

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

239



**FROM:** Executive Office

**SUBMITTAL DATE:**  
September 28, 2010

**SUBJECT: Request For A Member Of The Board Of Supervisors To Provide Testimony On Tentative Order R9-2010-0016, Scheduled For Adoption By The San Diego Regional Water Quality Control Board On October 13, 2010**

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Receive and file the attached comment letters dated September 7, 2010, from the Riverside County Flood Control and Water Conservation District (District) and Transportation Land Management Agency (TMLA) regarding requested revisions to the requirements of **Tentative Order R9-2010-0016**, on Behalf of the County of Riverside and the Copermitees named in the Tentative Order.
2. Authorize a member of the Board of Supervisors to testify on behalf of the County of Riverside regarding **Tentative Order R9-2010-0016**, renewal of the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit for the Santa Margarita Watershed region of Riverside County at the October 13, 2010, hearing before the San Diego Regional Water Quality Control Board (RWQCB) in Temecula.

Departmental Concurrence

(Continued on Page 2)

*Michael R. Shetler*  
Michael R. Shetler, Senior Management Analyst

<b>FINANCIAL DATA</b>	Current F.Y. Total Cost:	N/A	In Current Year Budget:	N/A
	Current F.Y. Net County Cost:	N/A	Budget Adjustment:	N/A
	Annual Net County Cost:	N/A	For Fiscal Year:	N/A
<b>SOURCE OF FUNDS:</b> No Net County Cost				Positions To Be Deleted Per A-30 <input type="checkbox"/>
				Requires 4/5 Vote <input type="checkbox"/>

**C.E.O. RECOMMENDATION:**

APPROVE

BY: *Dean Deines*  
Dean Deines

**County Executive Office Signature**

Department Recommendation:  Consent  Policy  
Per Executive Office:  Consent  Policy

Prev. Agn. Ref.:

District: 1 & 3

Agenda Number:

3.7

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

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**SUBJECT: Request For A Member Of The Board Of Supervisors To Provide Testimony On Tentative Order R9-2010-0016, Scheduled For Adoption By The San Diego Regional Water Quality Control Board On October 13, 2010**

**BACKGROUND:** The San Diego RWQCB is currently renewing the NPDES MS4 Permit that regulates the Santa Margarita River Watershed region of Riverside County, which includes portions of Murrieta, Temecula, Wildomar, Menifee and the unincorporated County area. The requirements of this Permit, which regulates discharges of stormwater and dry weather flows from storm drains operated by the aforementioned agencies (Copermittees) to Waters of the United States profoundly impacts public and private development (including road development and road maintenance), commercial/Industrial business and residential activities within the Permit area.

Late last year, RWQCB staff indicated their intent to use the NPDES MS4 Permit adopted for coastal Orange County as a model for the Santa Margarita River Watershed Permit renewal. The Copermittees analyzed that Permit and determined it would require significant and unnecessary modifications and expansions to existing Riverside County Permit programs. In an effort to stave off unnecessary costs, the Copermittees engaged RWQCB staff in an effort to develop a Permit that instead recognized and built upon the County's proactive efforts to protect local water resources and better reflected the resources available to the Copermittees as a result of current economic conditions. Although the Copermittees efforts improved the Permit, RWQCB staff insisted on maintaining many of the Orange County Permit requirements and also imposed several additional requirements regarding water quality monitoring, unpaved roads maintenance and business regulation.

The result is a Permit that still imposes significant program expansions that are not necessary to protect local water resources. The District has estimated that the monitoring requirements alone (which currently exceed coastal Orange County's Permit requirements) will increase by a factor of 5, with local Riverside County residents paying three times per capita the costs incurred by coastal Orange County residents.

Other program elements significantly impacting the County include:

- 1) Requirements to regulate public and private unpaved road construction and maintenance activities;
- 2) Requirements to prohibit excess residential and business irrigation runoff to public streets; and
- 3) Requirements to add additional business inspection program elements that far exceed current inspection protocols.

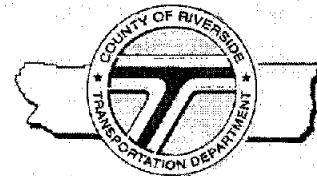
The District, as Principal Permittee, has prepared extensive comments regarding the requirements of the Permit on behalf of the Copermittees. TLMA has also provided a separate comment letter addressing specific impacts of the Permit on regulation of unpaved roads (see attached).

The Executive Office is requesting that a member of the Board of Supervisors be authorized to testify on behalf of the County of Riverside regarding the economics and resource ramifications of the Permit and make an appeal to the Regional Board to remand the Permit back to Regional Board staff to address the County's remaining issues.

