STATE OF CALIFORNIA

California Regional Water Quality Control Board
North Coast Region

Order No. R1-2009-0050
NPDES No. CA0025054
WDID No. 1B96074SSON

Waste Discharge Requirements

For

The City of Santa Rosa, the County of Sonoma, and
the Sonoma County Water Agency

Storm Water and Non-Storm Water Discharges
from Municipal Separate Storm Sewer Systems

Sonoma County

Table of Contents

FINDINGS 2

PUBLIC PROCESS 3
BACKGROUND 4

A. DISCHARGE PROHIBITIONS 9

B. RECEIVING WATER LIMITATIONS 15

C. TOTAL MAXIMUM DAILY LOAD PROVISIONS FOR DISCHARGES TO THE LAGUNA DE SANTA ROSA 16

D. STORM WATER QUALITY MANAGEMENT PROGRAM IMPLEMENTATION 17

PART 1 – GENERAL REQUIREMENTS 17
PART 2 – LEGAL AUTHORITY 18
PART 3 – FISCAL RESOURCES 19
PART 4 – MODIFICATIONS/REVISIONS 20
PART 5 – RESPONSIBILITIES OF THE CO-PERMITTEES 21

E. SPECIAL PROVISIONS 21

PART 1 – GENERAL REQUIREMENTS 21
PART 2 – PUBLIC INFORMATION AND PARTICIPATION PROGRAM (PIPP) 22
PART 3 – INDUSTRIAL/COMMERCIAL FACILITIES PROGRAM 25
PART 4 – PLANNING AND LAND DEVELOPMENT PROGRAM 33
PART 5 – NEW DEVELOPMENT/REDEVELOPMENT INTEGRATED WATER QUALITY/RESOURCE PLAN 37
PART 6 – IMPLEMENTATION OF NEW DEVELOPMENT/REDEVELOPMENT POST-CONSTRUCTION BMPS 41
PART 7 – STATE STATUTE CONFORMITY 44

PART 8 – DEVELOPMENT CONSTRUCTION PROGRAM 45
PART 9 – PUBLIC AGENCY ACTIVITIES PROGRAM 51
PART 10 – ILLICIT CONNECTIONS AND ILLICIT DISCHARGES ELIMINATION PROGRAM 60
PART 11 – REPORTING PROGRAM 62

List of Tables

TABLE 1. BMPS FOR NON-STORM WATER DISCHARGES 10

TABLE 2. LAGUNA TMDL NET LOADS FOR TOTAL NITROGEN (POUNDS/SEASON) IN URBAN RUNOFF 17

TABLE 3. LAGUNA TMDL NET LOADS FOR TOTAL AMMONIA (POUNDS/SEASON) IN URBAN RUNOFF 17

TABLE 4. BMPS AT RESTAURANTS 27

TABLE 5. BMPS AT AUTOMOTIVE SERVICE FACILITIES 28

TABLE 6. BMPS AT RETAIL GASOLINE OUTLETS 30

TABLE 7. BMPS AT NURSERIES, LANDSCAPE BULK MATERIAL YARDS, AND NURSERY CENTERS 31

TABLE 8. BMPS AT CONSTRUCTION SITES LESS THAN 1 ACRE 47

TABLE 9. BMPS AT CONSTRUCTION SITES GREATER THAN 1 ACRE 47

TABLE 10. BMPS AT VEHICLE MAINTENANCE/MATERIAL STORAGE FACILITIES/CORPORATION YARDS 52

TABLE 11. EFFLUENT DISCHARGE LIMITATIONS FOR DEWATERING STORM WATER TREATMENT BMPS 59

FINDINGS

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

1. The City of Santa Rosa, the County of Sonoma, and the Sonoma County Water Agency (hereinafter Co-Permittees) jointly submitted a Report of Waste Discharge dated December 21, 2007. The report was submitted to request renewal of Waste Discharge Requirements (hereinafter Order) under the National Pollutant Discharge Elimination System (NPDES). The Co-Permittees discharge or contribute to discharges of storm water and non-storm water from municipal separate storm sewer systems (MS4s), also called storm drain systems, to the Russian River and its tributaries and other waters.

2. The Fact Sheet is hereby incorporated into this Order.

3. This Order includes a Monitoring and Reporting Program and the following attachments:
   (a) Attachment A – Beneficial Uses of Waters within or downstream of the Permit Boundary.
   (b) Attachment B – Standard Provisions of the Order.
   (c) Attachment C – Definitions of Terms in the Order.
   (d) Attachment D – Co-Permittees' Storm Water Management Plan Summary.
   (e) Attachment E – U.S.EPA Inspection Report for Santa Rosa.
   (f) Attachment F – U.S.EPA Inspection Report for Sonoma County and the Sonoma County Water Agency.

Public Process

4. On September 9, 2008, the Regional Water Board released the first draft of this Order for a 43 day public comment period that ended on October 22, 2008. The Regional Water Board received 159 comment letters. Responses to these comments can be found in a separate document that was released during the comment period for the second draft of this Order.

5. The Executive Officer of the Regional Water Board held a public workshop on October 21, 2008 to discuss this Order, receive comments and answer questions about the Order.

6. In writing the second draft of this Order, Regional Water Board staff met with interested parties and parties that had commented on the draft Order. Meetings were held with:
   (a) Co-Permittees: September 25, 2008; October 23, 2008; November 13, 2008; November 25, 2008; December 8, 2008; December 15, 2008; December 29, 2008; December 30, 2008; January 8, 2009; January 20, 2009; January 21, 2009; January 28, 2009; February 4, 2009; February 19, 2009; February 26, 2009; March 12, 2009; and April 9, 2009;
   (b) Russian River Watershed Association: October 14, 2008;
   (c) Sonoma County Fire Fighter's Association: October 28, 2008;
   (d) Russian River Watershed Protection Committee: November 19, 2008;
   (e) Russian Riverkeeper and Coast Action Group: December 2, 2008;
   (f) Sonoma Marin Vector Control District: December 9, 2008;
   (g) Engineers representing associations and local consultants: December 15, 2008;
   (h) U.S.EPA: February 18, 2009; and
   (i) Department of Fish and Game: March 3, 2009.

7. The Regional Water Board has notified the Co-Permittees and interested parties of its intent to prescribe waste discharge requirements (WDRs) for this discharge. Regional Water Board staff and Co-Permittees' staff have worked closely together over the last two years to develop the Management Plan and discuss revisions to the previous Order to achieve a well integrated set of documents that will

effectively protect water quality. The hearing on the Order was properly noticed. Accordingly, the Co-Permittees and interested parties have been given an opportunity to address the Regional Water Board at a public hearing and an opportunity to submit their written comments and recommendations to the Regional Water Board.

8. The issuance of waste discharge requirements is exempt from the California Environmental Quality Act (CEQA) of the Public Resources Code in accordance with California Water Code section 13389. Notwithstanding, the Regional Water Board has considered the policies and requirements set forth in Chapters 1 through 2.6 of CEQA (Pub. Resources Code §§ 21000-21098).

9. The Regional Water Board has considered the information in the attached Management Plan, which is part of this Order, in developing the Findings of this Order and the Fact Sheet.

10. This Order shall serve as an NPDES permit, pursuant to Clean Water Act (CWA) section 402, or amendments thereto, and shall take effect 90 days from Order adoption date provided the Regional Administrator of the United States Environmental Protection Agency (U.S.EPA) has no objections.

11. Pursuant to Water Code section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board within 30 days of adoption of the Order by the Regional Water Board. A petition must be sent to:

    State Water Resources Control Board
    Office of the Chief Counsel
    P.O. Box 100
    Sacramento, CA 95812-0100

12. This Order may be modified or alternatively revoked or reissued prior to its expiration date, in accordance with the procedural requirements of the NPDES program 40 CFR 122.41(f) & 122.62, and the Water Code § 13167.5 for the issuance of waste discharge requirements.

13. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge and this Order.

Background

14. Section 402(p) of the federal Clean Water Act (CWA) (33 U.S.C. § 1342(p)), as amended by the Water Quality Act of 1987, requires NPDES permits for discharges from Municipal Separate Storm Sewer Systems (MS4s) that include a requirement to effectively prohibit non-storm water discharges into storm sewers and that require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including management practices, control techniques and

system, design and engineering methods, and such other provisions as the State determines appropriate for the control of such pollutants. On November 16, 1990, the U.S.EPA published regulations (40 CFR Part 122) which prescribe permit application requirements for MS4s pursuant to section 402(p) of the CWA. On May 17, 1996, U.S.EPA published an Interpretive Policy Memorandum on Reapplication Requirements for MS4s, which provided guidance on permit application requirements for regulated MS4s.

15. On September 9, 1997, the Co-Permittees entered into a cooperative agreement to share costs and other resources for implementing NPDES storm water program activities. The Co-Permittees were designated on a system-wide basis under Phase I of the CWA § 402(p)(3)(B)(i). The action of covering the Co-Permittees under a single MS4 permit on a system-wide basis was consistent with the provisions of 40 CFR 122.26(a)(3)(iv), which states that one permit application may be submitted for all or a portion of all municipal separate storm sewers within adjacent or interconnected large or medium municipal separate storm sewer systems; and the Regional Water Board may issue one system-wide permit covering all, or a portion of all municipal separate storm sewers in adjacent or interconnected large or medium municipal separate storm sewer systems.

16. The Regional Water Board may require storm water permits for a storm water discharge that the State determines contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States. In addition, the Regional Water Board may adopt a separate NPDES permit for any entity that discharges storm water into the watersheds included in this Order. Such an entity can be any State or Federal facility, special district or other public or private party. (1342 U.S.C. § 402(p)(2)(E).)

17. The discharges from the Co-Permittees' MS4s as detailed in the Fact Sheet, contribute to violations of water quality standards and are a contributor of pollutants to the Laguna watershed.

18. As described above, section 402(p)(3)(B) of the CWA requires that MS4 permits must "require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including management practices, control techniques and systems, design engineering methods and such other provisions as the [U.S. EPA] Administrator or the state determines appropriate for the control of such pollutants." The State Water Resources Control Board (State Water Board)'s Office of Chief Counsel (OCC) has issued a memorandum, dated February 11, 1993, interpreting the meaning of MEP to include technical feasibility, cost, and benefit derived with the burden being on the municipality to demonstrate compliance with MEP when rejecting a particular best management practice by showing that it is not technically feasible in the locality, that its costs would exceed any benefit to be derived, or that its cost would be prohibitive. (See also *In re Petition of the Cities of Bellflower et al.* (SWRCB 2000) Order No. WQ 2000-11, p. 20.) MEP generally emphasizes pollution prevention and source control best

management practices (BMPs) (as first line of defense) in combination with treatment methods as a backup (additional line of defense). Furthermore, it is recognized that the implementation of BMPs to ensure water quality protection is an iterative process. BMPs must be evaluated for success and, when necessary, additional BMPs implemented to provide required water quality protection.

19. The Co-Permittees are currently subject to Order No. R1-2003-0062 adopted on June 26, 2003.

20. The Co-Permittees have jurisdiction over and/or maintenance responsibility for their respective MS4s that they own and operate in Sonoma County. The MS4 discharges consist of storm water runoff generated from various land uses discharging into Santa Rosa Creek, the Laguna de Santa Rosa (Laguna), Mark West Creek, the lower Russian River, bay and ocean waters and other surface waters. In addition, various non-storm water discharges enter the MS4 and are discharged to surface waters. The quality and quantity of these discharges varies considerably due to the effects of land use, season, geology, and the sequence and duration of hydrologic events.

21. The previous two five-year terms of the MS4 permit provided for an increasingly robust program for all mandated components. The Co-Permittees have implemented many programs and policies intended to control the discharge of pollutants into their MS4 systems. Due to the differences in their levels of responsibility and authority, each Co-Permittee has developed and implemented its own individual program. However, where possible, consistent strategies are implemented throughout the permit area. Examples of first-term and second-term accomplishments include: implementing a spill response and enforcement program; implementing a year-round inspection program focusing on erosion and non-storm water discharge control; conducting ongoing education and outreach activities; biological and chemical monitoring of select receiving waters; the establishment of a refined working relationship between the Co-Permittees and the Regional Water Board with respect to reducing pollutants of concern in storm water runoff; and development and implementation of the Standard Urban Storm Water Mitigation Plan (SUSMP). However, during the previous permit terms, monitoring of receiving waters has shown continued pollution concerns. Additional receiving water bodies have been included on the 303(d) list of impaired waters. During this third-term of the MS4 permit, the Co-Permittees are required to implement a more effective combination of these programs and policies and will implement additional programs as identified in this Order which will ensure that pollutant loads resulting from storm water runoff are properly controlled and managed to the MEP.

22. Permit boundary

The first term of this Order defined a permit boundary which consisted of the existing Santa Rosa city limits, areas tributary to the City, Sonoma County islands

within the City limits and the City's future urban growth boundary. Many areas of the watershed were not included within the permit boundary of the first-term permit. Since these additional areas do discharge storm water runoff and do contribute, cumulatively, to the water quality impairment of downstream receiving waters, the next permit expanded the permit boundary to apply to all City and Sonoma County controlled MS4s within the Mark West Creek and Laguna de Santa Rosa watersheds as well as urban clusters outside of Healdsburg and Graton.

