-Permittee shall require implementation of additional BMPs and controls as needed to reduce pollutants in storm water runoff that may be causing or contributing to an exceedance of water quality standards. Likewise, for those BMPs that are not adequate to achieve water quality standards, the Co-Permittee may require additional site-specific controls. Each Co-Permittee must document each inspection, including inspection findings and any necessary follow up.
- (b)** Each Co-Permittee shall document in the 2015/2016 Annual Report the agency or department that will be implementing the critical source inspection requirements.
- (c)** Each Co-Permittee shall meet at least annually with inspection staff to review the critical source inspection requirements and to discuss the status of the inspections. Documentation of these meetings shall be provided in each Annual Report.

**Table 6: Industrial/Commercial BMPs**

<b>Pollutant-Generating Activity</b>	<b>BMP Narrative Description</b>	
Hazardous Materials/Waste Storage, Handling and Disposal	Distribution of educational materials on storm water pollution prevention practices to employees.	
Unauthorized Non-Storm Water Discharges	Effective elimination of non-storm water discharges	
Accidental Spills/Leaks	Implementation of effective spills/leaks prevention and response procedures	
Vehicle/Equipment Fueling	Implementation of effective	

<b>Pollutant-Generating Activity</b>	<b>BMP Narrative Description</b>	
	fueling source control devices and practices	
Vehicle/Equipment Cleaning	Implementation of effective equipment/vehicle cleaning practices and appropriate wash water management practices	
Vehicle/Equipment Repair	Implementation of effective vehicle/equipment repair practices and source control devices	
Outdoor Loading/Unloading	Implementation of effective outdoor loading/unloading practices	
Outdoor Liquid Storage	Implementation of effective outdoor liquid storage source controls and practices	
Outdoor Equipment Operations	Implementation of effective outdoor equipment source control devices and practices	
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices	
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/handling practices and appropriate control measures	
Building and Grounds Maintenance	Implementation of effective facility maintenance practices	
Parking/Storage Area Maintenance	Implementation of effective parking/storage area designs and housekeeping/maintenance practices	
Storm Water Conveyance System Maintenance	Implementation of proper conveyance system operation and maintenance protocols	

**e. Progressive Enforcement**

Each of the Co-Permittees shall implement their Progressive Enforcement Policy to ensure that industrial/commercial facilities are brought into compliance with all storm water requirements within a reasonable time period. See VI.A.5 for requirements for the development and implementation of a Progressive Enforcement Policy.

## **D. Planning and Land Development**

### **1. General**

Each Co-Permittee shall implement planning and land development requirements for private and public new development and redevelopment projects subject to this Order. The program shall incorporate the following goals:

- a.** Minimize the adverse impacts from storm water runoff on water quality, the biological integrity of receiving waters, and the beneficial uses of water bodies in accordance with requirements under CEQA (California Public Resources Code section 21100), and local government ordinances.
- b.** Minimize the percentage of impervious surfaces on development and redevelopment projects.
- c.** Implement mitigation measures to mimic the pre-development water balance through infiltration, evapotranspiration, and capture and reuse of storm water. Pre-development water balance determinations shall include assessments of runoff stored on the surface in natural depressions, runoff captured by topsoil and debris layers and runoff evapotranspiration by vegetation.
- d.** Control pollutant loadings from impervious surfaces such as roof-tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including source control BMPs such as trash enclosures, good housekeeping practices), Low Impact Development (LID) strategies, and treatment control BMPs.
- e.** Properly select, design, inspect and maintain treatment control BMPs and hydromodification control BMPs to control pollutants that are likely to be generated by land development, control post-development surface flows and velocities, assure long-term functionality of the BMPs, and avoid the breeding of vectors.<sup>3</sup>
- f.** Prioritize the selection of post-development BMPs to remove storm water pollutants specific to the proposed development, control storm water runoff volume and velocity, and beneficially use storm water to support an integrated approach to protecting water quality and managing water resources.

### **2. Storm Water Post-Construction Best Management Practice Applicability**

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<sup>3</sup> Treatment BMPs when designed to drain within 72 hours of the end of rainfall minimize the potential for breeding of vectors.

- a.** Ministerial and discretionary projects are subject to storm water post-construction BMPs. New development and redevelopment projects subject to post-construction BMP implementation requirements include:
- i.** All new development and redevelopment projects creating or replacing 10,000 square feet or more of impervious surface;
  - ii.** Streets, roads, highways, and freeway construction or reconstruction projects creating or replacing a combined total of 10,000 square feet or more of impervious surface; and
  - iii.** Starting two years after the effective date of this Order, reconstruction projects, undertaken by a public agency, of street or roads remaining in the original footprint and less than 48 feet wide. Alternatively, Co-Permittees can propose an alternative method of compliance, including:
    - 1) An offset program that provides equivalent protection of beneficial uses; or
    - 2) Physical structured units that do not achieve volume capture and are not landscape based, but are effective in removing pollutants commonly found in road runoff, such as metals, sediment, hydrocarbons, and trash. These units can only be considered if an equivalent offset project cannot be developed to treat pollutants commonly found in road runoff, as described above.
- Alternative proposals are subject to the Regional Water Board Executive Officer's approval and must be adopted no later than two years after the effective date of this Order.
- b.** Development and redevelopment projects not subject to post-construction BMP implementation requirements include:
- i.** Routine maintenance activities<sup>4</sup> that are conducted to maintain original line and grade, hydraulic capacity, and original purpose of facility (example resurfacing existing roads and parking lots);
  - ii.** Emergency activities required to protect public health and safety<sup>5</sup>;

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<sup>4</sup> Impervious surface replacement, such as the reconstruction of parking lots or excavation to roadway subgrades, is not a routine maintenance activity. Reconstruction is defined as work that replaces surfaces down to the subgrade. Overlays, resurfacing, trenching and patching are defined as maintenance activities.

<sup>5</sup> The Regional Water Board must agree that the activities are an emergency and are needed to protect public health and safety to qualify for this exception.

- iii. Projects undertaken solely to install or reinstall public utilities (ex. sewer or water lines) and do not include any additional street or road development or redevelopment activities beyond paving activities needed as a result of construction impacts on the existing roadway;
  - iv. Municipal activities involving pothole repairs and square cut patching; and
  - v. Stand-alone pedestrian pathways, trails, and off-street bicycle lanes.
- c. These triggers and exemptions must be applied to the final complete project, including all phases of work.

### **3. Post-Construction BMP Selection and Sizing**

#### **a. Post Construction Pollutants of Concern**

Post-Construction BMPs shall be selected and designed to treat the following pollutants of concern: dissolved and particulate metals, pathogens, nutrients, sediment, hydrocarbons, and trash, fine sediment, and other debris sized 100 microns and larger. This requirement may be met by directing flow and debris into a landscaped based infiltration feature that adequately captures these pollutants. All other pollutants shall be treated to the maximum extent practicable. It may be necessary to select and install multiple BMPs in order to treat all pollutants of concern.