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**COUNTY OF RIVERSIDE**  
**TRANSPORTATION AND**  
**LAND MANAGEMENT AGENCY**  
**Transportation Department**



*Juan C. Perez, P.E., T.E.*  
*Director of Transportation*

September 7, 2010

Chairman David King and Members of the Board  
San Diego Regional Water Quality Control Board  
Attn: Executive Director Gibson  
9174 Sky Park Court, Suite 100  
San Diego CA 92123-4353

RE: Draft Tentative Order No. R9-2010-0016 (NPDES No. CAS0108740) - Proposed Unpaved Road Requirements

Dear Mr. Gibson:

The Riverside County Transportation Department has reviewed the proposed requirements applicable to unpaved roads presented in the Draft Municipal Separate Storm Sewer System Permit (Draft Tentative Order No. R9-2010-0016 (NPDES No. CAS0108740) for the Santa Margarita Region of Riverside County (Draft MS4 Permit) and has identified several major concerns. We appreciated the opportunity to meet recently with you and staff to discuss our concerns. Primarily, they have to do with requirements being imposed through this permit that go well above-and-beyond what is required in the Orange County permit to regulate the operation and maintenance of unpaved roads.

**SUMMARY**

There are many different categories of unpaved roads within the unincorporated County area. These include County-Maintained unpaved roads, dedicated and accepted public roads (which are not County maintained), roads dedicated but not accepted, private roads, utility access roads, roads through tribal lands, and others. These roads are maintained by numerous entities besides the County, such as Homeowners Associations, Quasi-public entities like County Service Areas, Community Service Districts, public and private utilities, Tribes, and in many cases, individual property owners. The County in fact is prohibited by law from spending general gas tax dollars (our main funding source) for maintenance of roads not in the County Maintained Road System, and is not financially able to take on new unpaved roads into the County Maintained System until they are improved to County Standards.

The proposed permit requirements would therefore impose an undue and substantial regulatory burden on the County and would create a class of potential unwitting "violators" that are not familiar with these requirements, including hundreds if not thousands of property owners that have been maintaining unpaved roads for many decades as needed to access their property. The special requirements for development and maintenance of unpaved roads were proposed by Regional Board staff for inclusion in the draft MS4 Permit very late in the process, after a number of weeks of discussions on the overall permit language and just prior to release for the Santa Margarita Region for public comment. During those discussions, unpaved roads were not raised by Regional Board staff as a source requiring additional regulatory attention.

Given the complexity of these jurisdictional issues, and the number of stakeholders that would be impacted, we respectfully request that the regulation of unpaved roads be removed from this permit. Alternatively, unpaved roads could be considered as part of a separate general permit to allow for proper stakeholder involvement and vetting, at the least within those areas of the permit (see below) that have to do with maintenance provisions. Given the complexity of this issue and the impact on thousands of properties, another option is to achieve a water quality benefit through education programs, not using limited resources on regulation and enforcement. We also note that unpaved road regulation was not included in the recent Orange County permit. Orange County receives approximately 8 times the amount of funding on a per mile basis towards their County-Maintained roads as does Riverside County, so imposing additional requirements on the Riverside County permit magnifies the undue regulatory and financial burden.

The Draft MS4 Permit includes requirements for unpaved roads that are either redundant to existing regulatory requirements or that impose new regulation requirements at a time that the County can ill afford to start new programs. The language proposed needs clarification to avoid potential misinterpretations that may result in operational disruptions to the transportation system and/or compliance costs way out of proportion to the potential impact on receiving water quality. Although the Department supports implementation of erosion and sediment control best management practices (BMPs) as appropriate for development of new unpaved roads, it does not agree that the statements in the Fact Sheet and Findings support identification of unpaved roads as a significant source of pollutants warranting special regulation. The following summarizes the Department's specific concerns and perspectives.

### **UNPAVED ROAD DEVELOPMENT REQUIREMENTS**

Requirements for the development of unpaved road projects are addressed in section F.1.i. on page 45 of the Draft MS4 Permit. This requirement states:

#### **i. Unpaved Roads Development**

The Copermittees must develop, where they do not already exist, and implement or require implementation of erosion and sediment control BMPs after construction of new unpaved roads. At a minimum, the BMPs must include:

- (1) Practices to minimize road related erosion and sediment transport;
- (2) Grading of unpaved roads to slope outward where consistent with road engineering safety standards;
- (3) Installation of water bars as appropriate;
- (4) Unpaved roads and culvert designs that do not impact creek functions and where applicable, that maintain migratory fish passage;

It is our contention that construction of new unpaved roads is already adequately regulated through development regulations. New unpaved roads built through development fall under the definition of a "project", and as such are already required to develop and implement project-specific SUSMPs, which include identification of BMPs in the same manner as required of other development projects. Unpaved road projects are also required to comply with the General Permit-Construction which requires preparation of a SWPPP. These requirements are implemented by the Permittees during the development review process and in issuance of grading permits. We also note that the development process already achieves a gradual "retirement" of unpaved roads, as the County requires in many cases that new development replace unpaved access roads with paved access.