The first draft of this Order proposed to expand the current MS4 permit boundary from the Laguna de Santa Rosa and Mark West Creek watersheds as well as the area outside of Healdsburg and the Graton area, to include the entire area of Sonoma County that falls within the North Coast Region. The MS4 permit boundary had been proposed for expansion for the following reasons: (1) the North Coast Region has CWA section 303(d) impaired water bodies that receive storm water runoff containing constituents of concern in areas of Sonoma County outside the Laguna de Santa Rosa and Mark West Creek watersheds, (2) total maximum daily loads (TMDLs) will be developed for these water bodies and until TMDLs are established, the impaired waters must be protected from the discharge of pollutants, (3) these additional areas of Sonoma County do discharge storm water runoff and do contribute, cumulatively, to the water quality impairment of downstream receiving waters; (4) many of these water bodies provide habitat for endangered species, (5) encouraging Co-Permittees to provide consistent requirements and standards for development within Sonoma County, and (6) the North Coast Region has a designated area of biological significance (ASBS) in the waters of Bodega Bay and Sonoma County has substantial coastal resources that need to be protected from new and existing sources of storm water pollution.

Sonoma County submitted comments on the first draft of this Order objecting to the proposed expansion of the permit boundary, citing cost concerns. Regional Water Board and Sonoma County staff have discussed the implementation of four primary program elements of this Order in those areas of the county that are outside the existing permit boundary, but within the Regional Water Board's jurisdiction. These four elements include (1) implementation of post-construction treatment controls, such as Low Impact Development (LID) and hydromodification requirements to mitigate storm water pollution; (2) implementation of the Public Agency Activities Program, as detailed in Special Provisions E Part 9; (3) creation and implementation of an approved BMP program that reduces or eliminates non-storm water discharges, and (4) implementation of a program to eliminate all illicit connections and illicit discharges to the MS4. Regional Water Board staff has determined that implementation of these programs county-wide within the North Coast Region would be most effective for protecting water quality. Regional Water Board staff is, however, willing to implement these program elements under another regulatory program instead of including the expanded permit boundary in this Order.

If Regional Water Board and Sonoma County staff can reach an agreement, Sonoma County would implement these primary programs county-wide in the North Coast Region. Several mechanisms that may be used to require the implementation of these four programs on a county-wide basis include the issuance of a waiver of waste discharge requirements or requiring enrollment of those areas of the County outside of the permit boundary of this Order under a Phase II storm water permit. In either case, Regional Water Board staff would provide an opportunity for public comment on the county-wide expansion of the four elements of the storm water program described above.

If the Regional Water Board and Sonoma County cannot reach an agreement to implement the above programs on a county-wide basis within the North Coast Region, the Regional Water Board may reopen this Order to consider expansion of the permit boundary.

The permit boundary in this Order is the same as that in the current permit, and includes those areas of the MS4s within the Mark West Creek and Laguna de Santa Rosa watersheds that are controlled by the City of Santa Rosa and Sonoma County, in addition to County controlled MS4s located in Graton and urban clusters outside of Healdsburg. This Order will reduce discharges from Co-Permittee owned and/or operated storm water infrastructure currently in place as well as future additions to the system. This Order will help provide a consistent watershed-wide effort to control all MS4 sources of pollutants to receiving waters within the watershed.

23. Storm water runoff and non-storm water discharges that enter the Co-Permittees' MS4s are regulated by this Order.

24. Federal and State entities within the Co-Permittees' boundaries, and not currently named in this Order, may operate storm drain facilities and/or discharge storm water to storm drains and watercourses covered by this Order. The Co-Permittees may lack legal jurisdiction over these entities under State and Federal constitutions. Many of these entities are subject to regulation under the Phase II storm water permit program. The Regional Water Board will work with these entities to ensure the implementation of programs that are consistent with the requirements of this Order.

25. A Co-Permittees need only comply with permit conditions relating to discharges from MS4s for which they are operators. (40 CFR 122.26(a)(3)(vi). The Co-Permittees may perform duties required by or related to this Order in another jurisdiction if both Co-Permittees agree to this arrangement and this should be identified in the Storm Water Management Plan.

26. This Order and its requirements are not intended to restrict or control local land use decision-making authority. The Co-Permittees retain authority to make the final land-use decisions and retain full statutory authority for deciding what land

uses are appropriate at specific locations within each Co-Permittees' jurisdiction. The Regional Water Board recognizes that the Co-Permittees' land use authority allows urban developments that may generate pollutants and runoff that could impair receiving water quality and beneficial uses. The Co-Permittees are therefore responsible for considering potential storm water impacts when making planning decisions in order to fulfill the CWA requirement to reduce the discharge of pollutants in municipal storm water to MEP and to effectively prohibit non-storm water discharges into the storm sewers. This responsibility requires the Co-Permittees to exercise their legal authority to ensure that any increased pollutant loads and flows do not affect the beneficial uses of the receiving water. The Sonoma County Water Agency (Water Agency) does not have broad land use authority and can control activities only on its own property or through its flood control and stream maintenance responsibilities. Therefore, not all requirements in this Order are applicable to the Water Agency.

27. This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Health Services or local vector control agencies in accordance with California Health and Safety Code section 2270 *et seq*. and section 116110 *et seq*. Certain storm water treatment controls if not properly designed, operated or maintained may create habitats for vectors (e.g. mosquitoes and rodents). This Order expects the Co-Permittees to closely cooperate and collaborate with local vector control agencies and the State Department of Health Services for the implementation, operation, and maintenance of storm water treatment controls in order to minimize the risk to public health from vector borne diseases.

IT IS HEREBY ORDERED that the Co-Permittees, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted thereunder, and the provisions of the CWA and regulations adopted thereunder, shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. 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 Water Code section 13050), in waters of the State are prohibited.

2. Discharges from the MS4, which cause or contribute to exceedances of receiving water quality objectives for surface waters are prohibited.

3. Discharges from the MS4 shall be in compliance with the applicable discharge prohibitions contained in the Water Quality Control Plan for the North Coast Basin (Basin Plan).

4. In accordance with the requirements of 40 CFR 122.26(d)(2)(i)(B) and 40 CFR 122.26(d)(2)(i)(F), the Co-Permittees shall prohibit illicit/illegal

discharges (non-storm water) from entering into the MS4 unless such discharges are either authorized by an NPDES permit, or not prohibited in accordance with Discharge Prohibition 5, below.

5. Non-Storm Water Discharges
   (a) Impacts to receiving waters from non-storm water flows may include increased pollutant loading, flow modification and related physical changes to receiving waters, and creation of a condition of nuisance. The Co-Permittees shall effectively prohibit non-storm discharges into the MS4 and watercourses. In lieu of a strict prohibition, the Co-Permittees may submit a plan for Executive Officer authorization that includes categories of non-storm water discharges and associated BMPs to minimize or eliminate non-storm water discharges to the MS4.
   (b) The Co-Permittees shall require that non-storm water flows infiltrate into the ground where possible and perform public outreach and education intended to reduce or eliminate such discharges as one of the BMPs associated with each type of non-storm water discharge that they seek authorization from the Executive Officer to allow into the MS4.
   (c) The Co-Permittees shall submit a BMP plan to apply for authorization from the Executive Officer to allow specific non-storm water flows into the MS4. The BMP plan submitted by the Co-Permittees shall be noticed for public review prior to authorization by the Executive Officer.
   (d) The Executive Officer will consider authorizing the discharge of non-storm water flows that are listed below in Table 1 (BMPs for Non-Storm Water Discharges), and are not a significant source of pollutants. Upon request by a Co-Permittee, the Executive Officer may consider authorizing the discharge of additional non-storm water flows.

Table 1. BMPs for Non-Storm Water Discharges

Type of Discharges:	**Conditions under which allowed:**	**BMP plans shall include, but not be limited to:**
Stream diversions permitted by the State or Regional Water Board where such flows enter the MS4.	Shall comply with all conditions in the Executive Officer's authorization.	Erosion, sediment, and velocity controls to keep the diverted flows from discharging sediment to the MS4 and to prevent storm drain sediment scour.
Natural springs and rising ground water that are diverted into the MS4.	1. Shall comply with all conditions in the Executive Officer's authorization. 2. Ground water dewatering (from construction or pumped sources) may require a separate NPDES permit.	1. No sources of ground water contamination near the diversion site. 2. Segregate flow to prevent introduction of pollutants. 3. Sediment removal in discharge through settling or filtration. 4. Control flow rate of discharge to minimize erosion potential. 5. BMPs such as sand bags shall be utilized to prevent erosion and

Type of Discharges:	Conditions under which allowed:	BMP plans shall include, but not be limited to:
		sediment transport. 6. All sediments shall be collected and disposed of in a legal and appropriate manner.
Uncontaminated ground water infiltration into structures [as defined by 40 CFR 35.2005(20)][1] (Utility vault dewatering requires a separate NPDES permit) where flows are diverted into the MS4.	Shall comply with all conditions in the Executive Officer's authorization.	No sources of ground water contamination near the extraction site.
Natural overflows from riparian habitats or wetlands where such flows are diverted into the MS4.	1. Shall comply with all conditions in the Executive Officer's authorization. 2. Provided that all necessary permits or authorizations are received prior to diverting the flow.	Dewatering that would impact beneficial uses of wetlands and other state waters shall be prohibited unless approved by the Regional Water Board.
Flows from emergency fire fighting activity.	No authorization from the Executive Officer needed.	1. BMPs shall be used whenever possible. 2. Pooled water after fire shall be controlled (non-emergency repair or training flows are not allowed). 3. Runoff controls shall be considered for fires at industrial or other facilities where hazardous materials may be onsite.
Flows from fire fighting training and equipment repair activities.	Shall comply with all conditions in the Executive Officer's authorization.	1. Must be dechlorinated using aeration and/or sodium thiosulfate and/or other appropriate means and/or be allowed to infiltrate into the ground. 2. Sediment and solids removed from discharge through settling or filtration. 3. Control flow rate of discharge to minimize erosion potential. 4. BMPs such as sand bags shall be utilized to prevent erosion and sediment transport.

[1] NPDES permit for ground water dewatering is required within the North Coast Region including Sonoma County.

Type of Discharges:	Conditions under which allowed:	BMP plans shall include, but not be limited to:
		5. BMPs including education materials, structural containment when possible, infiltration and evaporation when possible shall be used for controlling training flows.
Fire hydrant testing.	Shall comply with all conditions in the Executive Officer's authorization.	1. Must be dechlorinated using aeration and/or sodium thiosulfate and/or other appropriate means and/or be allowed to infiltrate to the ground. 2. Utilize BMPs to increase the distance and removal of chlorine by volatilization before discharge to a storm drain.
Discharges from potable water sources.[2]	1. Shall comply with all conditions in the Executive Officer's authorization. 2. Planned discharges from water lines and potable water sources shall be dechlorinated, pH adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to prevent resuspension of sediments.	1. Must be dechlorinated using aeration and/or sodium thiosulfate and/or other appropriate means and/or be allowed to infiltrate into the ground. 2. Sediment and solids removed from discharge through settling or filtration. 3. Control flow rate of discharge to minimize erosion potential. 4. BMPs such as sand bags shall be utilized to prevent erosion and sediment transport. 5. All sediments shall be collected and disposed of in a legal and appropriate manner.
Utility vault dewatering.	1. Shall comply with all conditions in the Executive Officer's authorization. 2. Coverage under Order No. 2006-0008-DWQ or as updated may be	1. Segregation of flow to prevent introduction of pollutants. 2. Sediment removal through settling or filtration.

[2] The term applies to low volume, incidental and infrequent releases that are innocuous from a water quality perspective. It does not cover scheduled discharges by potable water purveyors for the (i) dewatering or hydro-testing or flushing of water supply and distribution mains, or (ii) dewatering or draining of reservoirs or water storage facilities. Releases may occur for discharges from potable water sources only with the implementation of appropriate BMPs, dechlorination prior to discharge. Discharges from utility vaults shall be conducted under coverage of a separate NPDES permit specific to that activity.

Type of Discharges:	Conditions under which allowed:	BMP plans shall include, but not be limited to:
	required. 3. No reasonable potential to discharge CTR pollutants.	
Gravity flow from foundation, footing and crawl drains.	Shall comply with all conditions in the Executive Officer's authorization.	1. Segregation of flow to prevent introduction of pollutants. 2. Sediment removal through settling or filtration. 3. No sources of ground water contamination near the extraction site.
Air conditioning condensate.	Shall comply with all conditions in the Executive Officer's authorization.	Segregation of flow to prevent introduction of pollutants.
Water from crawl space pumps.	Shall comply with all conditions in the Executive Officer's authorization.	1. Segregation of flow to prevent introduction of pollutants. 2. Sediment removal through settling or filtration. 3. No sources of ground water contamination near the extraction site.
Reclaimed and potable landscape irrigation runoff.	1. Shall comply with all conditions in the Executive Officer's authorization. 2. Reclaimed water irrigation sites must have appropriate permits from the State or Regional Water Boards.	1. Segregation of flow to prevent introduction of pollutants. 2. Implement conservation programs, which will minimize the amount of irrigation water that could be accidentally discharged. 3. User agreements between Master Water Recycler and recycled water user requiring adherence to Title 22 standards and setbacks from waterways. 4. Implement structural BMPs such as low flow emitters. 5. Provide infiltration areas at the lowest elevation of large urban irrigation areas, if possible. 6. Proper maintenance of sprinkler systems. 7. Development of public outreach programs, nutrient management plans, inspections, monitoring, complaint response, and enforcement protocols.
Dechlorinated/ debrominated swimming pool discharges (see	1. Shall comply with all conditions in the Executive Officer's	1. Segregation of flow to prevent introduction of pollutants. 2. Sediment removal through

Type of Discharges:	Conditions under which allowed:	BMP plans shall include, but not be limited to:
definitions).	authorization. 2. Provided discharge to a sanitary sewer or land is not available. Swimming pool discharges must be dechlorinated, pH adjusted if necessary, aerated to remove chlorine if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments. 3. Cleaning waste water and filter back wash shall not be discharged to the MS4. Water that has been hyperchlorinated shall not be discharged to the MS4, even after de-chlorination. No discharges are allowed containing salts in excess of Water Quality Standards. 4. Chlorine residual in discharge shall not exceed 0.02mg/L.	settling or filtration.
Non-commercial car washing by residents or non-profit organizations.	Shall comply with all conditions in the Executive Officer's authorization.	1. Preferred area is at commercial carwash or in an area where wash water infiltrates. 2. Pumps, vacuums or physical routing BMPs may be used to direct water to areas for infiltration or re-use.
Pooled storm water from treatment BMPs.[3]	Shall comply with all conditions in the Executive Officer's authorization.	All storm water BMPs shall at a minimum be maintained at a frequency as specified by the manufacturer. Storm water treatment BMPs may be drained to the MS4 under this Order if the discharge is

[3] All storm water BMPs shall at a minimum be maintained at a frequency as specified by the manufacturer, and designed to drain within 72 hours of the end of a rain. Storm water treatment BMPs may be drained to the MS4 under this Order if the discharge is not a source of pollutants. Sediments shall be disposed of properly, in compliance with all applicable local, state, and federal policies, acts, laws, regulations, ordinances, and statutes.