#### **b. Sizing**

Each Co-Permittee shall require all new development and redevelopment projects subject to post-construction BMP requirements to select and size post-construction BMPs according to the following criteria:

##### **i. Volume Capture and Treatment Requirements**

Post-construction BMPs shall be sized to treat all of the runoff generated using the modified Rational Method with an intensity of 0.2 inches per hour and capture (infiltrate, evapotranspirate, and/or reuse) the increase in volume generated by the site due to the increase in impervious surface for a one inch rain event over a 24 hour period using the Curve Number Method.

- ii. Treatment Only: If treatment is the only requirement, BMPs must be sized and designed to:

##### **(a) Filter or treat:**

- (1)** 1.5 times the design flow rate;

**(2)** Flow rate of runoff produced by the 24 hour 85th percentile rain event, as determined from the local historical rainfall record, multiplied by a factor of two.

**iii.** A reduction in volume capture and/or treatment requirements may be provided with the selection of LID pollution prevention measure BMPs. All projects may consider the use of these LID BMPs, which include:

- (a)** Living Roof,
- (b)** Rainwater Harvesting,
- (c)** Interceptor Trees,
- (d)** Vegetated Buffer Strips,
- (e)** Bovine Terrace,
- (f)** Pervious Pavement,
- (g)** Impervious Area Disconnect, and
- (h)** Stream Setbacks and Buffers.

**c. Selection**

The Co-Permittees shall approve post-construction BMP selection for required projects based on the following criteria:

**i. Low Impact Development BMPs**

**(a)** LID BMPs shall be deemed the highest priority BMP and are required to be implemented to the maximum extent practicable at all required development and redevelopment projects. These BMPs achieve both treatment and volume capture requirements. Infiltration must be provided by the underlying native soils or other suitable material. BMPs shall be installed without perforated pipes or impermeable liners. Example BMPs include:

- (1)** Rain Garden,
- (2)** Roadside Bioretention,
- (3)** Vegetated Swale with Bioretention,
- (4)** Constructed Wetlands, and
- (5)** Infiltration Trench.

**(b)** If it is deemed inappropriate or infeasible to infiltrate into native soil due to low soil infiltration rates, the infiltration based BMPs may be designed with a perforated pipe raised to allow infiltration below, as

opposed to the bottom of the feature. This is to ensure that volume capture occurs in the area below the perforated pipe.

**ii. Treatment Based BMPs**

**(a)** Treatment based BMPs are intentionally designed not to infiltrate and shall only be selected where infiltration is not required or not feasible due to the following reasons<sup>6</sup>:

- (1)** The project's proximity to geotechnical hazards,
- (2)** The proposed BMPs proximity to a contaminated groundwater site where infiltration poses a risk of causing pollutant mobilization,
- (3)** Site constraints that prohibit the ability to infiltrate storm water due to shallow groundwater and/or depth to hardpan, or
- (4)** Other criteria proposed by a Co-Permittee and approved by the Regional Water Board Executive Officer, in which compliance with volume capture is not feasible, such as high density development or sensitive biological areas.

**(b)** For projects approved for treatment only BMPs, selection shall be given in the following order of priority:

- (1)** Biofiltration BMPs installed with subdrains and/or impermeable liner. BMPs in this category infiltrate, treat, and then direct treated storm water to the storm drain.
- (2)** Landscaped based BMPs that must be used in a treatment train in sequence with other BMPs in order to achieve treatment of all pollutants of concern. Example BMPs include tree filter units and modular wetlands.
- (3)** Physical structured units that do not achieve volume capture and are not landscape based. Example BMPs include chambered separator units, physical filters, and trash excluders. These BMPs may also be used in a treatment train with other higher priority BMPs, to achieve treatment of all pollutants of concern.
- (4)** Detention facilities which are integrated for hydraulic system design may be used to provide volume capture and/or treatment if the design meets the design criteria specified for LID in this Order.

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<sup>6</sup> Projects unable to meet volume capture requirements under this criteria are subject to section 9. Offset Mitigation Program.

- d. This selection and sizing criteria shall be applied to new development and redevelopment projects or project phases that have not received tentative tract map approval prior to the effective date of this Order<sup>7</sup>. For projects that are not required to receive tentative tract maps, use permits, or other similar permits, the selection and sizing criteria shall be applied to all projects which have not received certification of a final CEQA document by the effective date of this Order.

#### **4. Low Impact Development Manual**

- a. No later than six months from the effective date of this Order, the City of Santa Rosa shall submit to the Regional Water Board for the Executive Officer approval, an updated version of the Storm Water Low Impact Development Technical Design Manual (LID Manual) to be consistent with the requirements set forth in this Order. The City of Santa Rosa shall provide each Co-Permittee and the Regional Water Board with the opportunity to review proposed changes prior to submitting to the Executive Officer. Any subsequent changes to the LID Manual are subject to Regional Water Board Executive Officer approval.
- b. The Planning and Land Development Program shall be implemented within 60 days of the Executive Officer's approval of the updated LID Manual. Co-Permittees are required to continue implementation of the LID Manual developed as required under Order No. R1-2009-0050 until the updated LID Manual is effective.

#### **5. Post Construction BMP Requirements Approval Process**

Each Co-Permittee shall incorporate into their entitlement process standard procedures that require consideration of potential storm water quality impacts early in the planning process of any project that meets the criteria of this Order for new development and redevelopment projects. Each Co-Permittee shall clearly demonstrate the developer and Co-Permittee considered storm water quality site issues before the facilities/projects reached final design. The Co-Permittees must demonstrate review in the conceptual design of storm water quality protection at either of two different points in the project planning and permitting process:

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<sup>7</sup> All projects required to enroll in the State's Construction General Permit (CGP), subject to a 401 water quality certification, or waste discharge requirements may be required to comply with post-construction requirements regardless of tentative tract map approval date. While it is not the Co-Permittee's responsibility to determine compliance with post-construction requirements from other Regional Water Board permits, projects may need additional local review to incorporate appropriate requirements.

- a. During the discretionary approval process of a proposed project, when the Co-Permittee must exercise judgment or deliberation in order to approve or disapprove a development or significant redevelopment project; or
- b. During the ministerial approval process of issuing a grading, building, demolition, or similar “construction” permits in which only fixed standards or objective measures are applied.

#### **6. Project Approval**

Each Co-Permittee shall facilitate an effective process for approval of post-construction BMPs. The process shall include:

- a. Detailed review of the project-specific Standard Urban Storm Water Mitigation Plan (SUSMP) submitted for all applicable projects, both public and private, per section D.2. of this Order. Requirements of the SUSMP submittal shall be stipulated in the LID Manual and include BMP sizing calculations and BMP pollutant removal calculations; and
- b. An established organizational structure for communication, coordination and delineated authority between and among municipal departments that have jurisdiction over project review, plan approval, and project construction.

#### **7. Post-Construction BMP Training**

Each Co-Permittee, either collaboratively or individually, shall provide training to key stakeholders on the LID Manual following any revisions and annually thereafter. The primary focus of the training shall be on changes to the LID Manual, as specified by this Order.