Additional separate requirements for development of unpaved roads are redundant to these requirements and may only complicate compliance. However, if the Board wishes to include permit language to further clarify what is already required through these permits, we would be pleased to work with the Board to help craft appropriate language.

### **UNPAVED ROAD MAINTENANCE**

This is our primary issue of major concern, particularly since the proposed language would appear to impose regulatory requirements on roads that are not part of the County Maintained Road System that we operate.

Requirements for the maintenance of unpaved road projects are addressed in section F.3.a.(10) on page 56 of the Draft MS4 Permit. This requirement states:

#### **(10) Unpaved Roads Maintenance**

- (a) The Copermittees must develop, where they do not already exist, and implement or require implementation of BMPs for erosion and sediment control

measures during maintenance activities on unpaved roads, particularly in or adjacent to receiving waters.

(b) The Copermitees must develop and implement or require implementation of appropriate BMPs to minimize impacts on streams and wetlands during unpaved road maintenance activities.

(c) The Copermitees must regularly maintain their unpaved roads adjacent to streams and riparian habitat to reduce erosion and sediment transport;

(d) Re-grading of unpaved roads during maintenance must be sloped outward where consistent with road engineering safety standards;

(e) Through their regular maintenance of unpaved roads, the Copermitees must examine the feasibility of replacing existing culverts or design of new culverts or bridge crossings to reduce erosion and maintain natural stream geomorphology.

As we have stated, this issue should be addressed through a broad general permit or an education program. However, if the Board finds it necessary to impose additional permit requirements on maintenance activities, which go well beyond the Board's previous definitions of a "project", we respectfully request that this language be re-written to make it clear that it applies to those roads within the County (or City) Maintained Road System.

### **UNPAVED ROADS ARE NOT A SIGNIFICANT SOURCE OF WATER QUALITY IMPAIRMENT**

Findings D.1.C, pg 57-59, states:

"During the previous permit period, the San Diego Water Board identified, through investigations and complaints, sediment discharges from unpaved roads as a significant source of water quality problems in the Riverside County portion of the San Diego Region. Enforcement and inspection activities conducted by the San Diego Water Board during the previous permit term have found a lack of source control for many unpaved roads within the jurisdiction of the Copermitees".

The Department supports the continued application of development and construction requirements and maintenance of temporary post-maintenance erosion and sediment control BMPs as specified in existing permits. However, we do not believe that sufficient justification has been presented to support the identification of unpaved roads as a significant source of water quality problems in the Santa Margarita Region. In these days of uncertain state funding and dwindling local funding sources, every dollar spent on additional regulatory requirements needs to be weighed against the benefit of otherwise using funding on basic public health-and-safety needs such as road maintenance and safety improvements.

The discussion of Finding D.1.c. states that the inclusion of unpaved road requirements were based on findings by the San Diego Regional Board during typical compliance assurance activities, audits, or receipt of complaints. However no feedback from these activities were reported to the Permittees at the MS4 Permit discussions prior to the proposal of the unpaved road requirements just before the draft permit was released.

The Department has reviewed the documents cited by Regional Board staff in the discussion of Finding D.1.c. and the conditions in the Santa Margarita River are vastly different from those in Pennsylvania and Northern California cited in those documents. Nevertheless, these documents do not suggest that unpaved roads are a significant source requiring special attention in MS4 permits. Further, neither the Permittee's monitoring data nor our observations support a conclusion that unpaved roads are a significant source of pollutants warranting special regulatory attention and we request that this finding be deleted unless significant data specific to the Santa Margarita Region can be produced. In particular, the Department requests a copy of the investigations and complaints along with the data that supports a significant source of water quality problems on unpaved roads, including a listing of roadways where water quality problems have been identified.

Thank you for the opportunity to review and comment on the Draft MS4 Permit. The County of Riverside Transportation Department is committed to managing the roads and highways within our County Maintained Road System in a manner that protects water quality. Our goal is to work constructively with the Regional Board staff to improve the effectiveness with which we address water quality issues, and put limited public and private dollars into those programs that provide the best return. We would be pleased to meet with you to discuss regulation of unpaved roads further and to explain our unpaved road development, construction, and maintenance practices.

Please feel free to contact me or Ward Maxwell at 951-955-6740 if you have any questions regarding our comments on the proposed unpaved road requirements or our requests for modification of the draft Santa Margarita Region MS4 Permit.