Type of Discharges:	Conditions under which allowed:	BMP plans shall include, but not be limited to:
		not a source of pollutants. The discharge shall cease before the discharge has become a source of a pollutant(s), (bottom sediment included). Sediments shall be disposed of properly, in compliance with all applicable local, state, and federal policies, acts, laws, regulations, ordinances, and statutes.

(e) If the Regional Water Board Executive Officer determines that any of the preceding categories of non-storm water discharges are a continuing source of significant pollutants, the Co-Permittee(s) shall either:
  (1) Prohibit the discharge from entering the MS4; or
  (2) Authorize the discharge category and require implementation of appropriate or additional BMPs to ensure that the discharge will not be a source of pollutants; or
  (3) Require or obtain coverage under a separate NPDES permit for discharge into the MS4.

B. RECEIVING WATER LIMITATIONS

1. Discharges of storm water or non-storm water from the MS4 that cause or contribute to a violation of water quality standards are prohibited.

2. Discharges of storm water or non-storm water from the MS4 shall not cause or contribute to a condition of pollution or nuisance.

3. 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 the respective Management Plan and this Order. The Management Plan shall be designed to achieve compliance with Receiving Water Limitations, Discharge Prohibitions and water quality standards. If exceedance(s) of water quality objectives or water quality standards (collectively WQS) persist, notwithstanding implementation of the Management Plan and this Order, the Co-Permittee(s) shall assure compliance with WQS by complying with the following procedure:
   (a) Upon a determination by either the Co-Permittee(s) or the Regional Water Board that discharges are causing or contributing to an exceedance of an applicable water quality standard, which may be determined from the results of the receiving water monitoring program described in Monitoring and Reporting Program No.R1-2009-0050 or by other information obtained by the Co-Permittee(s), the Co-Permittee(s)

shall notify the Regional Water Board within 30 days of any such determination, and thereafter submit a Receiving Water Limitations (RWL) Compliance Report to the Regional Water Board Executive Officer for approval. The RWL Compliance Report shall be included with the Annual Report, unless the Regional Water Board Executive Officer directs an earlier submittal.

(b) The RWL 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 WQS.

(c) The RWL Compliance Report shall include a BMP implementation schedule.

(d) Within 30 days following approval of the RWL Compliance Report, the approved or modified suite of BMPs, the implementation schedule, and any additional monitoring required shall be implemented.

(e) Modifications to the RWL Compliance Report required by the Regional Water Board Executive Officer shall be submitted within 30 days of notification unless directed otherwise by the Regional Water Board Executive Officer.

(f) The Co-Permittee(s) shall revise the Management Plan to incorporate the approved modified BMPs, implementation schedule, and any additional monitoring required, and implement the revised monitoring program according to the approved schedule.

4. The Co-Permittee(s) will have to implement alternative BMPs or combinations of BMPs and will repeat the procedure set forth above to comply with the receiving water limitations for continuing or recurring exceedances of the same WQS unless directed otherwise by the Regional Water Board Executive Officer. The Co-Permittees shall not be expected to continue using the same specific BMPs repetitively if they have been shown to be ineffective.

C. TOTAL MAXIMUM DAILY LOAD PROVISIONS FOR DISCHARGES TO THE LAGUNA DE SANTA ROSA

1. The 1995 Waste Reduction Strategy for the Laguna de Santa Rosa Total Maximum Daily Load (TMDL) assigned numeric, seasonal targeted reductions and net load goals for Total Nitrogen and Total Ammonia contained in discharges from urban storm water systems in four identified areas of the Laguna watershed.

2. Section A. Discharge Prohibitions and Section E. Special Provisions of this Order include requirements to assure compliance with the Laguna TMDL of storm water and non-storm water discharges, specifically the Net Loads for Nitrogen in Urban Runoff set forth in Table 2. Monitoring and Reporting Program No. R1-2009-0050 includes requirements to monitor MS4 outfalls to verify compliance with the TMDL.

3. The Co-Permittees shall submit a report in year five including the MS4 outfall monitoring results and an analysis of their compliance with the Laguna TMDL.
   (a) If an updated Laguna TMDL and Implementation Plan are adopted prior to year five, the Co-Permittees shall submit the MS4 outfall monitoring and analysis of the results by year five, but without verification of compliance with the 1995 Laguna TMDL.

Table 2. Laguna TMDL Net Loads for Total Nitrogen (pounds/season) in Urban Runoff

Attainment Point	**Winter Net**[4]	**Spring Net**	**Summer Net**	**Fall Net**
1. Trenton-Healdsburg Road	182,353	11,789	0	7,718
2. Guerneville Road	129,960	5,321	0	2,543
3. Occidental Road	42,025	1,161	0	514
4. Stony Point Road	17,054	1,161	0	514

Table 3. Laguna TMDL Net Loads for Total Ammonia (pounds/season) in Urban Runoff

Attainment Point	**Winter Net**[5]	**Spring Net**	**Summer Net**	**Fall Net**
1. Trenton-Healdsburg Road	16,174	942	0	539
2. Guerneville Road	11,593	376	0	140
3. Occidental Road	3,589	50	0	10
4. Stony Point Road	1,318	50	0	10

D. STORM WATER QUALITY MANAGEMENT PROGRAM IMPLEMENTATION

PART 1 – General Requirements

1. Each Co-Permittee shall, at a minimum, adopt and implement applicable terms of this Order within the permit boundary. 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 the permit boundary.

[4] Net Load in (pounds/season).

[5] Net Load in (pounds/season).

This Order shall be implemented no later than January 1, 2010, 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(d)(2) and implement programs and control measures so as to reduce the discharges of pollutants in storm water to the MEP and achieve water quality objectives.

PART 2 – Legal Authority

1. Co-Permittees shall possess the necessary legal authority to prohibit, including, but not limited to, the following:
   - (a) Illicit connections and illicit discharges;
   - (b) The discharge of non-storm water to the MS4 from the following (at a minimum):
     - (1) Washing or cleaning of gas stations, auto repair garages, or other types of automotive service facilities;
     - (2) Mobile auto washing, carpet cleaning, steam cleaning, sandblasting and other such mobile commercial and industrial operations;
     - (3) Areas where repair of machinery and equipment which are visibly leaking oil, fluid or antifreeze, is undertaken;
     - (4) Storage areas for materials containing grease, oil, or other hazardous substances, storage areas for fertilizers and soil amendments, and uncovered receptacles containing hazardous materials;
     - (5) Swimming pools that have a concentration greater than:
       - (A) Chlorine/bromine - 0.02mg/L;
       - (B) Chloride - 250mg/L;
     - (6) Swimming pool filter backwash;
     - (7) Landscape irrigation overflow (either recycled or potable water);
     - (8) Decorative fountains and ponds;
     - (9) Industrial and commercial areas, including areas where restaurant mats are cleaned;
     - (10) Concrete truck cement, pumps, tools, and equipment washout;
     - (11) Spills, dumping, or disposal of materials, such as:
       - (A) Litter, landscape and construction debris, household refuse, garbage, food, animal waste, fuel or chemical wastes, batteries, and any other materials which have the potential to adversely impact water quality;
       - (B) Any pesticide, fungicide or herbicide;
     - (12) Stationary and mobile pet grooming facilities;
     - (13) Trash container leachate; and
     - (14) Discharges from onsite wastewater systems.

2. The Co-Permittees shall possess adequate legal authority to achieve WQS and:
   (a) Control through interagency agreement, the contribution of pollutants from one portion of the MS4 to another portion of the MS4;
   (b) Require persons within their jurisdiction to comply with conditions in the Co-Permittees' ordinances, permits, contracts, model programs, or orders (i.e. hold dischargers to its MS4 accountable for their contributions of pollutants and flows);
   (c) Utilize progressive and consistent enforcement measures (e.g., stop work orders, notices of violation, monetary penalties, referral to City, County, and/or District Attorneys, referral to task forces, etc.) authorized by ordinances, permits, contracts, orders, administrative authority, and civil and criminal prosecution[6];
   (d) Control pollutants, including potential contributions from discharges of storm water runoff associated with industrial activities, including construction activities to its MS4, and control the quality of storm water runoff from these sites;
   (e) Carry out all inspections, surveillance and monitoring procedures necessary to determine compliance and non-compliance with permit conditions including the prohibition on illicit discharges to the MS4;
   (f) Require the use of control measures to prevent or reduce the discharge of pollutants; and
   (g) Require that treatment control BMPs be properly operated and maintained.

3. Each Co-Permittee has a currently adopted Storm Water Quality Ordinance that prohibits the discharge of pollutants to their MS4 without proper authorization. These existing ordinances may not be adequate to implement requirements of this Order. Therefore, each Co-Permittee will update its Storm Water Quality Ordinance to be able to enforce all requirements of this Order, no later than October 1, 2010.

4. Each Co-Permittee shall submit no later than October 1, 2010, a statement by its legal counsel that the Co-Permittee has obtained and possesses all necessary legal authority to comply with this Order through adoption of ordinances and/or municipal code modifications.

PART 3 – Fiscal Resources

1. The Co-Permittees shall implement the activities required to comply with the provisions of this Order.[7] Each Co-Permittee shall:

[6] Where the Co-Permittee has no direct authority, the Co-Permittee is required to enter into an agreement with the agency or department that has the enforcement authority. In the case of private responsible parties such as, home owner's associations, the Co-Permittee must retain enforcement authority.

(a) Submit an Annual Budget Summary that shall include:
  (1) The storm water budget for the prior report year, using actual expenditures including written explanation where necessary for the implementation of the storm water program.
  (2) The storm water budget for the upcoming report year, using estimated expenditures with written explanation where necessary for the implementation of the storm water program.
  (3) The Annual Budget Summary shall identify for both the prior report year (actual expenditure) and the upcoming report year (estimated expenditure) the following specific categories:
    (A) Storm water program management activities and overall administrative costs;
    (B) Storm water program required activities implementation (storm water related activities only). Provide figures describing the breakdown of expenditures for the categories below:
      (i) Illicit connection/illicit discharge prevention;
      (ii) Development planning program;
      (iii) Development construction program;
      (iv) Construction inspection activities;
      (v) Industrial/Commercial inspection activities;
      (vi) Public agency activities;
        (I) Inspection and maintenance of structural BMPs and treatment control BMPs;
        (II) Municipal street sweeping for commercial/industrial land uses only;
        (III) Catch basin clean-outs (include dumping fees separately);
        (IV) Storm drain clean-outs (include dumping fees separately);
        (V) Other costs (describe);
      (vii) Public information and participation program;
      (viii) Monitoring program; and
      (ix) Miscellaneous expenditures (describe).

PART 4 – Modifications/Revisions

1. No later than October 1, 2010 each Co-Permittee shall modify storm water management programs, protocols, practices, and municipal codes to make them consistent with the requirements herein, unless otherwise specified in this Order.

2. The Regional Water Board shall consider approval of requested modifications to the Management Plan annually or less frequently as needed.

[7] The sources of funding may be the general funds, and/or Benefit Assessment, plan review fees, permit fees, industrial and commercial user fees, revenue bonds, grants or other similar funding mechanisms.

PART 5 – Responsibilities of the Co-Permittees

1. Each Co-Permittee is required to comply with the requirements of this Order applicable to MS4 discharges within its boundaries. Each Co-Permittee shall:
   (a) Comply with the requirements of this Order and any modifications thereto;
   (b) Participate in intra-agency coordination (e.g., Planning Department, Fire Department, Building and Safety, Code Enforcement, Public Health, Parks and Recreation, and others) necessary to successfully implement the provisions of this Order;
   (c) Report, in addition to the Annual Budget Summary, any supplemental dedicated budgets for the same categories;
   (d) Participate in the Sonoma County Environmental Crimes Task Force, when possible;
   (e) Provide technical and administrative support for committees that will be organized to implement this Order and its requirements;
   (f) Evaluate, assess, and synthesize the results of the monitoring program and the effectiveness of the implementation of BMPs; and
   (g) Provide personnel and fiscal resources for the collection, processing and submittal to the Regional Water Board of monitoring and annual reports, and summaries of other reports required under this Order.

E. SPECIAL PROVISIONS

PART 1 – General Requirements

1. This Order and the provisions herein are intended to develop, implement and achieve a timely, comprehensive, cost-effective storm water pollution control program to reduce the discharge of pollutants in storm water to the MEP and achieve WQS for the City of Santa Rosa, County of Sonoma, and the Sonoma County Water Agency.

2. The current Management Plan and updates, when developed by the Co-Permittees and approved by the Regional Water Board, after public review, are incorporated into this Order and are fully enforceable.