#### **8. Hydromodification (Flow/Volume/Duration) Control Criteria**

- a. Each Co-Permittee, either collaboratively or individually, shall develop and implement a Hydromodification Control Plan which requires all new development and redevelopment projects creating or replacing one acre or more of impervious surface and not exempt consistent with section VI.D.2.b of this Order, to address potential hydromodification impacts to receiving water. Hydrologic control measures shall be implemented to prevent accelerated downstream erosion, minimize flooding and public nuisance conditions, maximize groundwater recharge, and protect stream habitat in receiving waters, and riparian areas.

- i.** The Hydromodification Control Plan shall be developed to mimic pre-and post-development hydrologic storm water runoff discharge rates, velocities, and duration. Pre-development hydrology shall be based on an analysis of natural infiltration, soils storage and evapotranspiration rates. The Hydromodification Control Plan shall also ensure that total storm water runoff volumes remain the same or lower as the pre-development volumes unless the project meets iv(h) below.
  - ii.** The Hydromodification Control Plan may include one, or a combination of on-site regional or subregional hydromodification control BMPs, LID strategies, or stream restoration measures, with preference given to LID and on-site hydromodification control BMPs.
  - iii.** The Hydromodification Control plan shall be consistent with the one or more of the following:

    - (a)** A simplified method using LID BMPs with accepted sizing criteria to provide hydromodification control;
    - (b)** A numerical model to predict the hydrological changes resulting from new development and provide mitigation; or
    - (c)** A numerical model to identify effective end of pipe or flow duration control mitigation strategies.
  - iv.** The Hydromodification Control Plan shall:

    - (a)** Maintain infiltration based on natural site conditions;
    - (b)** Specify authorized hydromodification management control BMPs;
    - (c)** Specify hydromodification management control BMP design criteria;
    - (d)** Specify the range of flows controllable with flow duration control methods;
    - (e)** Describe the approved hydromodification method or model;
    - (f)** Describe any alternate hydromodification management model and design;
    - (g)** Specify stream restoration measures design criteria; and
    - (h)** Allow a developer an exception to the hydromodification requirements if it can be adequately demonstrated to the Regional Water Board Executive Officer that the project runoff flows will have a positive impact on receiving waters.
- b.** By the effective date of this Order, each Co-Permittee shall have an approved Hydromodification Control Plan which incorporates the requirements of this

Order. The Hydromodification Control Plan shall be implemented in applicable projects by the effective date of this Order.

## **9. Offset Mitigation Program**

- a.** Each Co-Permittee, using a collaborative approach or individually, shall develop and implement an offset mitigation program to substitute all or part of a project's requirements for volume capture, where on-site compliance is deemed to be technically infeasible. The offset mitigation program shall include the following components:
  - i.** The offset mitigation program shall describe the criteria in which a project is deemed eligible for offset mitigation. Technical infeasibility criteria must be consistent with section VI.D.3.c.ii.a)1-4.
  - ii.** Full treatment of the design storm is required at all applicable projects and is not eligible for the offset mitigation program.
  - iii.** When a Co-Permittee determines a project applicant has demonstrated that it is technically infeasible to capture all or part of the volume required to be retained on-site, the Co-Permittee shall require the project applicant to mitigate the portion of the volume capture not achieved by participating in the offset mitigation program.
  - iv.** The offset mitigation program shall determine criteria to which offset projects must meet to qualify for the program. Consideration shall be given to allowing the project applicant to fund projects with equivalent water quality benefits to the project being offset.
  - v.** Offset mitigation projects must be prioritized and approved by the Regional Water Board Executive Officer, after a 21 day public comment period. Co-Permittees shall seek approval of projects that provide an equivalent and measureable water quality benefit. High priority projects will be selected based on benefits to water quality, projects that address impairments of the Russian River Watershed, LID retrofit, and stream restoration.
- b.** No later than four years after the effective date of this Order, the Co-Permittees, either collaboratively or individually, shall submit a proposed offset mitigation program for Executive Officer approval.
- c.** Absent of an approved offset mitigation program, projects unable to meet volume capture requirements shall be referred to the Regional Water Board Executive Officer for approval.

## 10. Retrofit Areas of Existing Public Development

- a. Each Co-Permittee shall develop a program to retrofit areas of existing public development. The program shall be developed based on the following criteria:
  - i. Each Co-Permittee shall identify existing public development opportunities as candidate projects for retrofitting with green infrastructure.
  - ii. Candidate projects are defined as any existing public development that does not currently have storm water volume capture and/or treatment at the facility and contributes to pollutant loading of storm water runoff and/or hydromodification. This may also include street, road, or sidewalk projects that don't otherwise trigger post-construction BMPs, such as replacement of public utilities.
  - iii. Candidate projects shall have identifiable opportunities to incorporate LID BMPs which promote groundwater infiltration, storm water reuse, and/or evapotranspiration using the following types of green infrastructure BMPs:
    - (a) Downspout Disconnection;
    - (b) Rainwater Harvesting;
    - (c) Rain Gardens;
    - (d) Planter Boxes;
    - (e) Bio retention basins;
    - (f) Permeable Pavements;
    - (g) Green Roofs;
    - (h) Green Streets;
    - (i) Street Washing;
    - (j) Diversion of First Flush from MS4 to a POTW for treatment; or
    - (k) Other BMPs that promote groundwater recharge, storm water reuse, and/or evapotranspiration.
- b. The Co-Permittees shall develop a preliminary list of candidate projects no later than one year after the effective date of this Order.
- c. During the duration of this Order, Co-Permittees shall seek out opportunities to fund and implement projects identified as candidates for retrofit opportunities. Projects may be implemented through the Offset Mitigation Program, in conjunction with other multi-benefit projects, grant funding, or other mechanisms deemed appropriate by the Co-Permittees.
- d. Co-Permittees shall implement projects as funding and opportunities become available.

## **11. Maintenance Declaration**

- a.** Each Co-Permittee shall require that all new private development and redevelopment projects subject to post-construction BMP requirements provide verification of maintenance provisions for LID BMPs, treatment control BMPs, and hydromodification control BMPs by way of a legally binding maintenance declaration which shall be recorded to the title deed and run with the land. The BMP maintenance declaration shall ensure that the BMPs remain fully functional and that all areas identified for treatment will discharge to the treatment BMP system.
- b.** Verification at a minimum shall include the developer's recorded maintenance declaration accepting responsibility for maintenance until the responsibility is legally transferred to a public entity, property owner, home owners association, or other entity designated to take over permanent responsibility for BMP maintenance.
- c.** BMP maintenance plans shall be implemented by entities with the appropriate funding and technical ability to conduct the maintenance. BMPs within the public right of way or treating public areas shall be maintained by the Co-Permittee, home owner's association, or other legally responsible party, and shall not be maintained by individual property owners.

## **12. Tracking and Inspection**

- a.** Each Co-Permittee shall implement a tracking system, and an inspection and enforcement program for new development and redevelopment projects, both private and public, that have post-construction BMPs.
- b.** Each Co-Permittee shall implement a system for tracking projects with installed post-construction BMPs. The system shall be an electronic system, and at a minimum, contain the following information:
  - i.** Municipal project identifying information;
  - ii.** BMP type(s) and description;
  - iii.** BMP location;
  - iv.** Date of acceptance;
  - v.** Scanned copy of the maintenance declaration;
  - vi.** Date of end of warranty period;
  - vii.** Maintenance records;



Each of the Co-Permittees shall implement their Progressive Enforcement Policy to ensure that owners of dysfunctional or un-maintained post-construction BMPs are brought into compliance with all requirements within a reasonable time period but no later than the next likely rain event<sup>8</sup>. See section VI.A.5 for requirements for the development and implementation of a Progressive Enforcement Policy.