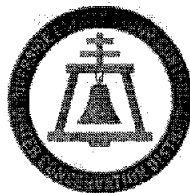
Sincerely,



Juan C. Perez  
Director of Transportation

CC: George A. Johnson, TLMA Director  
Mike Shelter, Executive Office  
Patty Romo, Deputy Director of Transportation  
Ward Maxwell, Engineering Project Manager  
Jason Uhley, Flood Control





RIVERSIDE COUNTY FLOOD CONTROL  
AND WATER CONSERVATION DISTRICT  
September 7, 2010

Chairman David King and Members of the Board  
San Diego Regional Water Quality Control Board  
9174 Sky Park Court, Suite 100  
San Diego, California 92123-4353

Dear Chairman King:

Re: Tentative Order R9-2010-0016, NPDES  
No. CAS0108740, Riverside County  
Municipal Separate Storm Sewer System  
Permit Reissuance *NWU:749045:rneill*

The Riverside County Flood Control and Water Conservation District (District) is submitting this comment letter on the above listed Tentative Order, on behalf of the Riverside County MS4 Permittees within the San Diego Region (Copermittees). Tentative Order R9-2010-0016 (draft MS4 Permit) was drafted by Board staff to serve as the reissuance of Order R9-2004-0001 (existing MS4 Permit) which covers the Santa Margarita Region of Riverside County. This letter was developed in consultation with the Copermittees and reflects our most critical concerns. The Board's careful consideration of these critical concerns will be appreciated.

This comment letter is organized as follows:

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Chairman David King  
and Members of the Board

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September 7, 2010

Re: Tentative Order R9-2010-0016, NPDES  
No. CAS0108740, Riverside County  
Municipal Separate Storm Sewer System  
Permit Reissuance *NWU:749045:bneill*

In addition, the following attachments provide support for our priority issues and solutions, provide additional legal comments and/or summarize additional technical changes recommended to the draft MS4 Permit. Attachment 9 is a full redline markup of the draft MS4 Permit incorporating all of our recommended edits. Attachment 9 also includes additional minor edits not found elsewhere in this letter or its attachments.

- Attachment 1** – Summary of Proactive Efforts to Manage Stormwater
- Attachment 2** – Economic Assessment
- Attachment 3** – Language Changes Supported by Board Staff and Copermittees
- Attachment 4** – Monitoring and Reporting Program Requirements
- Attachment 5** – Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit
- Attachment 6** – Prohibition of Irrigation Runoff
- Attachment 7** – General Legal Comments
- Attachment 8** – District Specific Comments
- Attachment 9** – Redline Comments of MS4 Permit and Attachments
- Attachment 10** - Fact Sheet Comments

### **EXECUTIVE SUMMARY**

It is the goal of the Copermittees to obtain an MS4 permit that is both protective of the beneficial uses of the receiving waters in the Santa Margarita Region and respectful of the unprecedented economic conditions impacting the Copermittees. Further, the Copermittees have no interest in repeating the three-year Orange County MS4 Permit adoption process. In an effort to achieve our goal and head off a renewal process similar to Orange County's, the Copermittees approached David Gibson, Regional Board Executive Officer, in February 2010 regarding implementing a win-win process for developing the draft MS4 Permit.

In response, the Executive Officer authorized Board staff to meet with the Copermittees to foster communication and understanding. The Copermittees appreciate the Executive Officer's decision to dedicate staff time to meetings regarding the individual requirements of the South Orange County MS4 Permit and the appropriateness of those individual requirements to the Santa Margarita Region. The meetings provided an opportunity to foster a mutual understanding of the goals and objectives of Board staff and the capabilities and limitations of the Copermittees. As a result, the Permittees and Regional Board staff worked collaboratively to develop language for consideration in the Tentative Order.

However, the process did not resolve several significant issues due to the following constraints:

1. The process needed to be cut short as the Board expected the draft MS4 Permit to be heard in October. Copermittee staff requested that the hearing be delayed to allow the process to complete several times, but these requests were denied;

Chairman David King  
and Members of the Board

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September 7, 2010

Re: Tentative Order R9-2010-0016, NPDES  
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2. Regional Board staff indicated that the Board had adopted the South Orange County MS4 Permit as a model permit and, therefore, the Board would have to approve any major revisions to the provisions established in that MS4 Permit; and
3. Regional Board staff indicated that the Board would have to resolve our issues with several new provisions of the draft MS4 Permit addressing unpaved roads, inspection programs and monitoring requirements, all requirements that exceed the provisions of the Orange County MS4 Permit.