3. Best Management Practice Program Substitution
   (a) The Regional Water Board Executive Officer may approve any specific BMP program substitution (except BMP program substitution specified elsewhere in this Order (see Special Provisions Part 6)) upon petition by a Co-Permittee(s) and after public notice, if the Co-Permittee can document that:
      (1) The proposed alternative BMP program will meet or exceed the objective of the original BMP program in the reduction of storm water pollutants;

(2) 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
(3) The proposed alternative BMP program will be implemented within a similar period of time.

4. Best Management Practice Substitution
   (a) The Co-Permittees may substitute a site-specific BMP and will notify the Regional Water Board, for Executive Officer review, of any site-specific BMP substitution and document the reasoning for the substitution, including a demonstration that:
      (1) The proposed alternative BMP will meet or exceed the objective of the original BMP in the reduction of storm water pollutants;
      (2) The fiscal burden of the original BMP is greater than the proposed alternative and does not achieve a greater improvement in storm water quality; and
      (3) The proposed alternative BMP will be implemented within a similar period of time.

PART 2 – Public Information and Participation Program (PIPP)

1. The Co-Permittees shall implement a Public Information and Participation Program (PIPP) that includes, but is not limited to, the requirements listed in this section. The Co-Permittees shall be responsible for developing and implementing the PIPP, and shall coordinate with other entities (such as Sonoma State University and the Santa Rosa Junior College) to implement specific requirements. The objectives of the PIPP are as follows:
   (a) To measurably 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 measurably change behavior of target audiences regarding waste disposal and activities that generate storm water pollution by encouraging implementation of appropriate solutions;
   (c) To involve and engage communities in Sonoma County to participate in mitigating the impacts of storm water pollution; and
   (d) To regularly review PIPP program elements to ensure that efforts are effective in educating the public and changing behavior. At a minimum, the Co-Permittees shall devote one regular MS4 Co-Permittee meeting per year to discuss PIPP program effectiveness.

2. Residential Program
   (a) "No Dumping" Message
      (1) Each Co-Permittee shall label all storm drain inlets that they own with a legible “no dumping” message. In addition, signs with prohibitive language discouraging illegal dumping shall be posted at selected designated public access points to creeks, and channels where dumping has occurred. Signage and storm drain

messages shall be legible and maintained. The Co-Permittees shall label 20 percent of all unlabeled storm drain inlets, if the structure of the storm drain inlets allows, each year, with a goal of 100 percent of all storm drain inlets, to be labeled by October 1, 2013.

(b) Public Reporting

(1) Co-Permittees shall include contact information in outreach efforts for reporting clogged catch basin inlets and illicit discharges/dumping, faded or missing catch basin labels, and general storm water management information. This information must be updated by July 1st of each year in public information media, such as the government pages of the telephone book, and internet web sites. Each Co-Permittee is responsible for keeping current, updated contact information in an easily accessible page on their web sites.

(c) Outreach and Education

(1) Co-Permittees shall implement the following activities:

(A) Conduct a storm water pollution prevention advertising campaign;

(B) Conduct storm water pollution prevention public service announcements;

(C) Distribute storm water pollution prevention public education materials to:

(i) Automotive parts stores;

(ii) Home improvement centers, lumber yards, hardware stores, landscape supply stores, nurseries, and stores where fertilizers and pesticides are sold;

(iii) Pet shops and feed stores; and

(iv) Local fairs and events.

(D) Public education materials shall include, but are not limited to information on the proper disposal, storage, and use of:

(i) Vehicle waste fluids;

(ii) Household waste materials;

(iii) Construction waste materials;

(iv) Pesticides and fertilizers (including integrated pest management practices-IPM);

(v) Litter;

(vi) Green waste (including lawn clippings and leaves); and

(vii) Animal wastes.

(E) Using previously conducted public survey results, work with existing local watershed groups, or organize watershed citizen advisory groups or committees to educate the public about storm water pollution; and

(F) Organize or participate in events targeted to residents.

(2) The Co-Permittees shall develop a strategy to educate Spanish-speaking communities through culturally effective methods.

Details of this strategy should be incorporated into the PIPP, and implemented, no later than October 1, 2010;

(3) Each Co-Permittee shall continue the existing outreach program to residents on proper lawn care and water conservation practices;

(4) Each Co-Permittee shall conduct educational activities within its jurisdiction and participate in countywide events;

(5) The Co-Permittees shall make impressions on at least 25% of the permanent population within the permit area per year relating to storm water quality, with a minimum of (15%) impressions via newspaper, local TV access, billboard, local radio, internet access, and/or other advertising techniques or media;

(6) The Co-Permittees, shall provide schools with materials, including, but not limited to, videos, live presentations, and other information necessary to educate a minimum of 40% of all school children (K-12) every 2 years on storm water pollution;

(7) The Co-Permittees shall develop and implement a strategy to measure the effectiveness of school educational programs. The protocol shall include assessment of students' knowledge of the adverse impacts of storm water pollution and its solutions before and after educational programs are conducted. The strategy shall be implemented no later than October 1, 2010; and

(8) The Co-Permittees shall develop and implement a behavioral change assessment strategy no later than October 1, 2012, to assess whether the PIPP is demonstrably effective in changing the behavior of the public.

(d) Pollutant-Specific Outreach

(1) The Co-Permittees shall coordinate to develop outreach programs that focus on watershed-specific pollutants identified in Table 1 in the Fact Sheet (Impaired Water Bodies) no later than October 1, 2011.

3. Businesses Program

(a) Corporate Outreach

(1) The Co-Permittees shall work with other regional or statewide agencies and associations such as the California Storm Water Quality Association (CASQA), to develop and implement a Corporate Outreach program to educate and inform corporate and/or franchise operators and local facility managers about storm water regulations and BMPs. The program shall target a minimum of four retail gasoline outlets (RGOs) franchisers and cover a minimum of 80% of RGO franchisees in the county, four retail automotive parts franchisers, two home improvement center franchisers and six restaurant franchisers. Corporate Outreach for all target facilities shall be conducted not less than once during the term of this Order, with the first outreach contact to begin no

later than October 1, 2013. At a minimum, this program shall include:

(A) Meetings with corporate management and/or facility operators and local facility managers to explain storm water regulations; and

(B) Distribution and discussion of educational material regarding storm water pollution and BMPs, and provide managers with recommendations to facilitate employee and facility compliance with storm water regulations.

(b) Business Assistance Program

(1) The Co-Permittees shall implement a Business Assistance Program to provide technical resource assistance to small businesses to reduce the discharge of pollutants in storm water. The Co-Permittees shall develop a Business Assistance Program no later than October 1, 2011. The Program shall include:

(A) A website with telephone and e-mail contact information to arrange for staff consultation regarding the responsibilities of businesses to reduce the discharge of pollutants, pollution prevention methods and BMPs, and available guidance material; and

(B) Distribution of storm water pollution prevention education materials to operators of auto repair shops, car wash facilities (including mobile car detailing), mobile carpet cleaning services, commercial pesticide applicator services and restaurants.

PART 3 – Industrial/Commercial Facilities Program

1. 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. 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:

(a) Identify applicable facilities;

(b) Inspect;

(c) Ensure compliance with municipal ordinances at industrial and commercial facilities that are critical sources of pollutants in storm water;

(d) Refer non-filers under the Industrial General Permit to the Regional Water Board; and

(e) Track local compliance and inspections.

2. Inventory of Critical Sources
   (a) Each Co-Permittee shall maintain a watershed-based inventory or database of facilities within its jurisdiction that are critical sources of storm water pollution. At a minimum, the following critical sources to be tracked are summarized below.
      (1) Commercial Facilities:
         (A) Restaurants;
         (B) Automotive service facilities including those in dealerships;
         (C) Retail gasoline outlets - RGOs;
         (D) Nurseries and landscape material yards;
         (E) Facilities that store, use or transport pre-production plastic pellets (nurdles);
         (F) Automotive dealerships, rental businesses, and other businesses where commercial car washing occurs; and
         (G) Other commercial facilities that may discharge pollutants of concern.
   (b) Each Co-Permittee shall include in its inventory of critical sources the following minimum fields of information for each industrial and commercial facility:
      (1) Name of facility and name and contact information of owner/operator;
      (2) Address of facility; and
      (3) A narrative description, including Standard Industrial Classification (SIC) system/North American Industry Classification System (NAICS) codes, that best describe the industrial activities performed and principal products used at each facility, and status of exposure to storm water.
   (c) The Regional Water Board recommends that Co-Permittees include additional fields of information, such as material usage and/or industrial output, and discrepancies between SIC system/NAICS code designations (as reported by facility operators) and identify the actual type of industrial activity that has the potential to pollute storm water. In addition, the Regional Water Board recommends the use of an automated database system, such as a Geographical Information System (GIS) or Internet-based system.
   (d) Each Co-Permittee shall update its inventory of critical sources at least annually. The update may be accomplished through collection of new information obtained through field activities or through other readily available inter and intra-agency informational databases (e.g. business licenses, pretreatment permits, sanitary sewer hook-up permits, and similar information).

3. Inspect Critical Sources
   (a) Commercial Facilities

(1) Level of inspections: Each Co-Permittee shall inspect all facilities identified in Part 3 twice during the five-year term of the Order, provided that the first inspection occurs no later than October 1, 2011. A minimum interval of six months between the first and the second mandatory compliance inspection is required. In addition, each Co-Permittee shall implement the activities outlined in sections (b), (c), (d), and (e), below. At each facility, inspectors shall verify that the operator is implementing the mandatory source control BMPs, or substitution BMPs that have been approved by the Executive Officer, pursuant to sections (3) and (4) of Part 1 of Section E Special Provisions, above. The Co-Permittees shall require implementation of additional BMPs and controls to reduce pollutants in storm water runoff that may be causing or contributing to exceedances of WQS in CWA section 303(d) listed impaired water bodies (see Table 1 in the Fact Sheet). Likewise, for those BMPs that are not adequate to achieve WQS, Co-Permittees may require additional site-specific controls. Written inspection reports shall be available for Regional Water Board review, if requested.

(b) Restaurants

(1) Level of inspections: Each Co-Permittee, in cooperation with its appropriate department (such as health or public works), shall inspect all restaurants within its jurisdiction to confirm that storm water BMPs are being effectively implemented in compliance with State law, and County and municipal ordinances. Typical BMPs in Table 4 (BMPs at Restaurants) shall be implemented, unless the pollutant generating activity does not occur.

Table 4. BMPs at Restaurants

Pollutant-Generating Activity	**BMP Narrative Description**	**2003[8] California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.**
Hazardous Materials/Waste Storage, Handling and Disposal	Distribution of educational materials on storm water pollution prevention practices to employees when necessary	Comply with local municipal requirements
Unauthorized Non-Storm Water Discharges	Effective elimination of non-storm water discharges	SC-10

[8] Including future updates and revisions.

Pollutant-Generating Activity	**BMP Narrative Description**	**2003[8] California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.**
Accidental Spills/Leaks	Implementation of effective spills/leaks prevention and response procedures	SC-11
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices	SC-33
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/handling practices and appropriate control measures	SC-34
Parking/Storage Area Maintenance	Implementation of effective parking/storage area designs and housekeeping/ maintenance practices	SC-43
Storm Water Conveyance System Maintenance	Implementation of proper conveyance system operation and maintenance protocols	SC-44

(c) Automotive Service Facilities

(1) Level of Inspection: Each Co-Permittee shall confirm that BMPs are being effectively implemented at each facility within its jurisdiction, in compliance with County and municipal ordinances. The inspections shall verify that typical BMPs in Table 5 (BMPs at Automotive Service Facilities) are being implemented, unless the pollutant generating activity does not occur.

Table 5. BMPs at Automotive Service Facilities

Pollutant-Generating Activity	**BMP Narrative Description**	**2003[9] California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.**
Unauthorized Non-Storm Water Discharges	Effective elimination of non-storm water discharges	SC-10

[9] Including future updates and revisions.

Pollutant-Generating Activity	**BMP Narrative Description**	**2003[9] California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.**
Accidental Spills/Leaks	Implementation of effective spills/leaks prevention and response procedures	SC-11
Vehicle/Equipment Fueling	Implementation of effective fueling source control devices and practices	SC-20
Vehicle/Equipment Cleaning	Implementation of effective equipment/vehicle cleaning practices and appropriate wash water management practices	SC-21
Vehicle/Equipment Repair	Implementation of effective vehicle/equipment repair practices and source control devices	SC-22
Outdoor Liquid Storage	Implementation of effective outdoor liquid storage source controls and practices	SC-31
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices	SC-33
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/handling practices and appropriate control measures	SC-34
Parking/Storage Area Maintenance	Implementation of effective parking/storage area designs and housekeeping/ maintenance practices	SC-43
Storm Water Conveyance System Maintenance Practices	Implementation of proper conveyance system operation and maintenance protocols	SC-44

(d) Retail Gasoline Outlets and Automotive Dealerships

(1) Level of Inspections: Each Co-Permittee shall confirm that BMPs are being effectively implemented at each facility within its jurisdiction, in compliance with County and municipal ordinances.

The inspections shall verify that BMPs in Table 6 (BMPs at Retail Gasoline Outlets) are being implemented, unless the pollutant generating activity does not occur.