## **E. State Conformity**

### **1. CEQA**

Each Co-Permittee shall incorporate procedures necessary for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents. The procedures shall include the following considerations:

- a.** Potential impact of project on the site hydrograph and receiving waters by a change in runoff flow velocity or volume ;
- b.** Potential impact of post-construction storm water runoff on water quality and receiving water beneficial uses;
- c.** Potential for discharge of storm water from areas with material storage, vehicle or equipment fueling, vehicle or equipment maintenance, waste handling and disposal, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;
- d.** Potential for the discharge of storm water to cause harm to the biological integrity of the water ways and water bodies;
- e.** Potential for significant increases in erosion from storm water flows at the project site and surrounding areas; and
- f.** Potential to cause or contribute to an exceedance of water quality standards.

### **2. General Plan**

- a.** Each Co-Permittee shall amend, revise or update their General Plan to include storm water quality and storm water management considerations and policies as needed to remain consistent with this Order. Such considerations shall take place when any of the following elements of the General Plan are updated or amended:

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<sup>8</sup> A likely rain event is any weather pattern that is forecast to have a 50% or greater probability of producing precipitation in the project area. Each Co-Permittee shall obtain a copy of rain forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at <http://www.srh.noaa.gov/forecast>).

- i.** Land use;
  - ii.** Housing;
  - iii.** Conservation; and/or
  - iv.** Open Space.
- b.** Each Co-Permittee shall provide the Regional Water Board with a draft amendment or revision when a General Plan element or General Plan is noticed for comment in accordance with Government Code section 653050 et. Seq.

## **F. Development Construction**

### **1. General**

- a.** Each Co-Permittee shall develop, implement, and enforce a construction program that:
  - i.** Prevents illicit construction-related discharges of pollutants into the MS4 and receiving waters;
  - ii.** Requires implementation and maintenance of structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites;
  - iii.** Reduces construction site discharges of pollutants to the MS4 to the maximum extent practicable; and
  - iv.** Prevents construction site discharges to the MS4 from causing or contributing to a violation of water quality standards.

### **2. Grading Restrictions**

- a.** No grading shall occur between October 1st and April 30th for construction projects on hillsides with slopes 10% or steeper unless the project is granted an exception by a Co-Permittee.
- b.** If grading in these areas is not completed before October 1st and no exception is granted, grading shall be halted and effective erosion control measures shall be put in place to control erosion. Grading shall not resume until after April 30th.
- c.** A grading restriction exception may be granted by a Co-Permittee where the project proponent can demonstrate through plan review, inspections,

monitoring, and use of effective BMPs that can reasonably be expected to meet the following goals:

- i. Keep storm water from causing or contributing to degradation of water quality or impairing beneficial uses;
  - ii. The storm event daily average turbidity of the discharge from the site is 50 NTU or less; and
  - iii. The field pH of the discharge from the site is between 6.5 and 8.5.
- d. If an exception is granted by a Co-Permittee, a monitoring program must also be conducted by the project proponent to demonstrate BMP effectiveness and compliance with the above goals. If the project does not meet one or more of the above goals, the Co-Permittee shall direct the project to cease grading activities and improve BMPs. Grading may resume after demonstrating BMPs are effective at meeting the goals.

**3. Requirements for Construction Sites Less than One Acre**

- a. Each Co-Permittee shall require the implementation of an effective combination of erosion and sediment control BMPs from Table 7, or equivalent, to prevent erosion and sediment loss, and the discharge of construction wastes from all projects that are less than one acre and require a permit for grading within the Co-Permittee’s jurisdictional boundary. This list of BMPs may not be applicable in its entirety and judgment is necessary to implement site-appropriate BMPs, but the Co-Permittees will ensure that an effective combination of BMPs are used.

**Table 7: BMPs for Construction Sites Less than One Acre**

<b>Minimum Set of BMPs for All Construction Sites</b>	<b>CASQA Handbook<sup>8</sup></b>	<b>Caltrans Handbook<sup>8</sup></b>
<b>Erosion Control</b>		
Scheduling	EC-1	SS-1
Preservation of Existing Vegetation	EC-2	SS-2
<b>Sediment Controls</b>		
Silt Fence	SE-1	SC-1
Fiber Rolls	SE-5	SC-5
Sand Bag Barrier	SE-8	SC-8
Gravel Bag Berm	SE-6	SC-6
Stabilized Construction Site Entrance/Exit	TR-1	TC-1
<b>Non-Storm Water Management</b>		

<b>Minimum Set of BMPs for All Construction Sites</b>	<b>CASQA Handbook<sup>8</sup></b>	<b>Caltrans Handbook<sup>8</sup></b>
Water Conservation Practices	NS-1	NS-1
Dewatering Operations (Groundwater dewatering to surface water only under NPDES Permit No. R1-2009-0045) <sup>9</sup>	NS-2	NS-2
<b>Waste Management</b>		
Material Delivery and Storage	WM-1	WM-1
Stockpile Management	WM-3	WM-3
Spill Prevention and Control	WM-4	WM-4
Solid Waste Management	WM-5	WM-5
Concrete Waste Management	WM-8	WM-8
Sanitary/Septic Waste Management	WM-9	WM-9

**4. Requirements for Construction Site One Acre or More**

**a. General**

Each Co-Permittee shall require operators of public and private construction sites one acre or more within their jurisdictional boundary to select, install, implement and maintain BMPs during construction activities. For the purposes of this Order, any project one acre or more requiring a permit for grading activities is subject to these requirements.

**b. Construction Site Inventory/ Electronic Tracking System**

Each Co-Permittee shall use an electronic system to inventory grading permits, encroachment permits, demolition permits, building permits, or construction permits, (and any other municipal authorization to move soil, remove vegetation, and/or construct or destruct that involves land disturbance) issued by the Co-Permittee.

**c. Construction Plan Review and Approval Procedures**

- i.** Each Co-Permittee shall develop and implement procedures to review and approve relevant construction plan documents. The review procedures shall meet the following minimum requirements:

Prior to issuing a grading permit (or similar permit issued to regulate soil disturbing activities), the Co-Permittee shall require each operator of a construction activity within their jurisdictional boundary to prepare and

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<sup>4</sup> Or as updated or renewed.

submit an erosion and sediment control plan for the Co-Permittee’s review and written approval. Each Co-Permittee shall require that:

- (a) Each erosion and sediment control plan contains appropriate construction site BMPs, identifies specific locations where BMPs will be installed, and includes a maintenance schedule;
- (b) The erosion and sediment control plan includes the rationale for selecting BMPs, including soil loss calculations, if necessary;
- (c) A Storm Water Pollution Prevention Plan (SWPPP) is developed pursuant to the State Water Board’s Construction General Permit, and the SWPPP may be substituted for the erosion and sediment control plan;
- (d) The erosion and sediment control plan is developed and certified by a Qualified SWPPP Developer (QSD);
- (e) Each erosion and sediment control plan is reviewed using a checklist or similar process; and
- (f) The construction site operators have coverage under applicable permits, including but not limited to the Construction General Permit and 401 Water Quality Certifications.