Although the collaborative process has improved the draft MS4 Permit with respect to several provisions of the Orange County MS4 Permit, Board staff also introduced several costly compliance and monitoring requirements, many of these requirements were introduced during the very latter part of the collaborative process. As described within this letter and its attachments, **the remaining issues and these new requirements result in a Permit that is economically infeasible** and has no substantiated nexus to demonstrated impairments of beneficial uses within the Santa Margarita Region caused by MS4 discharges. **At a minimum, the Priority issues outlined below must be addressed before the Copermittees can support the draft MS4 Permit.**

The Copermittees note that despite being directed to take several important issues to the Board, we have not been provided an opportunity for a formal or informal workshop before the Board. By contrast, the South Orange County MS4 Copermittees had at least three workshops and five formal hearings prior to adoption of that permit. Although we do not want to duplicate the Orange County renewal process, it is common practice to allow at least one workshop on significant permit issues before holding an adoption hearing. Given the issues outlined in this letter and in the attachments, there are numerous issues worthy of at least one workshop.

The Copermittees also have significant concern with the use of the South Orange County MS4 Permit as a model for our MS4 Permit area. As outlined in more detail throughout this letter and the attachments, the South Orange County and Santa Margarita Region MS4 Permit areas vary widely with regard to the water resources to be protected and available tax revenue to fund local programs and services, including compliance with MS4 permit requirements. Orange County has substantial coastal water resources with active recreational use, twice the population, and significantly higher tax revenues. The per capita cost for the residents within the Santa Margarita Region to comply with the requirements of the draft MS4 Permit is significantly greater than the per capita cost faced in South Orange County, with each dollar spent effectively hitting our residents three to four times harder. The expansion of regional program elements (e.g., coordination, monitoring, reporting, program development, effectiveness assessment) will result in an annual doubling of these costs, with a peak increase of nearly 300% for these programs alone. The Copermittees simply cannot economically support, nor does the Santa Margarita Region warrant, the same level of programs as South Orange County to protect our local receiving waters.

Chairman David King  
and Members of the Board

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September 7, 2010

Re: Tentative Order R9-2010-0016, NPDES  
No. CAS0108740, Riverside County  
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In summary, the meetings between Regional Board staff and Copermittee staff were honest, good faith and productive efforts to bridge the gaps between the requirements of the Orange County MS4 Permit and the specific needs of, and resources available to, the Upper Santa Margarita Watershed (the draft MS4 Permit area). However, given the constraints identified herein, the differing impacts on beneficial uses and current economic realities, the current draft MS4 Permit cannot be supported by the Copermittees.

*The Copermittees, therefore, request that the Board direct staff to work with the Copermittees to resolve the issues identified in this letter prior to considering adoption of the Permit.*

In the interest of developing economically feasible requirements for Board consideration, the balance of this letter and its attachments propose and justify changes to the draft MS4 Permit that will reduce costs to an achievable level, while continuing to raise the bar, where appropriate, to effectively protect the beneficial uses of receiving waters in the Santa Margarita Region. Please note that the Copermittees have many other concerns in addition to those identified in this letter with provisions in the draft MS4 Permit. These concerns are discussed in the Attachments to this letter, the redline of the Permit and the letters drafted by individual Copermittees.

## **BACKGROUND**

### **Receiving Waters and Water Quality Conditions**

This draft Permit proposes to regulate discharges from the MS4 owned by the Copermittees within the Santa Margarita Region of Riverside County. The MS4 in the Santa Margarita Region primarily discharges into Murrieta and Temecula Creeks and immediate tributaries thereto.

Unlike several of the watersheds in South Orange County, which exhibit perennial flow, the Santa Margarita Region is an ephemeral watershed. The only areas of perennial flow in the Santa Margarita Region are located at the formation of the Santa Margarita River right at the County line and in mountain areas outside of the urbanized areas serviced by the MS4s. The creeks in the urbanized areas of the watershed serviced by the MS4s are ephemeral and flows are only observed during and immediately after significant storm events. Any non-stormwater flows quickly disappear by seepage into the alluvial sands. Additionally, rising groundwater has been observed in Murrieta and Temecula Creeks for a short distance at various locations upstream of the confluence with the Santa Margarita River; however such conditions existed prior to urbanization.<sup>1</sup>

Since the initial MS4 permit was issued in 1990, the Copermittees have been actively and successfully implementing programs to manage their MS4 discharges. As described in the 2009 report of waste discharge (ROWD) submitted by the Copermittees, there have been no statistically

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<sup>1</sup> State of California Department of Public Works Division of Water Resources, Bulletin No. 57, "Santa Margarita River Investigation," Volume I, June 1956, p. 48.