Table 6. BMPs at Retail Gasoline Outlets

Pollutant-Generating Activity	**BMP Narrative Description**	**2003[10] California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.**
Unauthorized Non-Storm Water Discharges	Effective elimination of non-storm water discharges	SC-10
Accidental Spills/Leaks	Implementation of effective spills/leaks prevention and response procedures	SC-11
Vehicle/Equipment Fueling	Implementation of effective fueling source control devices and practices	SC-20
Vehicle/Equipment Cleaning	Implementation of effective wash water control devices	SC-21
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices	SC-33
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/handling practices and appropriate control measures	SC-34
Building and Grounds Maintenance	Implementation of effective facility maintenance practices	SC-41
Parking/Storage Area Maintenance	Implementation of effective parking/storage area designs and housekeeping/ maintenance practices	SC-43

(e) Commercial Nurseries, Landscape Bulk Material Yards, and Nursery Centers

(1) Level of Inspection: Each Co-Permittee shall confirm that BMPs are being effectively implemented at each facility within its jurisdiction, in compliance with County and municipal ordinances. The inspections shall verify that typical BMPs in Table 7 (BMPs at Nurseries, Landscape Bulk Material Yards, and Nursery Centers) are being implemented, unless the pollutant generating activity does not occur.

[10] Including future updates and revisions.

Table 7. BMPs at Nurseries, Landscape Bulk Material Yards, and Nursery Centers

Pollutant-Generating Activity	**BMP Narrative Description**	**2003[11] California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.**
Unauthorized Non-Storm Water Discharges	Effective elimination of non-storm water discharges	SC-10
Outdoor Loading/Unloading	Implementation of effective outdoor loading/unloading practices	SC-30
Outdoor Liquid Storage	Implementation of effective outdoor liquid storage source controls and practices	SC-31
Outdoor Equipment Operations	Implementation of effective outdoor equipment source control devices and practices	SC-32
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices	SC-33
Building and Grounds Maintenance	Implementation of effective facility maintenance practices	SC-41

(f) Ensure Compliance of Critical Sources

(1) BMP Implementation: Facilities shall implement applicable source control BMPs in Appendix D, California Stormwater Industrial and Commercial BMP Handbook (2003[12]). In the event that a Co-Permittee determines that a BMP is infeasible at any site, the Co-Permittee shall require implementation of similar BMPs that will achieve the equivalent reduction of pollutants in the storm water discharges. Likewise, for those BMPs that are not adequate to achieve WQS, Co-Permittees shall require additional site-specific controls.

(2) Impaired Waters: For critical sources that discharge to CWA section 303(d) listed impaired water bodies, the Co-Permittees shall require operators to implement additional controls to reduce

[11] Including future updates and revisions.
[12] Including future updates and revisions.

pollutants in storm water runoff that may be causing or contributing to exceedances of WQS.

(3) Progressive Enforcement: Each Co-Permittee shall implement a progressive enforcement policy to ensure that facilities are brought into compliance with all storm water requirements within a reasonable time period as specified below.

(A) In the event that a Co-Permittee determines, based on an inspection, that an operator has failed to adequately implement all necessary BMPs, that Co-Permittee shall take progressive enforcement actions which, at a minimum, shall include a follow-up inspection within four weeks from the date of the initial inspection.

(B) In the event that a Co-Permittee determines that an operator has failed to adequately implement BMPs after a follow-up inspection, that Co-Permittee shall take further enforcement action as established through authority in its municipal code and ordinances or through the judicial system.

(C) Each Co-Permittee shall maintain records and make them available on request to the Regional Water Board, including inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating a good faith effort to bring facilities into compliance.

4. Interagency Coordination

(a) A Co-Permittee may refer a violation(s) of municipal storm water ordinances and the Water Code resulting from discharges of storm water or non-storm water into the MS4 by industrial and commercial facilities to the Regional Water Board provided that that Co-Permittee has made a good faith effort of progressive enforcement. At a minimum, a Co-Permittee's good faith effort must be documented with:

(1) Two follow-up inspections; and

(2) Two warning letters, correction notices or notices of violation.

(b) Referral of violations of the Industrial General Permit, including requirements to file a notice of intent or no exposure certification: For those facilities in violation of the municipal storm water ordinance and subject to the Industrial General Permit, Co-Permittees may escalate referral of such violations to the Regional Water Board after one inspection and one written notice (copied to the Regional Water Board) to the operator regarding the violation. In making such referrals, Co-Permittees shall include, at a minimum, the following documentation:

(1) Name of the facility;

(2) Operator of the facility;

(3) Owner of the facility;

(4) WDID Number (if available);

(5) Industrial activity being conducted at the facility that is subject to the Industrial General Permit;

(6) Records of communication with the facility operator regarding the violation and any inspection reports; and

(7) The written notice of the violation copied to the Regional Water Board.

(c) Investigation of Complaints Regarding Facilities Not Covered Under the Industrial General Permit – Transmitted by the Regional Water Board Staff to the Co-Permittees: Each Co-Permittee shall initiate, within two business days, investigation of complaints regarding industrial/commercial facilities within its jurisdiction. The initial investigation shall include, at a minimum, a limited inspection of the site/facility to determine if the site/facility is effectively complying with the municipal storm water ordinances, and to oversee corrective action.

(d) Assistance with Regional Water Board Enforcement Actions: As directed by the Regional Water Board Executive Officer, Co-Permittees shall assist Regional Water Board enforcement actions by: helping in identification of current owners, operators, and lessees of facilities; providing staff, when available, for joint inspections with Regional Water Board inspectors; appearing as witnesses in Regional Water Board enforcement hearings, if applicable; and providing copies of inspection reports and other progressive enforcement documentation.

(e) Participation in a Task Force: The Co-Permittees are strongly encouraged to participate with the Regional Water Board and other public agencies in the Sonoma County Environmental Crimes Task Force, to communicate concerns regarding special cases of storm water violations by industrial and commercial facilities and to develop a coordinated approach to enforcement action.

PART 4 – Planning and Land Development Program

1. The requirements in Part 4 – Planning and Land Development Program apply to both public and private projects.

2. The requirements in Parts 4, 5, and 6 shall be implemented to the fullest extent possible with the Co-Permittees' existing authority and the Standard Urban Stormwater Mitigation Plan (SUSMP) until the Co-Permittees' authority and manuals are updated as required by this Order.

3. The Co-Permittees shall implement a Planning and Land Development Program with a goal to:

(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 (Cal. Pub. Resources Code § 21100), and local government ordinances.

(b) Minimize the percentage of impervious surfaces on land development projects and 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.

(c) Minimize 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 strategies, and treatment control BMPs.

(d) Properly select, design and maintain treatment control BMPs and hydromodification control BMPs to address pollutants that are likely to be generated by land development, minimize post-development surface flows and velocities, assure long-term functionality of the BMPs, and avoid the breeding of vectors.[13]

(e) Prioritize the selection of post-development BMPs to remove storm water pollutants specific to the proposed development, minimize storm water runoff volume and velocity, and beneficially reuse storm water to support an integrated approach to protecting water quality and managing water resources) BMPs currently required in the existing SUSMP manual and subsequent updates of the SUSMP manual, shall be selected in the following order of preference:

(1) Low Impact Development strategies (see the following Special Provisions E. Part 5) Including:

(A) Landscape based BMPs;

(B) Infiltration and dispersal BMPs;

(C) BMPs that incorporate vegetation to remove pollutants and reduce storm water runoff volume;

(D) BMPs that store and reuse storm water runoff; and

(E) BMPs that percolate storm water runoff through engineered soil.

(2) Treatment/detention ponds, wet ponds and constructed wetlands;

(3) Approved modular/proprietary treatment control BMPs that are based on LID concepts, incorporate biological treatment processes using soil and vegetation, and that meet pollution removal goals; and

(4) Co-Permittee approved offset project, after Regional Water Board notification.

4. Numeric Sizing Criteria – The Co-Permittees shall employ numeric sizing criteria for all structural treatment BMPs. The selected BMPs shall be designed to treat runoff from <u>all</u> impervious surfaces associated with the project (onsite and any associated offsite projects). The BMPs shall be installed in accordance with recognized design criteria in order to maximize

[13] Treatment BMPs when designed to drain within 72 hours of the end of rainfall minimize the potential for breeding of vectors.

pollutant removal. The BMPs shall be sized to treat runoff flows up to and including the following numeric sizing criteria:

(a) Volume-based BMPs shall be designed to infiltrate or treat either:
  (1) The volume of runoff produced from the 85th percentile of 24-hour storm event, as determined from the local historical rainfall record (approximately 0.92 inches in the Santa Rosa area); or
  (2) The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined using the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, p. 170-178 (1998); or
  (3) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in California Storm Water Best Management Practices Handbook-Industrial/Commercial (1993); or

(b) Flow-based BMPs shall be designed to infiltrate or treat either:
  (1) The flow rate of runoff produced by the 85th percentile mean annual 24-hour storm event hourly rainfall intensity, as determined from the local historical rainfall record; or
  (2) The maximum flow rate of runoff, as determined from local historical rainfall records, that achieves approximately the same reduction in pollutant loads and flows as achieved by treatment of the 85th percentile hourly rainfall intensity; or
  (3) Equivalent numeric sizing criteria. The Co-Permittees may develop or use any equivalent numeric sizing criteria or performance-based standard for post-construction structural treatment BMPs as part of these requirements. Such equivalent sizing criteria shall be authorized by Regional Water Board staff prior to use in place of the above criteria. In the absence of an equivalent numeric sizing criteria, the criteria contained above shall be implemented.

(c) When implementing these sizing criteria, the Co-Permittee's shall include a safety factor to ensure that treatment BMPs accommodate these minimum design storms at all times. The sizing of filtering treatment devices shall recognize potential clogging and loss of capacity during operation and shall be sized to provide full treatment of the design storm at all times.

5. Entitlement Process:

(a) Each Co-Permittee shall incorporate into its 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 (E. Standard Provisions, Part 4, section 6) for new development and redevelopment projects. The Co-Permittees 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 involvement in the conceptual design of storm water quality protection at either of two different points in the project planning and permitting process:

(1) 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

(2) 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. New Development and Redevelopment Projects – for purposes of this Order, impervious surface is defined as an area that has been modified in such a way as to reduce storm water runoff capture, treatment and percolation into underlying soils. Such surfaces include rooftops, walkways, plastic liners and parking areas. Permeable pavements shall be considered impervious for this section if they have subdrains without a properly engineered soil-based filter medium to provide sufficient treatment of the storm water prior to entering the MS4. For purposes of this Order, structural areas that are covered under a green or eco-roof shall not be considered impervious surface.

(a) New development and redevelopment projects that are required to implement post-construction treatment controls to mitigate all project-related storm water pollution include:

(1) All development and redevelopment projects with 1.0 acre or greater of impervious surface;

(2) All development and redevelopment projects that include four or more houses;

(3) Industrial parks with 10,000 square feet or more of impervious surface;

(4) Commercial strip malls with 10,000 square feet or more of impervious surface;

(5) Retail gasoline outlets with 10,000 square feet or more of impervious surface;

(6) Restaurants (SIC 5812) with 10,000 square feet or more of impervious surface;

(7) Parking lots (if not included as part of a project type listed above) with 10,000 square feet or more of impervious surface, or with 25 or more parking spaces;

(8) Streets, roads, highways, and freeway construction of 10,000 square feet or more of impervious surface. Stand alone pedestrian pathways, trails, and off-street bicycle lanes are exempt from this requirement;

(9) Automotive service facilities (SIC 5013, 5014, 5541, 7532-7534 and 7536-7539) with 10,000 square feet or more of impervious surface; and

(10) Single-family hillside homes.

(A) Measures to be implemented:

(i) Conserve natural areas;

(ii) Protect slopes and channels;

(iii) Divert roof runoff to vegetated areas before discharge, unless the diversion would result in slope instability as determined by a registered engineer or geologist; and

(iv) Direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability as determined by a registered engineer or geologist.

(b) Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways, is not considered a routine maintenance activity. Resurfacing of existing roads and parking lots is not subject to redevelopment requirements.

Effective Date: The updated New Development and Redevelopment sizing requirements referenced above shall apply to projects or project phases that have not received tentative tract map, use permit or other permit prior to October 1, 2010.

PART 5 – New Development/Redevelopment Integrated Water Quality/Resource Plan

1. The requirements in Part 5 – New Development/Redevelopment Integrated Water Quality/Resource Plan apply to both public and private projects.

2. The Co-Permittees shall develop a new development and redevelopment integrated water quality and water resource plan, for Executive Officer approval, which includes an LID manual, post-construction treatment BMP choice criteria, and a hydromodification control and mitigation plan. The integrated water quality/resource plan shall be included in an updated SUSMP manual, and shall include the following:

(a) Low Impact Development Measures

(1) All new development and redevelopment projects identified in Special Provisions E Part 4 shall integrate LID principles into project design. LID is a storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect predevelopment hydrologic functions.

(2) The Co-Permittees shall initiate SUSMP guidance intended to formally prioritize LID treatment BMPs for new development and redevelopment projects (both public and private) by January 1, 2010. The Co-Permittees can comply with this requirement by adopting a resolution or issuing a guidance letter.

(3) The Co-Permittees shall develop and/or adopt a comprehensive LID technical guidance manual no later than October 1, 2011, for use by land planners, engineers and developers for both public and private development and redevelopment projects. The LID guidance manual shall include objectives and specifications for integration of LID strategies into:

(A) Site assessment;
(B) Site planning and layout;
(C) Vegetative protection, revegetation, and maintenance;
(D) On-site soil protection with the goals of reducing soil compaction, retaining topsoil and facilitating runoff capture;
(E) Retention of natural runoff infiltration, storage and evapotranspiration rates;
(F) Techniques to minimize land disturbance;
(G) Techniques to implement LID measures;
(H) LID BMP design guidance;
(I) LID BMP maintenance guidance;
(J) Integrated water resources management practices;
(K) LID design and flow modeling guidance;
(L) Hydrologic analysis; and
(M) LID offset credits.