**d. BMP Implementation**

- i. Each Co-Permittee shall require the implementation of BMPs at all projects requiring an erosion and sediment control plan (or equivalent) to prevent erosion, sediment loss, and the discharge of construction waste.
- ii. Each Co-Permittee must adopt BMP standards consistent with the range of activities presented in Table 8. Co-Permittees shall adopt BMP standards from the California BMP Handbook, Construction; or Caltrans Stormwater Quality Handbooks, Construction Site Best Management Practices (BMPs) Manual (or addenda), or equivalent. This list of BMPs may not be applicable in its entirety at all projects and judgment is necessary to implement site-appropriate BMPs.

**Table 8: BMPs for Construction Sites One Acre or More**

BMPs	CASQA Handbook <sup>10</sup>	Caltrans Handbook
Erosion Control		

<sup>10</sup> Or as updated or renewed.

<b>BMPs</b>	<b>CASQA Handbook<sup>10</sup></b>	<b>Caltrans Handbook</b>
Scheduling	EC-1	SS-1
Preservation of Existing Vegetation	EC-2	SS-2
Hydraulic Mulch	EC-3	SS-3
Hydroseeding	EC-4	SS-4
Soil Binders	EC-5	SS-5
Straw Mulch	EC-6	SS-6
Geotextiles and Mats	EC-7	SS-7
Wood Mulching	EC-8	SS-8
<b>Sediment Controls</b>		
Fiber Rolls	SE-5	SC-5
Gravel Bag Berm	SE-6	SC-6
Street Sweeping and/or Vacuum	SE-7	SC-7
Storm Drain Inlet Protection	SE-10	SC-10
Sediment Basin	SE-2	SC-2
Check Dam	SE-4	SC-4
Silt Fence	SE-1	SC-1
Sand Bag Barrier	SE-8	SC-8
<b>Tracking Control BMPs</b>		
Stabilized Construction Entrance/Exit	TR-1	TC-1
Entrance/Exit Tire Wash	TC-3	TC-3
<b>Additional Controls</b>		
Wind Erosion Controls	WE-1	WE-1
Stabilized Construction Roadway	TC-2	TC-2
<b>Non-Storm Water Management</b>		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations (Groundwater dewatering to surface water only under NPDES Permit No. R1-2015-0003) <sup>11</sup>	NS-2	NS-2
Vehicle and Equipment Washing	NS-8	NS-8
Vehicle and Equipment Fueling	NS-9	NS-9
Vehicle and Equipment Maintenance	NS-10	NS-10
<b>Waste Management</b>		
Material Delivery and Storage	WM-1	WM-1
Stockpile Management	WM-3	WM-3
Solid Waste Management	WM-5	WM-5
Spill Prevention and Control	WM-4	WM-4
Concrete Waste Management	WM-8	WM-8
Sanitary/Septic Waste Management	WM-9	WM-9

**e. Construction Site Inspections**

**i. Threat to Water Quality**

- (a)** Each Co-Permittee shall develop and implement a prioritization system to determine the construction projects relative threat to water quality. In evaluating the threat to water quality, the following factors shall be considered: soil erosion potential; site slope and length of slope; project size and type; sensitivity to receiving water bodies, proximity to receiving water bodies, non-storm water discharges, past record of non-compliance by the operators of the construction site; and any water quality issues relevant to the particular Co-Permittee.
- (b)** On an annual basis, and prior to September 1 of each calendar year, each Co-Permittee shall identify all projects, both public and private, considered to have a high threat to water quality based on the prioritization system above. This requirement shall be implemented beginning in the 2016 calendar year.
- (c)** A Co-Permittee does not need to develop or implement a prioritization system if all projects are inspected at the frequency specified in section VI.F.4.e.ii,

**ii. Inspection Frequency**

- (a)** All projects must be inspected once between September 1 and October 1 of each calendar year;
- (b)** All projects must be inspected within 2 business days of the first quarter inch rain event at the start of the rainy season<sup>12</sup>; and
- (c)** All projects identified as having a high threat to water quality must be inspected at least monthly during the months of September through April.

**iii. Inspection Procedures**

All inspections shall:

- (a)** Be performed to ensure all necessary erosion and sediment structural and non-structural BMPs are selected, installed, implemented, and maintained according to the approved erosion and sediment control plan (or subsequent revisions);

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<sup>12</sup> Rainy season is defined by October 1 through April 30.

- (b)** Assess the appropriateness of the planned and installed BMPs and their effectiveness;
- (c)** Include visual observation and record keeping of non-storm water discharges, potential illicit discharges and connections, and potential discharge of pollutants from storm water runoff; and
- (d)** Be documented in a manner to verify that the projects are inspected according to the required frequencies and procedures.

## **5. Enforcement**

Each Co-Permittee shall implement their Progressive Enforcement Policy to require that construction sites are brought into compliance with all storm water requirements within a reasonable time period but no later than the next likely rain event.

## **G. Public Agency Activities**

### **1. General**

Each Co-Permittee shall develop and implement a Public Agency Activities Program to minimize storm water impacts from Co-Permittee owned or operated facilities and activities. Requirements for Public Agency Activities Program consist of the following components:

- a.** Public Facility Inventory;
- b.** Public Agency Facility and Activity Management;
- c.** Storm Water Facility Pollution Prevention Plans;
- d.** Public Facility Inspections;
- e.** Vehicle and Equipment Washing Management;
- f.** Landscape, Park, and Recreational Facilities Management;
- g.** Storm Drain Operation and Maintenance;
- h.** Trash Management;
- i.** Street and Road Maintenance;
- j.** Emergency Procedures; and
- k.** Municipal Employee and Contracted Municipal Employee Training.