Chairman David King  
and Members of the Board

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September 7, 2010

Re: Tentative Order R9-2010-0016, NPDES  
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significant increases in pollutant concentrations since issuance of the initial MS4 permit in 1990, despite the fact that the Santa Margarita Region has experienced over 300% population growth over the same time period. Further, although staff points out several recent 303(d) listings as basis for the need to enhance regulations, these listings were based on data that mostly predates our existing management programs implemented under the 2004 NPDES MS4 Permit. Further, the Permittees have submitted additional data for the current round of listings that should result in the removal of some of these additional listings based on more recent data. Additionally, the likely sources of these impairments include natural background concentrations in soils and groundwater (iron and manganese), natural and/or agricultural source loads (nutrients, total dissolved solids, sulfates and bacteria), and/or federally authorized uses of products (pesticides and copper). Although all of these sources can have urban components, it is also clear that these sources are mostly non-point in nature and not solely urban sourced, as implied in the Fact Sheet and Findings.

#### **Proactive Permittee Programs to Protect Local Resources**

Murrieta and Temecula Creeks and their tributaries are an important economic, environmental and social resource for the Santa Margarita Region. The Copermittees are cognizant of these benefits and have implemented or initiated proactive programs beyond the requirements of the current and previous MS4 permits to ensure that these resources remain viable and are protected for future generations. These programs are described in Attachment 1 and include:

- Integrated Planning, including the development of an Integrated Regional Water Management Plan that is actively coordinated with San Diego and Orange Counties.
- Management of New Development, including a progressive LID BMP implementation program five years in the making. The program includes a comprehensive LID BMP design manual, proposed public maintenance mechanism and a \$3,000,000 LID BMP Testing and Demonstration Facility.
- Water Quality Monitoring and Assessment, including active participation in the Southern California Stormwater Monitoring Coalition, California Stormwater Quality Association (CASQA) and Santa Margarita Region Executive Management Team, and including funding of several special studies designed to improve the science of stormwater management.
- Statewide Stormwater Leadership, including active leadership in promoting changes in the regulations of pesticides at the state and federal level and strong leadership and representation within the CASQA organization.
- Habitat and Aquatic Resource Conservation, including development of the largest and most comprehensive Multiple Species Habitat Conservation Plan in California.

Chairman David King  
and Members of the Board

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September 7, 2010

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### **Economic Conditions**

As the draft MS4 Permit for the Santa Margarita Region of Riverside County was modeled on the MS4 Permit developed for South Orange County, it is important to carefully contrast the economic resources available to the Counties:

- The population of the Santa Margarita Region (289,765) is 48% less than the population of South Orange County (553,161).<sup>2</sup>
- The 2009 per capita income in Riverside County (\$29,177) is 38% less than the per capita income in Orange County (\$46,898).<sup>3</sup>
- The current unemployment rate in Riverside County is 15.3 percent, which is 56% higher than the unemployment rate in Orange County (9.8 percent).<sup>4</sup>

Property and sales tax revenues are the primary sources of funding for local programs and services, including compliance with MS4 Permit requirements. Based on population and average home value, South Orange County generates over four times the property tax revenue generated in the Santa Margarita Region. Based on data presented in the Los Angeles Economic Development Corporation's July 2010 Economic Forecast, South Orange County generates 2.6 times the taxable sales generated in the Santa Margarita Region. As a less affluent area with a relatively small population, the Copermittees in the Santa Margarita Region receive significantly less property and sales tax revenue than municipalities in South Orange County and are less able to fund additional MS4 Permit compliance costs. These issues are discussed in detail in Attachment 2.

The recession also has impacted the economy in the Santa Margarita Region more than in South Orange County and it is projected that tax revenues will continue at a reduced level for an extended period, with **recovery not expected within the Permit term**. The poor economy has resulted in reductions of reserves to minimum levels and cuts or eliminations in virtually all local services and programs in the Santa Margarita Region. As a result any increases in funding for the water quality mandates contained in the draft MS4 Permit can come only by reducing funding for public safety or other existing state and federal mandates.

Modeling the draft MS4 Permit on the South Orange County permit represented a significant expansion of compliance requirements and compliance costs relative to the existing MS4 Permit issued to the Santa Margarita Region Copermittees. The requirements in the draft MS4 Permit have been expanded to include additional compliance and monitoring requirements beyond the South

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<sup>2</sup> Richard Boon, County of Orange, personal communication, September 1, 2010.

<sup>3</sup> Economic Forecast, Los Angeles Economic Development Corporation, July 2010.

<sup>4</sup> Monthly Labor Force Data for Counties, July 2010 – Preliminary, Labor Market Information Division, Employment Development Department, August 20, 2010. <http://www.calmis.ca.gov/file/lfmonth/countyur-400c.pdf>

Chairman David King  
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Orange County permit, further increasing compliance costs. We would submit that such an approach is fundamentally unfair and could be viewed as arbitrary.