(4) The Co-Permittees shall facilitate implementation of LID by providing key industry, regulatory, and other stakeholders with information regarding LID objectives and specifications contained in the LID technical guidance manual (Part 5) through an LID training program. The LID training program shall begin by April 1, 2012, and include the following:

(A) LID targeted sessions and materials for builders, design professionals, regulators, resource agencies, and stakeholders that describe LID techniques;
(B) Information, data, materials, and case studies regarding national efforts and local experience gained through LID pilot projects and demonstration projects;
(C) Guidance on how to integrate LID requirements into the local regulatory program(s) and requirements;
(D) Guidance on how to integrate LID measures at various project scales; and
(E) Guidance on the relationship among LID strategies, source control BMPs, treatment control BMPs, and hydromodification control requirements.

(b) Post-Construction BMP Choice Methodology

(1) The Co-Permittees shall ensure that all storm water runoff from projects that meet the new development and redevelopment criteria in Part 4 and/or the hydromodification criteria in Part 5-2(c), below, is treated using LID design and landscape-based BMPs.

(2) If a project cannot comply with Part 5-2(b)(1) and substitute BMPs are approved for the project, the Co-Permittees shall document justification for the substitution and retain the records until adoption of an updated Order or until the project is constructed, whichever is longer.

(3) The priority for approval of post-construction BMPs by the Co-Permittees shall be given in the following order:

(A) Low Impact Development strategies including:

(i) Landscape based BMPs;

(ii) Infiltration and dispersal BMPs;

(iii) BMPs that incorporate vegetation to remove pollutants and reduce storm water runoff volume;

(iv) BMPs that store and reuse storm water runoff; and

(v) BMPs that percolate storm water runoff through engineered soil.

(B) Treatment/detention ponds, constructed wetlands, etc.;

(C) Approved modular/proprietary treatment control BMPs that are based on LID concepts and that meet pollution removal goals; and

(D) Regional Water Board and Co-Permittee approved offset project.

(c) Hydromodification (Flow/Volume/Duration) Control Criteria

(1) Each Co-Permittee shall require all new development and redevelopment projects identified in Special Provisions E Part 4 to implement hydrologic control measures, to prevent accelerated downstream erosion, minimize flooding and public nuisance conditions, to recharge ground water and to protect stream habitat in receiving waters. The purpose of the hydrologic controls is to minimize changes in post-development hydrologic storm water runoff discharge rates, velocities, and duration. This shall be achieved by maintaining the project's pre-development storm water runoff flow rates, and duration. Pre-development hydrology shall be based on an analysis of natural infiltration, soils storage and evapotranspiration rates. The Co-Permittees shall also ensure that total storm water runoff volumes remain the same as the pre-development volumes, when possible.

(A) All new development or redevelopment projects (both public and private) with 1.0 acre or more of impervious surface shall implement hydromodification control.

(B) Hydromodification control 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 strategies and on-site hydromodification control BMPs. Any in-stream restoration measures that are proposed in conjunction with hydromodification BMPs, shall not adversely affect the beneficial uses of the receiving waters and appropriate permits shall be obtained prior to starting any restoration projects.

(C) The Co-Permittees shall develop a Hydromodification Control Plan with input from local stakeholders and Regional Water Board staff by October 1, 2013, for Executive Officer approval, to address hydromodification based on accepted practices. The plan shall be consistent with the requirements of this Order and shall include one or more of the following:
  - (i) A simplified method using LID BMPs with accepted sizing criteria to provide hydromodification control;
  - (ii) A numerical model to predict the hydrological changes resulting from new development and provide mitigation; or
  - (iii) A numerical model to identify effective end of pipe or flow duration control mitigation strategies.

(D) The Hydromodification Control Plan shall:
  - (i) Minimize reduction of ground water recharge rates based on natural site conditions;
  - (ii) Describe authorized hydromodification management control BMPs;
  - (iii) Describe hydromodification management control BMP design criteria;
  - (iv) Describe the range of flows controllable with flow duration control methods;
  - (v) Describe the approved hydromodification method or model;
  - (vi) Describe any alternate hydromodification management model and design;
  - (vii) Describe stream restoration measures design criteria; and
  - (viii) Include a monitoring and effectiveness assessment.

(E) Interim Hydromodification Control Requirements
  - (i) The Interim Hydromodification Control Requirements to protect receiving waters until Co-Permittees complete a Hydromodification Control Plan shall be provided to the Regional Water Board by January 1, 2010, and may include: the use of hydrograph modification methods for post-construction BMPs found in other storm water management plans or BMP manuals, such as the

Marin LID manual, the Contra Costa County sizing factor approach, the State Water Board stream erosion identification tool for hydromodification planning (Bowles), or TR-55 model; for sizing BMPs for the two-year 24-hr rain event that keeps post-construction peak discharge, peak velocity, and peak duration at or below those respective pre-construction levels. The Co-Permittees will also ensure that pre-construction storm water runoff volume is the same as the post-construction storm water runoff volume when possible.

PART 6 – Implementation of New Development/Redevelopment Post-Construction BMPs

1. Maintenance Agreement and Transfer
   (a) Each Co-Permittee shall require that all new 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 final map conditions, legal agreements, covenants, conditions or restrictions, CEQA mitigation requirements, conditional use permits, and/or other legally binding maintenance agreements. The BMP maintenance shall ensure that the BMPs implemented will remain fully functional and that all areas identified for treatment will remain tributary to the treatment BMP system.
      (1) Verification at a minimum shall include the developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either
         (A) A signed statement from the public entity assuming responsibility for all structural BMP, treatment control BMP, and hydromodification control BMP maintenance; or
         (B) Written conditions in the sales or lease agreement in enough detail to be easily understood by the owner or tenant, which require the property owner or tenant to assume responsibility for BMP maintenance and conduct a maintenance inspection at least once a year; or
         (C) Written text in project covenants, conditions, and restrictions (CCRs) in enough detail to be easily understood by the owner or tenant, for residential properties assigning BMP maintenance responsibilities to the Home Owners Association (HOA); or
         (D) Any other legally enforceable agreement or mechanism that assigns responsibility for the maintenance of BMPs.

2. Tracking, Inspection, and Enforcement of Post-Construction BMPs
   (a) Each Co-Permittee shall implement a tracking system, and an inspection and enforcement program for new development and redevelopment post-construction storm water BMPs no later than October 1, 2010.
      (1) Implement a GIS or other electronic system for tracking projects that have been conditioned to include construction/post-construction BMPs. The electronic system, at a minimum, should contain the following information:
         (A) Municipal project identifying information;
         (B) State WDID No., if applicable;
         (C) Project acreage;
         (D) BMP type and description;
         (E) BMP location (coordinates recommended);
         (F) Date of acceptance;
         (G) Date of O&M certification;
         (H) Maintenance records;
         (I) Inspection date and summary;
         (J) Corrective action;
         (K) Date certificate of occupancy issued; and
         (L) Replacement or repair date.
   (b) Each Co-Permittee shall inspect all development sites upon completion of construction and prior to the issuance of occupancy certificates to ensure proper installation of LID measures, structural BMPs, treatment control BMPs and hydromodification control BMPs. The inspection may be combined with other inspections provided it is conducted by personnel trained and qualified to inspect LID measures and BMPs.
   (c) Each Co-Permittee shall verify proper maintenance and operation of post-construction BMPs previously approved by the Co-Permittee for new development and redevelopment, if the BMPs are legally accessible. The post-construction BMP maintenance inspection program shall incorporate the following elements:
      (1) Post-construction BMP maintenance inspection checklist;
      (2) Inspection at least once every 2 years, beginning October 1, 2010, of post-construction BMPs to assess operation conditions with particular attention to: hydraulic function, failure, invasive vegetation, vector risk, trash and debris, sediment clogging, improper modifications, solids removal, pump-out, blockage and drawdown drainage; and
      (3) Criteria and procedures for post-construction treatment control and hydromodification control BMP repair, replacement, or re-vegetation.
   (d) Each Co-Permittee may submit a plan for Executive Officer approval by October 1, 2010, to require annual reporting by other parties demonstrating proper maintenance and operation of post-construction BMPs. The approved plan would satisfy the requirements for

verification of proper operation and maintenance and reduce the frequency of inspections to once in the five-year Order term.

(e) Each Co-Permittee shall undertake necessary enforcement based on the results of the inspection.

3. Post-Construction BMP Implementation and Enforcement

(a) The Co-Permittees shall initiate enforcement actions to rectify failure to implement and maintain Co-Permittee approved post-construction BMPs. If an inspection conducted by a Co-Permittee, response to a complaint, or referral from another agency identifies a failure to construct and/or maintain adequate, effective post-construction BMPs (ineffective BMPs include those that are undersized, poorly maintained or are not draining properly), the Co-Permittee shall commence progressive enforcement against the owner or operator and notify the Regional Water Board.

4. Alternative Post-Construction Storm Water Mitigation Programs

(a) A Co-Permittee may apply to the Regional Water Board for approval of a regional or sub-regional storm water mitigation program to substitute in part or wholly for on-site post-construction requirements.

(b) Upon review and a determination by the Regional Water Board Executive Officer that the proposal is technically valid and appropriate, the Regional Water Board may consider for approval such a program if its implementation will:

(1) Implement LID or provide justification of why it cannot;
(2) Result in equivalent or improved storm water quality;
(3) Protect stream habitat;
(4) Be fiscally sustainable and have secure funding;
(5) Promote cooperative problem solving by diverse interests; and
(6) Be completed in four years or less, including the construction and start-up of treatment facilities.

(c) Nothing in these provisions shall be construed as to delay the implementation of post-construction control requirements, as approved in this Order.

Mitigation Funding

(d) A Co-Permittee may create a management framework, for Executive Officer approval, to fund regional or subregional solutions to storm water pollution, where any of the following situations occur:

(e) A waiver for impracticability is granted;

(f) Funds become available;

(g) Off-site mitigation is required because of loss of environmental habitat; or

(h) An approved watershed management plan, or an integrated water resources management plan, or a regional storm water mitigation plan,

or a wetlands recovery plan exists that incorporates an equivalent or improved strategy for storm water pollution mitigation.

5. Standard Urban Stormwater Mitigation Plan (SUSMP)
   (a) The Co-Permittees shall update their SUSMP to include, at a minimum, the following:
      (1) The New Development and Redevelopment Integrated Water Quality and Water Resource Plan (Part 5);
      (2) Expected BMP pollutant removal performance including effluent quality and removal efficiency ranges (ASCE/U.S. EPA International BMP Database, CASQA New Development BMP Handbook, technical reports, local data on BMP performance, and the scientific literature appropriate for northern California geography and climate);
      (3) Selection of appropriate BMPs for storm water pollutants of concern and in accordance with the New Development and Redevelopment Integrated Water Quality and Water Resource Plan (Part 5);
      (4) Data on observed local effectiveness and performance of implemented BMPs;
      (5) BMP maintenance information;
      (6) Criteria to facilitate integrated water resources planning and management in the selection of BMPs, including water conservation, groundwater recharge, public recreation, multipurpose parks, open space preservation, and redevelopment retrofits;
      (7) Updated analysis of the local design storm criteria; and
      (8) Other requirements to be consistent with this Order.

6. Project Coordination
   (a) Each Co-Permittee shall facilitate a process for effective approval of post-construction storm water control measures. The process shall include:
      (1) Detailed BMP review including BMP sizing calculations, BMP pollutant removal performance, and municipal approval; and
      (2) An established structure for communication and delineated authority between and among municipal departments that have jurisdiction over project review, plan approval, and project construction.

PART 7 – State Statute Conformity

1. CEQA Document Update
   (a) Each Co-Permittee shall incorporate into its CEQA process no later than October 1, 2010, those additional procedures necessary for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents.

(1) The procedures shall require consideration of the following:
  (A) Potential impact of project construction on storm water runoff;
  (B) Potential impact to water quality of project post-construction storm water runoff;
  (C) Potential for discharge of storm water from areas with material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;
  (D) Potential for discharge of storm water to impair the beneficial uses of the receiving waters;
  (E) Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies;
  (F) Potential for significant changes in the flow velocity or volume of storm water runoff to cause harm to or impair the beneficial uses of natural drainage systems;
  (G) Potential for significant increases in erosion from storm water flows at the project site or surrounding areas; and
  (H) Potential to cause or contribute to an exceedance of WQS.

2. General Plan Update
  (a) Each Co-Permittee shall amend, revise or update its General Plan to include watershed and storm water quality and quantity management considerations and policies when any of the following General Plan elements are updated or amended:
    (1) Land use;
    (2) Housing;
    (3) Conservation; and/or
    (4) Open space.
  (b) Each Co-Permittee shall provide the Regional Water Board with the draft amendment or revision when a listed General Plan element or General Plan is noticed for comment in accordance with Government Code section 65350 et seq.

PART 8 – Development Construction Program

1. The requirements in Part 8 – Development Construction Program apply to both public and private construction projects.

2. Grading Restrictions
  (a) Each Co-Permittee shall implement a program to control storm water discharges from construction activity at all construction sites within its jurisdiction. The program shall ensure that controls are adequate for full protection of water quality. During the wet season (October 1 – April 15), the program shall ensure that the following requirements are

effectively implemented at all the construction sites in the categories listed below:

(1) No grading shall occur during the wet season for construction projects in the following areas of high erosivity: On hillsides with slopes 20% or steeper prior to land disturbance (If hillside development is not defined by a zoning ordinance, then the prohibition will apply to steep or long continuous slopes, or areas with silty soils, fine sands, or soils lacking vegetative cover).

(b) If grading operations in these areas are not completed before the onset of the wet season, grading shall be halted and effective erosion control measures shall be put in place to minimize erosion. Grading shall not resume until after April 15th. Depending on the project area, the developer shall implement the Erosion and Sediment Control BMPs listed in the following Tables 8 and 9.