### **2. Public Facility Inventory**

- a.** Each Co-Permittee shall develop and maintain an inventory of all Co-Permittee owned or operated facilities within the jurisdictional boundary of this Order that are potential sources of storm water pollution, including the following, as applicable:
- i.** Airports;
  - ii.** Animal control facilities;
  - iii.** Chemical storage facilities;
  - iv.** Composting facilities;
  - v.** Equipment storage and maintenance facilities;
  - vi.** Fairgrounds;
  - vii.** Fueling or fuel storage facilities;
  - viii.** Hazardous waste disposal facilities;
  - ix.** Hazardous waste handling and transfer facilities;
  - x.** Incinerators;
  - xi.** Landfills;
  - xii.** Materials storage yards;
  - xiii.** Pesticide storage facilities;
  - xiv.** Fire stations;
  - xv.** Public parking lots;
  - xvi.** Public golf courses;
  - xvii.** Public swimming pools;
  - xviii.** Public parks;
  - xix.** Public works yards;
  - xx.** Public marinas;
  - xxi.** Recycling facilities;
  - xxii.** Solid waste management facilities (detention basins); and
  - xxiii.** All other Co-Permittee owned or operated facilities or activities that each Co-Permittee determines may contribute a substantial pollutant load to the MS4.
- b.** Each Co-Permittee shall include the following fields of information for each facility in the inventory:
- i.** Name of facility;



**Table 9: BMPs for Public Agency Facility and Activity Management**

<b>Maintenance Category</b>	<b>Caltrans Page</b>	<b>Activity Specific BMPs</b>
General BMPs	B-4	Schedule and Planning
	B-5	Spill Prevention and Control
	B-5	Sanitary/Septic Waste Management
	B-6	Material Use
	B-6	Safer Alternative Products
	B-7	Vehicle/Equipment Cleaning, Fueling, and Maintenance
	B-7	Illicit Connection Detection, Reporting and Removal
	B-7	Illegal Spill Discharge Control
	B-8	Maintenance Facility Housekeeping Practices
Flexible Paving	B-9	Asphalt Cement Crack and Joint Grinding/Sealing
	B-10	Asphalt Paving
	B-11	Structural Pavement Failure (Digouts) Pavement Grinding and Paving
	B-13	Emergency Pothole Repairs
	B-14	Sealing Operations
Rigid Pavement	B-15	Portland Cement Crack and Joint Sealing
	B-16	Mudjacking and Drilling
	B-17	Concrete Slab and Spall Repair
Slope/Drains/Vegetation	B-19	Shoulder Grading
	B-21	Nonlandscaped Chemical Vegetation Control
	B-23	Nonlandscaped Mechanical Vegetation Control/Mowing
	B-24	Nonlandscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal
	B-25	Fence Repair
	B-26	Drainage Ditch and Channel Maintenance
	B-28	Drain and Culvert Maintenance
	B-30	Curb and Sidewalk Repair
Litter/Debris/Graffiti	B-32	Sweeping Operations
	B-33	Litter and Debris Removal
	B-34	Emergency Response and Cleanup Practices
	B-36	Graffiti Removal
Landscaping	B-37	Chemical Vegetation Control
	B-39	Manual Vegetation Control
	B-40	Landscaped Mechanical Vegetation Control/Mowing
	B-41	Landscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal
	B-42	Irrigation Line Repairs
	B-43	Irrigation (Watering), Potable and Non-potable
	B-44	Storm Drain Stenciling
	B-45	Roadside Slope Inspection

Maintenance Category	Caltrans Page	Activity Specific BMPs
Environmental	B-46	Roadside Stabilization
	B-48	Storm Water Treatment Devices
	B-49	Traction Sand Trap Devices
Public Facilities	B-50	
Bridges	B-52	Welding and Grinding
	B-54	Sandblasting, West Blast and Sand Injection and Hydroblasting
	B-56	Painting
	B-57	Bridge Repairs
Other Structures	B-59	Pump Station Cleaning
	B-61	Tube and Tunnel Maintenance and Repair
	B-63	Tow Truck Operations
	B-64	Toll Booth Lane Scrubbing Operations
Electrical	B-65	Sawcutting for Loop Installation
Traffic Guidance	B-67	Thermoplastic Striping and Marking
	B-68	Paint Striping and Marking
	B-70	Raised/Recessed Pavement Marker Application and Removal
	B-71	Sign Repair and Maintenance
	B-73	Median Barrier and Guard Rail Repair
	B-75	Emergency Vehicle Energy Attenuation Repair
Snow and Ice Control	B-76	Snow Removal
	B-77	Ice Control
Storm Maintenance	B-78	Minor Slides and Slipouts Cleanup/Repair
Management and Support	B-80	Building and Grounds Maintenance
	B-82	Storage of Hazardous Materials (Working Stock)
	B-84	Material Storage Control (Hazardous Waste)
	B-85	Outdoor Storage of Raw Materials
	B-86	Vehicle and Equipment Fueling
	B-87	Vehicle and Equipment Cleaning
	B-88	Vehicle and Equipment Maintenance and Repair
	B-90	Aboveground and Underground Tank Leak and Spill Control

#### 4. Facility Pollution Prevention Plans

- a. Each Co-Permittee shall develop and implement a Facility Pollution Prevention Plan (FPPP) to include each facility (or group of facilities) identified in the Public Facility Inventory. The FPPP shall be developed consistent with the Public Agency Facility and Activity Management section of this Order. The FPPP must include the following elements, at a minimum:





**vii.** Policies, procedures, and ordinances shall include commitments and timelines to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:

- (a)** Quantify pesticide use by its staff and hired contractors;
- (b)** Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units; and
- (c)** Continue programs to reduce pesticide use to MEP.
- (d)** Report reductions in pesticide use annually.

**b.** Each Co-Permittee shall:

- i.** Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers;
- ii.** Ensure pesticides or fertilizers are not applied to an area immediately prior to a likely rain event, during, or immediately after a rain event, or when water is flowing off the area;
- iii.** Ensure pesticides are not applied within the MS4;
- iv.** Ensure that no banned or unregistered pesticides are stored or applied;
- v.** Ensure that all staff applying pesticides are certified in the appropriate category by the California Department of Pesticide Regulation, or are under the direct supervision of a pesticide applicator certified in the appropriate category;
- vi.** Implement procedures to encourage the retention and planting of native or drought-tolerant vegetation to reduce water, pesticide and fertilizer needs;
- vii.** Store pesticides and fertilizers indoors or under cover on paved surfaces with secondary containment;
- viii.** Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills; and
- ix.** Regularly inspect storage areas.

**c.** The City of Santa Rosa, the County of Sonoma, and the SCWA must continue implementing the Landscape, Park, and Recreational Facilities Management

program by the effective date of this Order. All other Co-Permittee shall implement no later than two years after the effective date of this Order.

## **8. Storm Drain Operation and Maintenance**

### **a. Storm Drain Maintenance**

- i.** Each Co-Permittee shall implement a program for storm drain maintenance that includes the following:
  - a)** Maintain catch basins, storm drain inlets, and other conveyance structures on a regular basis to remove larger pollutants such as trash, debris and sediment;
  - b)** Visual monitoring of prioritized Co-Permittee owned open channels and other drainage structures for debris at least annually prior to the rainy season;
  - c)** Manually remove trash and debris, as needed from open channels and roadside ditches in priority areas a minimum of once per year, prior to the rainy season;
  - d)** Use adequate BMPs to eliminate the discharge of contaminants and pollutants during MS4 maintenance and clean outs, and during subsequent rain events; and
  - e)** Quantify the amount of materials removed using best estimates and ensure the materials are properly disposed.
  - f)** The Storm Drain Maintenance Program shall be implemented by each Co-Permittee no later than October 1, 2016.

### **b. Storm Drain Inlet Labels**

- i.** Each Co-Permittee shall label unlabeled storm drain inlets with a legible no dumping message through a proactive approach with a goal of labeling all public storm drain inlets in parking lots and within the public right of way by the end of the five year term of this Order
- ii.** Each Co-Permittee shall track all storm drains with illegible stencils or labels, and re-stencil or re-label these storm drain inlets at a quarterly frequency.