### **Approach to the Permit Renewal**

As noted above, the Copermittees share the Board's goal of continually improving both the effectiveness and the efficiency of the MS4 compliance program. To that end, the Copermittees proposed program revisions in the ROWD that were designed to effectively manage/address the discharge of pollutants from their MS4, while making effective and responsible use of sharply reduced and further declining public funds. The ROWD recognized the Copermittees' proactive efforts and integrated those efforts into our recommendations for enhancing the MS4 Permit program. Further, the Copermittees met with Regional Board staff prior to the submittal of the ROWD in January 2009 to ensure that we had identified and addressed all of staff's concerns.

In March 2010, the Copermittees met with the Regional Board staff to discuss a collaborative process for renewing the draft Permit. At that time, the Executive Officer identified that the Board's fundamental goals for the renewal would be to develop a permit that is:

- Socially responsible;
- Environmentally responsible;
- Affordable; and
- Protective of water quality.

The Copermittees proposed initiating the discussions by focusing on the existing MS4 Permit and identifying what provisions needed to be changed to address local water quality conditions, the approach outlined in the ROWD. Regional Board staff preferred to start with the South Orange County permit and require the Copermittees to justify why programs in the Santa Margarita Region should be different than those proposed for Orange County. Regional Board staff also noted that none of the major provisions of the South Orange County permit could likely be altered, as that permit was now a model for the San Diego Region. In the interest of moving the process forward in light of the current economy, the Copermittees agreed to proceed based on the Board staff's terms.

### **Outcome of Discussions with Board Staff**

The discussions resulted in several improvements to the draft Permit including:

- Streamlined and more useful reporting and effectiveness assessment requirements.
- Greatly improved Development Planning / Low Impact Development (LID) requirements (further discussed in Attachment 3).

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- Language clarifications to more clearly state the intent of various requirements and to eliminate ambiguity.
- Enhanced understanding of the permit requirements and intent.

**However**, the addition of several new requirements not originally in the Orange County MS4 Permit as well as the constraints of working from within the boundaries of the existing Orange County MS4 Permit, resulted in an economically infeasible draft MS4 Permit that exceeds the water resource protection needs of the Santa Margarita Region and is too expensive for implementation by the Copermittees. Unless the permit requirements are revised to address specific local needs and resources, the Copermittees will not be able to implement the Permit requirements in a manner that is protective of water quality.

#### **PRIORITY ISSUES AND SOLUTIONS**

The Copermittees have identified specific and focused changes to the Permit that will allow the Copermittees to address staff's primary water quality concerns, while reducing compliance costs in a manner that is appropriate for the local watersheds. As previously noted, Board staff has directed the Copermittees to bring these changes directly to the Board for consideration, although we are hopeful that by summarizing them in writing that they may be addressed ahead of the scheduled October 13<sup>th</sup> hearing.

#### **Monitoring and Reporting Program (Attachment 4)**

Prior to the submittal of the ROWD, the Copermittees met with Board staff to propose changes to the Monitoring and Reporting Program (MRP). In these discussions, Board staff identified two areas for needed improvement:

- Relocation of Illicit Connection / Illicit Discharge (IC/ID) monitoring stations to MS4 outfalls, and
- Incorporation of Action Levels

In more recent discussions, Board staff noted that the MRP needed significant modification to reflect the South Orange County MRP, but would be scaled to be appropriate to the smaller Santa Margarita Region.

Unfortunately, the final MRP requirements have been expanded well beyond the South Orange County MRP requirements, resulting in a program that is completely out of proportion with the needs and resources of the Santa Margarita Region. In fact, the proposed MRP requirements will result in a **500% increase in monitoring program costs**, costing our residents **over two and a half times the per capita costs for South Orange County**.



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**Per Capita Monitoring Cost Comparison**

<b>\$5.13 per capita</b>	<b>~\$2.00 per capita</b>
--------------------------	---------------------------

The Copermittees recognize that monitoring and data collection is necessary. However, the MRP requirements exceed what is necessary to address management questions related to water quality, are beyond requirements dictated in the South Orange County MRP, and are beyond the Copermittees' ability to fund. Not only are the level of requirements inappropriate for the Santa Margarita Region, but they disregard the economic realities faced by the Copermittees. As such, the MRP falls far short of meeting the Executive Officer's stated goals of affordability.