(c) A Grading Prohibition Variance may be granted by a Co-Permittee where the project proponent can demonstrate through plan review, inspections, monitoring and use of an iterative BMP process that the proposed BMP measures can be reasonably expected to meet the following goals:

(1) Keep storm water from causing or contributing to degradation of water quality or impairing beneficial uses;

(2) Ensure that Total Suspended Solids discharged from the site is 100 mg/L or less; and

(3) Ensure that turbidity of the discharge from the site is 50 NTU or less.

(d) If a variance is granted by a Co-Permittee, a monitoring program must also be required to ensure BMP effectiveness and compliance with the above goals.

3. Construction Sites Less than 1 Acre

(a) Each Co-Permittee shall require the implementation of a minimum set of BMPs in combination at all construction sites (see Table 8 BMPs at Construction Sites Less than 1 Acre) to prevent erosion and sediment loss, and the discharge of construction wastes.[14] Erosion Control BMPs for erosion avoidance shall be the highest priority. If the site soils, hydrology, and geography are such that the BMPS in Table 8 are not adequate to meet WQS, additional (treatment train, redundant, and/or advanced) BMPs shall be deployed.

[14] The BMPs are taken from the *California BMP Handbook, Construction, January 2003* and the *Caltrans Stormwater Quality Handbooks, Construction Site Best Management Practices (BMPs) Manual, March 2003*, and addenda.

Table 8. BMPs at Construction Sites Less than 1 Acre

Minimum Set of BMPs for All Construction Sites	**CASQA Handbook**	**Caltrans Handbook[15]**
Erosion Control		
Scheduling	EC-1	SS-1
Preservation of Existing Vegetation	EC-2	SS-2
Sediment Controls		
Silt Fence	SE-1	SC-1
Sand Bag Barrier	SE-8	SC-8
Stabilized Construction Site Entrance/Exit	TR-1	TC-1
Non-Storm Water Management		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations (Groundwater dewatering to surface water only under NPDES Permit No. 93-61)[16]	NS-2	NS-2
Waste Management		
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. Construction Sites Greater than 1 Acre
   (a) Each Co-Permittee shall require the implementation of the BMPs in Table 9 (BMPs at Construction Sites Greater than 1 Acre) at all construction sites greater than 1 acre as needed to prevent erosion and sediment loss, and the discharge of construction wastes. If the site soils, hydrology, and geography are such that the BMPS in Table 9 are not adequate to meet WQS, additional BMPs (treatment train, redundant, and/or advanced) shall be deployed.

Table 9. BMPs at Construction Sites Greater than 1 Acre

BMPs	**CASQA Handbook**	**Caltrans Handbook**
Erosion Control		
Scheduling	EC-1	SS-1
Preservation of Existing Vegetation	EC-2	SS-2
Hydraulic Mulch	EC-3	SS-3
Hydroseeding	EC-4	SS-4

[15] And updates.
[16] Or as replaced by the Low Threat Discharge Permit currently being drafted to replace Order No. 93-61.

BMPs	**CASQA Handbook**	**Caltrans Handbook**
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
Sediment Controls		
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
Tracking Control BMPs		
Stabilized Construction Entrance/Exit	TR-1	TC-1
Entrance/Exit Tire Wash	TC-3	TC-3
Additional Controls		
Wind Erosion Controls	WE-1	WE-1
Stabilized Construction Roadway	TC-2	TC-2
Non-Storm Water Management		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations (Groundwater dewatering to surface water only under NPDES Permit No. 93-61)[17]	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
Waste Management		
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

5. Local Agency Requirements
   (a) Each Co-Permittee shall require for all public and private construction sites 5 acres or greater, compliance with all conditions identified previously in this section, Special Provisions Part 8, and the following requirements:

[17] Or as replaced by the Low Threat Discharge Permit currently being drafted to replace Order No. 93-61.

(1) Erosion Control Plan

(A) Each Co-Permittee shall require the preparation and submittal of an Erosion Control Plan for the Co-Permittee's review and approval prior to issuance of a grading permit. If the Erosion Control Plan is revised, the Co-Permittee shall review and approve those revisions.

(i) The Co-Permittee shall not approve any Erosion Control Plan unless it contains appropriate construction site BMPs, identifies specific locations where the BMPs will be installed, and maintenance schedules.

(ii) The Erosion Control Plan shall include a statement describing the location of BMPs and rationale for BMP selection, as well as a statement confirming that the owner and contractor are aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness and meet compliance with local codes and ordinances.

6. Electronic Site Tracking System

(a) Each Co-Permittee shall use an electronic system to track grading permits, encroachment permits, demolition permits, building permits, or construction permits (and any other municipal authorization to move soil) issued by each Co-Permittee. To satisfy this requirement, the use of a database or GIS system is encouraged, but not required.

7. Inspections

(a) Each Co-Permittee shall inspect all construction sites an acre or more for the implementation of storm water quality controls and effective pollutant reduction a minimum of once before the wet season to ensure that BMPs are fully installed prior to any forecasted rain event. Each Co-Permittee shall inspect each site once during the wet season to document that appropriate BMPs are installed according to the approved local erosion control plan and that the site runoff is protective of water quality. Concurrently, each Co-Permittee shall ensure that:

(1) The Erosion Control Plan is reviewed for compliance with local codes, ordinances, and permits; and

(2) A follow-up inspection takes place within two weeks for inspected sites that have not adequately implemented their Erosion Control Plan.

(b) Each Co-Permittee shall take additional enforcement actions to achieve compliance as specified in municipal codes, if compliance with municipal codes, ordinances, or permits has not been attained.

(c) Each Co-Permittee shall refer sites to the Regional Water Board if site inspectors observe a violation or suspected violation of the Construction Activities Storm Water General Permit (Construction General Permit) or

Small Linear Underground/Overhead Construction Projects General Permit (small LUPs).

(d) Each Co-Permittee can refer sites to the Regional Water Board for further joint enforcement actions for violations of the CWA or Water Code and municipal storm water ordinances after conducting a minimum of two site inspections and issuing a minimum of two written notices to the operator regarding the violation. In making such referrals, Co-Permittees shall include, at a minimum, the following documentation:

(1) Name of the site;
(2) WDID number (if applicable);
(3) Site developer or owner and contact information;
(4) Site contractor or operator and contact information;
(5) Records of communication with the site operator regarding the violation(s), which shall include at least an inspection report; and
(6) Written notice of the violation(s).

(e) Prior to approving and/or signing off for occupancy and issuing the Certificate of Occupancy for all construction projects subject to post-construction controls, each Co-Permittee shall require the design engineer to inspect the constructed site design, source control and treatment control BMPs to provide written verification that they have been constructed in compliance with all specifications, plans, permits, ordinances, and this Order.

8. State Conformity Requirements

(a) Each Co-Permittee shall inform all project applicants that a state Construction General Permit is required for all construction projects of one acre or more and provide them with information on how to enroll in the Construction General Permit.

(b) Each Co-Permittee shall verify that each construction project of one acre or more in size has filed an NOI to enroll under the Construction General Permit during the pre-construction meeting and notify the Regional Water Board of any known non-filers.

9. Interagency Coordination

(a) Investigation of complaints regarding facilities transmitted to the Co-Permittees by Regional Water Board staff:

(1) Each Co-Permittee shall initiate, within one business day,[18] an initial investigation of complaint(s) on the construction site(s) within its jurisdiction.

(A) The initial investigation shall include, at a minimum, an inspection on the facility and its perimeter to confirm the

[18] Co-Permittees may comply with the Order by taking initial steps (such as logging, prioritizing, and tasking) to "initiate" the investigation within that one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, to occur within two business days.

complaint and to determine if the site operator is effectively complying with the municipal storm water ordinances, and to oversee corrective action.

(b) Support of Regional Water Board enforcement actions:

(1) Each Co-Permittee shall support Regional Water Board enforcement actions by:

(A) Assisting in identification of current owners, operators, and lessees of properties and sites;

(B) Providing staff, when available, for joint inspections with Regional Water Board inspectors;

(C) Appearing to testify as witnesses in Regional Water Board enforcement hearings, when necessary; and

(D) Providing copies of inspection reports and other progressive enforcement documentation.

PART 9 – Public Agency Activities Program

1. Each Co-Permittee shall implement a Public Agency Activities Program to minimize storm water pollution impacts from public agency activities. The Public Agency Activities Program shall include:
   (a) Public construction activities management;
   (b) Vehicle maintenance/material storage facilities/corporation yards management/municipal operations;
   (c) Landscape and recreational facilities management;
   (d) Storm drain operation and management;
   (e) Streets and roads maintenance;
   (f) Infrastructure maintenance;
   (g) Public industrial activities management;
   (h) Emergency procedures; and
   (i) Employee training.

2. Vehicle Maintenance/Material Storage Facilities/Corporation Yards Management/Long Term Maintenance Programs

   (a) Each Co-Permittee shall implement the following BMPs[19] as needed at all Co-Permittee owned or leased facilities and job sites, including but not limited to vehicle/equipment maintenance facilities, material storage facilities, and corporation yards, and at any area that includes the activities as described in the following Table. Additionally, for any activity or area described in the footnote below,[20] each Co-Permittee shall also implement the BMPs in the Caltrans Storm Water Quality

[19] These BMPs are identified in Appendix B of the *Caltrans Storm Water Quality Handbook Maintenance Staff Guide, May 2003*, and its addenda.

[20] Scheduling and Planning; Spill Prevention and Control; Sanitary/Septic Waste Management; Material Use; Safer Alternative Products; Vehicle/Equipment Cleaning, Fueling, and Maintenance; Illicit Connections Detection, Reporting and Removal; Illegal Spill/Discharge Control and Maintenance Facility Housekeeping Practices.

Handbook Maintenance Staff Guide described as B-4 in Table 10 (BMPs at Vehicle Maintenance/Material Storage Facilities/Corporation Yards) or other industry-accepted BMP manuals such as Fishnet 4-C or CASQA.

Table 10. BMPs at Vehicle Maintenance/Material Storage Facilities/Corporation Yards **From the Caltrans Storm Water Quality Handbook Maintenance Staff Guide Appendix B (May 2003[21])**

Activity Specific BMPs	**Page**
General BMPs	B-4
Flexible Pavement	B-9
Asphalt Cement Crack and Joint Grinding/Sealing	B-9
Asphalt Paving	B-10
Structural Pavement Failure (Digouts) Pavement Grinding and Paving	B-11
Emergency Pothole Repairs	B-13
Sealing Operations	B-14
Rigid Pavement	B-15
Portland Cement Crack and Joint Sealing	B-15
Mudjacking and Drilling	B-16
Concrete Slab and Spall Repair	B-17
Slope/Drains/Vegetation	B-19
Shoulder Grading	B-19
Non-landscaped Chemical Vegetation Control	B-21
Non-landscaped Mechanical Vegetation Control/Mowing	B-23
Non-landscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal	B-24
Fence Repair	B-25
Drainage Ditch and Channel Maintenance	B-26
Drain and Culvert Maintenance	B-28
Curb and Sidewalk Repair	B-30
Litter/Debris/Graffiti	B-32
Sweeping Operations	B-32
Litter and Debris Removal	B-33
Emergency Response and Cleanup Practices	B-34
Graffiti Removal	B-36
Landscaping	B-37
Chemical Vegetation Control	B-37
Manual Vegetation Control	B-39
Landscaped Mechanical Vegetation Control/Mowing	B-40
Landscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal	B-41
Irrigation Line Repairs	B-42

[21] Including future updates and revisions.

Activity Specific BMPs	Page
Irrigation (Watering), Potable and Nonpotable	B-43
Environmental	B-44
Storm Drain Stenciling	B-44
Roadside Slope Inspection	B-45
Roadside Stabilization	B-46
Storm Water Treatment Devices	B-48
Public Facilities	B-50
Bridges	B-52
Welding and Grinding	B-52
Sandblasting, Wet Blast with Sand Injection and Hydroblasting	B-54
Painting	B-56
Bridge Repairs	B-57
Other Structures	B-59
Pump Station Cleaning	B-59
Tow Truck Operations	B-63
Electrical	B-65
Sawcutting for Loop Installation	B-65
Traffic Guidance	B-67
Thermoplastic Striping and Marking	B-67
Paint Striping and Marking	B-68
Raised/Recessed Pavement Marker Application and Removal	B-70
Sign Repair and Maintenance	B-71
Median Barrier and Guard Rail Repair	B-73
Emergency Vehicle Energy Attenuation Repair	B-75
Snow and Ice Control	B-76
Snow Removal	B-76
Ice Control	B-77
Storm Maintenance	B-78
Minor Slides and Slipouts Cleanup/Repair	B-78
Management and Support	B-80
Building and Grounds Maintenance	B-80
Storage of Hazardous Materials (Working Stock)	B-82
Material Storage Control (Hazardous Waste)	B-84
Outdoor Storage of Raw Materials	B-85
Vehicle and Equipment Fueling	B-86
Vehicle and Equipment Cleaning	B-87
Vehicle and Equipment Maintenance and Repair	B-88
Aboveground and Underground Tank Leak and Spill Control	B-90

(b) Each Co-Permittee shall obtain coverage under the Construction General Permit no later than October 8, 2009 for long-term maintenance projects including maintenance or replacement of streets, sidewalks, roads, and any other project that a Co-Permittee undertakes

including all Capital Improvement Projects (CIP) if either one or more acres of land are disturbed by grading, clearing or excavation activities.

3. Sonoma County shall implement the Fishnet 4-C manual for road maintenance projects as well as the BMPs described below.