## **9. Trash Management**

### **a. Trash Management at Public Events**

Each Co-Permittee shall require for any public event, permitted private event, or other event where a foreseeable amount of substantial trash will be generated, that the following measures be implemented:

- i.** Conditions be placed on any special use permit issued for such event to control and clean up trash; and
- ii.** Require the proper management of trash generated; and
- iii.** Arrange for temporary covers to be placed on storm drain inlets; or
- iv.** Clean trash receptacles and grounds as needed in the event area in a timely manner.

### **b. Trash Receptacles**

- i.** Each Co-Permittee shall install trash receptacles in areas subject to higher trash generation, such as transit stops or schools; and
- ii.** Each Co-Permittee shall ensure that trash receptacles are cleaned out and maintained as necessary to prevent trash overflow.

## **10. Street and Road Maintenance**

### **a. Street Sweeping**

- i.** Each Co-Permittee shall develop and implement a street sweeping program to reduce the amount of trash, sediment and other forms of pollutants from entering the MS4. The program must include routine street sweeping of all streets with a curb and gutter and protocols to maximize street sweeping effectiveness. Protocols to include in the street sweeping program shall include, at a minimum:

**(a)** A schedule detailing street sweeping frequency;

**(b)** Evaluation of high priority areas in the jurisdictional boundary in which an increase in sweeping frequency would provide maximum benefit to pollutant removal;

- (c)** Increase sweeping frequency in conjunction with special events that are likely to increase trash loads;
- (d)** Conduct sweeping activities at optimal times of the day in which a minimal number of vehicles will be parked on the street and optimal day of the week (e.g., day after the trash pick-up) when streets might be littered by fugitive trash; and
- (e)** Notify the general population of street sweeping schedules. This effort should include recommendations to the community on how to help make street sweeping an effective resource.
- ii.** Each Co-Permittee's street sweeping program shall also include a record of the amount of waste collected as a result of street sweeping. Each Co-Permittee shall report the record of waste collected in the annual report and discuss effectiveness of the program over time.
- iii.** Each Co-Permittee shall submit a proposed street sweeping program to the Regional Water Board's Executive Officers for approval. The proposed program shall be submitted no later than the end of the first year following the effective date of this Order. The program will be required to be implemented within 60 days from the date of the Executive Officer's approval.
- iv.** Each Co-Permittee shall maintain routine street sweeping activities during the development of the street sweeping program as required by this Order.

**b.** Road Maintenance

Each Co-Permittee shall implement the Guidelines for Protecting Aquatic Habitat and Salmon Fisheries for County Road Maintenance (a.k.a. the Fishnet-4C Manual) or equivalent, for road maintenance projects.

**c.** Roadway Paving or Repaving Operations

Each Co-Permittee shall require that the following BMPs be implemented for any project involving roadbed or street paving, repaving, patching, digouts, or resurfacing roadbed surfaces:

- i.** Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions;

- ii. Install BMPs at all susceptible storm drain inlets and at manholes to prevent discharges of paving products and tack coat;
- iii. Prevent the discharge of release agents such as soybean oil, other oils, or diesel to the MS4 or watercourses;
- iv. Minimize non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt;
- v. Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly;
- vi. Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly;
- vii. Collect solid waste by shoveling and vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly;
- viii. Cover the “cold-mix” asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting prior to rain events;
- ix. Cover loads with tarps before haul-off to a storage site and ensure the trucks are not overloaded;
- x. Minimize airborne dust by using water spray during grinding;
- xi. Protect stockpiles with a cover or sediment barriers during a rain event; and
- xii. Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grinding materials or rubble in or near storm water drainage systems or watercourses.

## **11. Emergency Procedures**

Each Co-Permittee may conduct repairs of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of the Order. Where the self-waiver has been invoked, the Permittee shall submit to the Regional Water Board Executive Officer a statement of the occurrence of the emergency, an explanation of the circumstances, and the measures that were

implemented to reduce the threat to water quality, no later than 10 days after the emergency has passed.

## **12. Municipal Employee and Contracted Municipal Employee Training**

- a. Each Co-Permittee shall, no later than one year after Order adoption and annually thereafter, ensure all municipal and contracted employees whose interactions, jobs, and activities may affect storm water quality, are appropriately trained to:
  - i. Understand the requirements of the overall storm water management program;
  - ii. Identify which activities in their scope of duties have the potential to pollute storm water; and
  - iii. Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.

Co-Permittees shall keep records of all trainings conducted in this section including staff attendance and training topics covered. Such documentation shall be submitted in the Annual Report.

## **H. Illicit Connections and Illicit Discharges Elimination**

### **1. General**

Each Co-Permittee shall develop and implement an Illicit Connection and Illicit Discharge (IC/ID) Elimination Program to detect, investigate, and eliminate IC/IDs to the MS4.

### **2. Outfall Mapping**

- a. Each Co-Permittee shall create and maintain an up-to-date and accurate outfall map showing all outfalls owned by the Co-Permittee and within their jurisdictional boundary. The map may be hard copy and/or electronic from or within a geographic information system (GIS). The map must include the location of outfalls (with description and coordinates - latitude and longitude information in decimal degrees using WGS 84 datum or note the coordinate system used), the name and location of all receiving water bodies receiving a direct discharge from outfalls, and the jurisdictional boundary.
- b. By the effective date of this Order, all Co-Permittees, except the City of Cloverdale and the County of Sonoma, shall have an up to date outfall map available. The City of Cloverdale shall complete outfall mapping by July 1, 2017. The County of Sonoma shall have newly designated areas mapped by June 30, 2016 and all other areas mapped by the effective date of this Order.

### **3. Outfall Inspection**

- a.** Each Co-Permittee shall conduct field inspections for illicit discharges/non-storm water flows at all outfalls owned by the Co-Permittee and within the jurisdictional boundary that meet any of the following criteria:
  - i.** 36 inches in diameter or greater; or
  - ii.** 50 years or older in age, or
  - iii.** Inspected during the Order No. R1-2009-0050 that were identified as having a non-storm water discharge not comprised of groundwater, surface water, natural spring, wetland, etc.
- b.** Inspections shall occur on all required outfalls once during the permit term and must be completed by the end of the fourth year of the permit. Inspections must take place at least 72 hours after a rain event. Any outfall found to be flowing and discharging non-storm water to receiving waters shall be investigated as described in the Illicit Discharge Source Investigation and Elimination section of this Order.

### **4. Illicit Discharge Source Investigation and Elimination**

#### **a. General**

Each Co-Permittee shall develop and implement procedures for conducting investigations to identify the source of all suspected illicit discharges, including procedures to eliminate the discharge once the source is located. Procedures shall include the following:

- i.** Each Co-Permittee shall respond by the end of the next business day following discovery or a report of a suspected illicit discharge;
- ii.** Each Co-Permittee shall take necessary actions to identify and abate the source of all illicit discharges;
- iii.** All investigations must include an assessment of the illicit discharge effect on receiving water quality and beneficial uses, if any;
- iv.** Each Co-Permittee shall track all investigations to document, at a minimum, the dates the discharge was reported or observed, the results of the investigation, any follow-up investigations and the date the investigation was closed; and
- v.** Resulting enforcement actions shall follow the Co-Permittee's Progressive Enforcement Policy, as described in Part 1, section 5.