4. Roadway Paving or Repaving Operations (For Private or Public Projects)
   (a) Each Co-Permittee shall require that for any project that includes roadbed or street paving, repaving, patching, digouts, or resurfacing roadbed surfaces, that the following BMPs be implemented for each project:
      (1) Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions;
      (2) Install sand bags or gravel bags and filter fabric at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat;
      (3) Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or watercourses;
      (4) Minimize non-storm water runoff from water use for the roller and for evaporative cooling of the asphalt;
      (5) Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly;
      (6) Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly;
      (7) Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly;
      (8) Cover the “cold-mix” asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm;
      (9) Cover loads with tarp before haul-off to a storage site, ensuring that trucks are not overloaded;
      (10) Minimize airborne dust by using water spray during grinding; and
      (11) Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or watercourses.

5. Streets and Roads
   (a) Maintenance
      (1) Each Co-Permittee shall perform street sweeping of curbed streets in commercial areas and areas subject to high trash generation six times per year.
      (2) Each Co-Permittee shall perform street sweeping of curbed streets in residential areas identified in their SWMP at least four times per year.

(b) Road Construction and Reconstruction
  (1) Each Co-Permittee shall implement the following BMPs for road reconstruction:
    (A) Drain Inlet protection from sediments;
    (B) Dewatering of below grade construction areas;
    (C) Secondary containment for cold mix;
    (D) Sheeting underneath and covering cold mix (during storage) to prevent discharge of spray release; and
    (E) If concrete will be used on site, Co-Permittees shall provide a vehicle wash off area that is isolated from the MS4.

(c) Post-Construction Controls
  (1) Municipal activities involving pothole repairs and square cut patching will not trigger post construction controls.

6. Each Co-Permittee shall protect debris and material stockpiles from rain or wind erosion with a cover or sediment barriers.

7. Vehicle and Equipment Wash Areas
  (a) Each Co-Permittee shall eliminate discharges of untreated wash waters from the washing of vehicles and equipment no later than October 1, 2011, by implementing any of the following measures at existing facilities with vehicle or equipment wash areas:
    (1) Infiltrate on-site;
    (2) Self-contain, and haul off for disposal;
    (3) Equip with a clarifier;
    (4) Equip with an alternative pre-treatment device; or
    (5) Plumb to the sanitary sewer with permission from the sewering agency.
  (b) Each Co-Permittee shall ensure that any municipal facilities constructed, redeveloped, or replaced have all vehicle and equipment wash areas routed to a vegetated or gravel area for infiltration, plumbed to the sanitary sewer, or hauled away for legal disposal.

8. Landscape, Park, and Recreational Facilities Management
  (a) Integrated Pest Management (IPM)
    (1) IPM is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Each Co-Permittee shall implement a jurisdiction-wide IPM program incorporating the following principles:
      (A) Pesticides are used only if evaluation indicates they are needed and are applied according to established guidelines;
      (B) Treatments are made with the goal of removing only the target organism;

(C) Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial, non-target organisms, and the environment;
(D) The use of pesticides, including Organo-phosphates and Pyrethroids does not threaten water quality;
(E) Partnerships with other agencies and organizations to encourage the use of IPM;
(F) Adoption and verification of implementation policies, procedures, and/or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) in the Co-Permittees' overall operations and on municipal property;
(G) 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:
(i) Quantify pesticide use by its staff and hired contractors;
(ii) Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units
(iii) Continue programs to reduce pesticide use to MEP; and
(iv) Demonstrate reductions in pesticide use.

(b) Each Co-Permittee shall implement the following requirements no later than January 1, 2010:
(1) Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers;
(2) Ensure pesticides or fertilizers are not applied to an area immediately prior to, during, or immediately after a rain event, or when water is flowing off the area;
(3) Ensure that no banned or unregistered pesticides are stored or applied;
(4) 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;
(5) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs;
(6) Store pesticides and fertilizers indoors or under cover on paved surfaces or use secondary containment, and:
(A) Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills; and
(B) Regularly inspect storage areas.

9. Storm Drain Operation and Management and Trash Management
(a) Catch Basin Cleaning

(1) Each Co-Permittee shall designate catch basin inlets within its jurisdiction as one of the following:
  (A) Priority A: Catch basins that are designated as consistently generating the highest volumes of trash and/or debris;
  (B) Priority B: Catch basins that are designated as consistently generating moderate volumes of trash and/or debris; or
  (C) Priority C: Catch basins that are designated as generating low volumes of trash and/or debris.
(2) Each Co-Permittee shall submit a map or list of catch basins, their locations, and their designation under the priority system described above for Executive Officer approval by October 1, 2010.
(3) Each Co-Permittee shall inspect and clean catch basins as necessary, but at least consistent with the following schedule:
  (A) Priority A: A minimum of 2 times during the wet season and once during the dry season every year;
  (B) Priority B: A minimum of once per year; and
  (C) Priority C: As needed, but not less than a minimum of once per permit term.
(4) In addition to the preceding schedule, Co-Permittees shall ensure that any catch basin that is at least 25% full of trash and/or debris shall be cleaned out.

(b) Trash Management at Public Events
(1) Each Co-Permittee shall require for any public event, permitted private event or wherever it is foreseeable that substantial quantities of trash and litter may be generated, that the following measures are implemented:
  (A) Conditions be placed on any special use permit issued for such event to control and clean up trash; and
  (B) Require the proper management of trash and litter generated; and
  (C) Arrange for temporary screens to be placed on catch basins; or
  (D) Clean out catch basins, trash receptacles, and grounds as needed in the event area within 24 hours subsequent to the event.

(c) Trash Receptacles
(1) Each Co-Permittee shall install trash receptacles in areas subject to high trash generation (such as transit stops and schools) within its jurisdiction no later than October 1, 2011; and
(2) Each Co-Permittee shall ensure that trash receptacles are cleaned out and maintained as necessary to prevent trash overflow.

(d) Catch Basin Labels
(1) Each Co-Permittee shall inspect 20% of the catch basins on an annual basis for the legibility of the catch basin stencil or label

nearest each catch basin and inlet when performing storm drain inspections and maintenance.

(2) Each Co-Permittee shall record and re-stencil or re-label within 15 days of inspection, catch basins with illegible stencils.

(e) Trash Excluders

(1) The Co-Permittees shall consider installing trash excluders, or equivalent devices on catch basins to prevent the discharge of trash to the storm drain system if a grant or other funding source becomes available.

(f) Storm Drain Maintenance

(1) Each Co-Permittee shall implement a program for storm drain maintenance no later than October 1, 2010 that includes the following:

(A) Visual monitoring of prioritized Co-Permittee-owned open channels and other drainage structures for debris at least annually;

(B) Remove trash, debris and sediment as needed from open channels and roadside ditches in priority areas a minimum of once per year before the storm season;

(C) Use adequate BMPs to eliminate the discharge of contaminants during MS4 maintenance and clean outs; and

(D) Quantify the amount of materials removed using best estimates and ensure the materials are properly disposed of.

(g) Spill Response Plan

(1) Each Co-Permittee shall implement a response plan for spills to the MS4 within their respective jurisdiction. The response plan shall clearly identify agencies required to respond, telephone numbers and e-mail addresses for contact and shall contain at a minimum the following:

(A) Initiation of investigation of all complaints received within 24 hours of the incident report;

(B) Response within 2 hours upon notification of spills; and

(C) Immediate notification to appropriate sewer and public health agencies, Sonoma County Department of Emergency Services (DES) and the Office of Emergency Services (OES).

(h) Co-Permittee Owned Treatment Control BMPs

(1) Each Co-Permittee shall implement an inspection and maintenance program for all Co-Permittee owned treatment control BMPs, including post-construction treatment control BMPs.

(2) Each Co-Permittee shall ensure proper operation of all treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs.

(3) Any residual water not internal to the BMP performance within a treatment control BMP when being maintained shall be:

(A) Hauled away and legally disposed of;

(B) Discharged to the sanitary sewer system (with permits or authorization); or

(C) Treated or filtered to remove sediments and oil and grease, and meet the limitations set in Table 11 (Discharge Limitations for Dewatering Treatment BMPs) prior to discharge to the MS4.

Table 11. Effluent Discharge Limitations for Dewatering Storm Water Treatment BMPs[22]

Parameter	**Units**	**Limitation**
Total Suspended Solids	mg/L	100
Turbidity	NTU	50
Oil and Grease	mg/L	10

10. Emergency Procedures

(a) Each Co-Permittee may conduct repairs of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of this Order.

(1) Where the self-waiver has been invoked, the Co-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 business days after the situation of emergency has passed.

11. Municipal Employee and Contracted Municipal Employee Training

(a) Co-Permittees are required to either perform the training required by this section or obtain written verification of equivalent training from any contractors that manage facilities, perform tasks, or provide services to the Co-Permittees that may affect storm water quality.

(b) Each Co-Permittee shall, no later than October 1, 2010 and annually thereafter, train all of their employees in targeted positions (whose interactions, jobs and activities may affect storm water quality) on the requirements of the storm water program to:

(1) Promote a clear understanding of the potential for activities to pollute storm water; and

(2) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.

(c) Each Co-Permittee shall, no later than October 1, 2010 and annually thereafter, train all of their employees who use or have the potential to use pesticides or fertilizers; training programs shall address:

(1) The potential for pesticide-related surface water toxicity;

(2) Proper use, handling, storage, and disposal of pesticides;

[22] Technology based effluent limits.

(3) Least toxic methods of pest prevention and control, including IPM; and
(4) Reduction of pesticide use.

(d) Each Co-Permittee shall, no later October 1, 2010 and annually thereafter, train all of their employees who are responsible for investigating illicit connections and illicit/illegal discharges. The training program shall address:
(1) Identification;
(2) Investigation;
(3) Termination;
(4) Cleanup;
(5) Reporting of incidents; and
(6) Documentation of incidents.

PART 10 – Illicit Connections and Illicit Discharges Elimination Program

1. Each Co-Permittee shall implement a program to eliminate all illicit connections and illicit discharges (IC/ID) to the storm drain system, and shall document, track, and report all such cases in accordance with the elements and performance measures specified in the following subsections.

2. General Program Implementation
(a) Each Co-Permittee shall implement an IC/ID program. The IC/ID procedures shall be documented and made available for public review.
(b) Tracking
(1) All Co-Permittees shall, no later than October 1, 2013, map or document all permitted connections to their storm drain system and include this in their next submitted annual report.
(2) All Co-Permittees shall maintain a database for recording information related to IC/ID and, to the extent possible, use mapping to assist in evaluating the data. Co-Permittees shall use this information to identify priority areas for further investigation and elimination of IC/ID.
(c) Co-Permittees shall include a summary of inspections, complaint response, investigation, enforcement and result of IC/ID activities in each annual report.

3. Public Reporting
(a) Co-Permittees shall establish and maintain a phone hotline and internet site to receive all reports of IC/ID complaints within their jurisdictions. If a Co-Permittee receives a complaint in another jurisdiction, the Co-Permittee shall transmit the complaint to the appropriate entity.
(b) Co-Permittees shall document the location of the reported IC/ID and the actions undertaken in response to all IC/ID complaints.

4. Illicit Connections
   (a) Screening for Illicit Connections
      (1) Co-Permittees shall conduct field screening of their storm drain outfalls that have not already been screened by October 1, 2014 for illicit connections including:
         (A) All storm drain outfall pipes 36 inches in diameter or greater;
         (B) High priority areas identified during the mapping of illicit connections and discharges; and
         (C) All portions of storm drain systems 50 years or older in age.
      (2) Each Co-Permittee shall maintain a list containing all connections under investigation for possible illicit connection and their status.
   (b) Response to Illicit Connections
      (1) Investigation
         (A) Each Co-Permittee, upon discovery or upon receiving a report of a suspected illicit connection, shall complete an investigation within 21 days, to determine the following:
            (i) Source of the connection;
            (ii) Nature and volume of discharge through the connection; and
            (iii) Responsible party for the connection.
      (2) Termination
         (A) Each Co-Permittee, upon confirmation of an illicit storm drain connection, shall ensure the following:
            (i) Termination of the connection within 180 days of completion of the investigation, using formal enforcement authority to eliminate the illicit connection or submit information to the Regional Water Board justifying the status of non-compliance.
      (3) Documentation
         (A) Each Co-Permittee shall keep records of all illicit connection investigations and the enforcement actions taken to eliminate all illicit connections.

5. Illicit Discharges
   (a) Investigation
      (1) Each Co-Permittee shall investigate illicit/illegal discharges during or immediately following containment and cleanup activities, and shall take appropriate enforcement action to eliminate the illegal discharge.
   (b) Abatement and Cleanup
      (1) Each Co-Permittee shall respond, within 1 business day of discovery or a report of a suspected illicit/illegal discharge, with actions to abate, contain, and clean up all illegal discharges, including hazardous waste or materials.

(c) Documentation

(1) Each Co-Permittee shall maintain records of all illicit/illegal discharge discoveries, reports of suspected illicit/illegal discharges, their response to the illicit/illegal discharges and suspected illicit/illegal discharges, and the enforcement actions taken to eliminate all illicit/illegal discharges and summarize these activities in the annual report.

PART 11 – Reporting Program

1. The Co-Permittees shall submit by December 15th of each year beginning the year of 2009, an Annual Report to the Regional Water Board Executive Officer in the form of one hard copy and one compact disk (CD) or an electronic equivalent.
   (a) The Annual Report shall document the status of the municipal storm water program and an integrated summary of the results of analyses.
   (b) The Annual Report shall include the reports or tasks specified in this Order (including its attachments) and any Plans, Study Reports or Progress Reports developed by the Co-Permittees that would aid in assessing development of their storm water program and compliance with this Order.

Certification

I, Catherine Kuhlman, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on October 1, 2009.

_____

Catherine Kuhlman
Executive Officer

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