**b. Identification and Response to Illicit Connections**

- i. Each Co-Permittee, upon discovery or upon receiving a report of a suspected illicit connection, shall initiate an investigation within 7 days, to determine the source of the connection, nature and volume of the discharge through the connection, and the responsible party for the connection.
- ii. Each Co-Permittee, upon confirmation of an illicit connection, shall use their formal enforcement authority to ensure the connection is terminated within 180 days of completion of the investigation.
- iii. Each Co-Permittee shall keep records of all illicit connection investigations and the enforcement actions taken to eliminate all illicit connections.

**5. Public Reporting of Non-Storm Water Discharges and Spills**

- a. Each Co-Permittee shall establish and maintain a phone hotline to receive public reports of illicit discharges, unauthorized non-storm water discharges, trash and debris, and spills that may be discharging to the MS4.
- b. Each Co-Permittee shall promote, publicize, and facilitate public reporting of illicit discharges, including publication of the hotline. At a minimum, the hotline and reporting procedures shall be published on each Co-Permittee's website. Co-Permittees shall also consider adding the hotline phone number to their storm drain stencil to direct the public on how to immediately report a non-storm water discharge.
- c. Each Co-Permittee shall follow up on complaints as described in the Illicit Discharge Source Investigation and Elimination and/or Spill Response sections, as appropriate.

**6. Spill Response Plan**

Each Co-Permittee shall implement a response plan for spills to the MS4 within their jurisdictional boundary. The spill response plan shall clearly identify agencies responsible for spill response and cleanup, telephone numbers and email addresses for contacts, and shall contain the minimum following requirements:

- a. Coordinate with spill response teams throughout all appropriate departments, programs and agencies;
- b. Initiate the investigation of all spill complaints received within one business day of the incident report ;

- c. Respond to spills requiring containment or if there is an immediate threat to public health or the environment within 2 hours of the incident report; and
- d. Illicit discharge and non-storm water discharge spills that may endanger public health or the environment shall be reported to appropriate agencies, including County Health and the California Emergency Management Agency (CalEMA).

## **I. Special Projects**

Workplans required in section VI.I shall provide the necessary details to implement the requirements set forth in VI.I.1-4. Project implementation time frames may extend beyond the five-year term of this Order.

### **1. Inorganic Pollutants**

- a. The City of Santa Rosa and the County of Sonoma shall develop a workplan to address copper, lead, and zinc in storm water runoff within their jurisdictional boundaries. The workplan shall include:
  - i. An inventory of sources of copper, lead, and zinc within their jurisdictions;
  - ii. Proposed BMPs needed to reduce the levels of copper, lead, and zinc in the discharge or storm water and non-storm water;
  - iii. A monitoring proposal to verify BMP effectiveness; and
  - iv. A proposed implementation schedule.
- b. The workplan shall be submitted no later than 6 months after the effective date of this Order. The implementation schedule shall commence within 60 days of the Regional Water Board's Executive Officers approval.

### **2. Pathogens**

- a. The City of Santa Rosa and the County of Sonoma shall develop a workplan to address pathogens in storm water runoff. The workplan shall include:
  - i. An inventory of pathogen sources from human and domestic animals;
  - ii. Proposed BMPs to reduce the levels of bacteria in the discharge to surface water;
  - iii. A proposal to conduct field monitoring, investigation, or research to confirm the source(s) identified as significantly impacting water quality;

- iv. A monitoring proposal to verify BMP effectiveness; and
- v. A proposed implementation schedule.

- b. The workplan shall be submitted no later than one year after the effective date of this Order. The implementation schedule shall commence within 60 days of approval by the Regional Water Board Executive Officer.

### **3. Sediment**

- a. Each Co-Permittee, working collaboratively with other Co-Permittees, or individually, shall develop a workplan to address sediment in storm water runoff. The workplan shall include:
  - i. An inventory of sediment sources;
  - ii. Proposed BMPs to reduce the levels of sediment in the discharge to surface water;
  - iii. A proposal to conduct field monitoring, investigation, or research to confirm the source(s) identified as significantly impacting water quality;
  - iv. A monitoring proposal to verify BMP effectiveness; and
  - v. A proposed implementation schedule.
- b. The workplan shall be submitted no later than 18 months after the effective date of this Order. The implementation schedule shall commence within 60 days of approval by the Regional Water Board Executive Officer.

### **4. Trash and Litter Assessment**

- a. Each Co-Permittee, working collaboratively or individually, shall develop a workplan to assess trash (including litter) as a pollutant within receiving waters within each jurisdictional boundary or on a watershed wide basis. A single workplan may be submitted if the assessment will be conducted on a watershed wide basis. The objectives of the assessment is to establish baseline conditions of trash in receiving water, evaluate the quantity and type of trash found in receiving water, and determine the source of trash entering receiving water. The assessment shall include the following elements:
  - i. Locations: The workplan shall identify suitable assessment locations which are representative of receiving water within each jurisdictional boundary or watershed area.



- d. A summary of data, including monitoring data, that is accumulated throughout the reporting year [40 CFR section 122.42(c)(4)];
  - e. Annual expenditures and budget for year following each annual report [40 CFR section 122.42(c)(5)];
  - f. A summary describing the number and nature of enforcement actions, inspections, and public education programs [40 CFR 122.42(c)(6)]; and
  - g. Identification of water quality improvements or degradation [40 CFR section 122.42(c)(7)].
2. Each Co-Permittee shall report any additional information deemed necessary as determined by Regional Water Board staff.
  3. For fiscal year 2014-2015, Annual Reports shall be submitted no later than December 15, 2015. Starting with the 2015-2016 fiscal year, Annual Reports shall be submitted no later than October 15 of each year.
  4. Annual Reports shall be submitted electronically to NorthCoast@waterboards.ca.gov unless directed otherwise.

#### **K. Report of Waste Discharge**

In accordance with Title 23, Chapter 3, Subchapter 9 of the California Code of Regulations, each Co-Permittee shall file a report of waste discharge no later than 180 days before the expiration date of this Order. The report of waste discharge serves as an application for reissuance of this Order. The application shall include the following minimum components, unless otherwise approved by Regional Water Board staff:

1. A completed Form 200 application;
2. A map of the Co-Permittee's jurisdictional boundary;
3. The current population within each Co-Permittee's jurisdictional boundary;
4. A description of land uses serviced by the MS4, including the approximate coverage in acres;
5. A list of water bodies that receive discharges from the MS4, including a list of impaired water bodies and the pollutant(s) of concern;
6. Pollutants of concern or potential concern in the discharge from the MS4;
7. A summary of all available water quality data from the discharge and receiving water collected during the term of this Order;

- 8.** Findings concluded from the data and special studies including recommendations based on such findings;
- 9.** Proposed revisions to this Order with a supporting rationale for the proposed change, and;
- 10.** Additional information deemed necessary as provided by Regional Water Board staff guidance.

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