In the interest of finding ways to offer Board staff a comparable program in a more cost effective and appropriate manner, the Copermittees have identified nine adjustments to the MRP that will **save approximately seven hundred and eighty thousand dollars (\$780,000) annually** and bring per capita monitoring costs more in line with the South Orange County MRP, while maintaining the core components of the MRP. Table 1 summarizes the key changes and the respective cost savings. It is important to note that any change highlighted in RED reflects bringing the program in line with the South Orange County MRP. Figure 1 below shows graphically the comparative costs for the draft MRP with and without the requested adjustments. Please note that the 100% baseline in Figure 2 reflects the current cost of the Copermittees' current MRP.

**Table 1 - Cost Savings resulting from proposed MRP changes<sup>1</sup>**

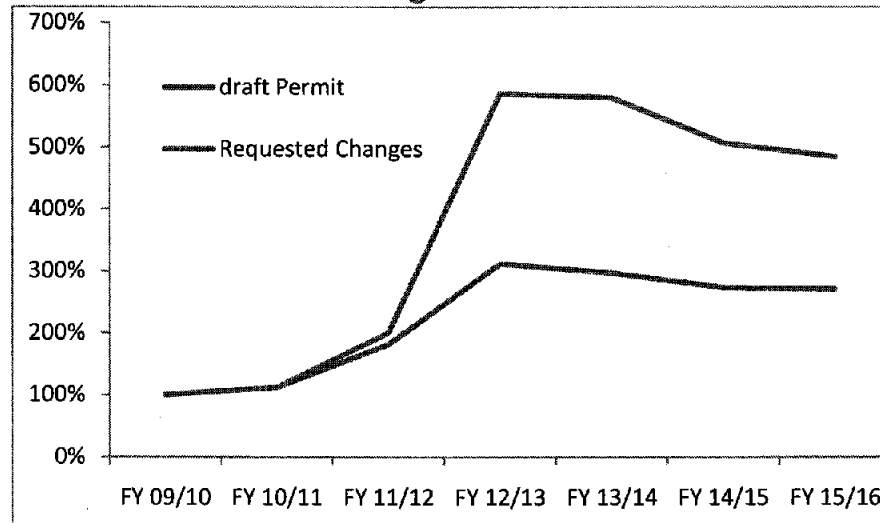
Component	Change	Cost Savings
<b>Mass Loading Stations</b>	1) Wet Weather - 3 wet -> 2 wet	~\$79,000
	2) Dry Weather - Composite -> Grab	~\$66,000
<b>Toxicity Testing (MLS and Bioassessment)</b>	3) 3 organisms -> 2 organisms	~\$14,000
<b>Bioassessment</b>	4) 6 stations -> 3 stations	~\$158,000
	5) 2X each -> 1X each	~\$95,000
<b>Action Levels</b>	6) 'Representative Number/Percent' -> Representative - and remove 'within each sub area'	~\$241,000
	7) SAL Composites -> Grab	~\$165,000
<b>Inland Aquatic Habitat Monitoring</b>	8) Eliminate requirement	~\$140,000
<b>Special Studies</b>	9) 6 special studies -> 4 studies, and Replace with more locally appropriate studies	~\$220,000/year
<b><u>TOTAL ESTIMATED SAVINGS</u></b>	Net savings of all recommended changes (annualized)	<b><u>~780,000/year</u></b>

*Note: Red text refers to requirements currently in the South Orange County MRP.*

1. See Attachment 4 for detail descriptions of requested changes.

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Figure 1



<b>\$5.13/per capita</b>	<b>~\$2.00/per capita</b>	<b>\$2.54/per capita</b>
--------------------------	---------------------------	--------------------------

Although the requested adjustments to the MRP will not eliminate cost increases, and will result in an MRP which is more expensive, on a per capita basis, than the South Orange County MRP, they provide a more manageable program for the Copermittees.

**The Copermittees request that the Board make the adjustments identified in Attachment 4 above before Permit adoption.**

Each of these requested adjustments and justifications for each is further discussed in Attachment 4 to this letter.

**Unpaved Roads Requirements (Sections F.1.i, F.3.a.(11), F.3.c.(5))**

The requirements for unpaved roads are particularly cumbersome, onerous and unreasonable. Our detailed analysis of these requirements is provided in Attachment 5. In summary, the proposed unpaved road requirements may result in substantial and unnecessary additional Copermittee costs that are not justified by the facts in the Santa Margarita Region. The Copermittees believe that the existing MS4 Permit requirements for new development, construction, maintenance and IC/ID adequately address regulation of unpaved roads that threaten water quality. If the Regional Board believes that unpaved roads require further regulation, the Copermittees believe that the appropriate regulatory mechanism is a general permit (Waste Discharge Requirements or NPDES permit) that would apply to *all* unpaved roads in the San Diego Region, rather than only those that are under the jurisdiction of the Copermittees.

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**The Copermittees request that Sections F.1.i, F.3.a.(11) and F.3.c.(5) regulating unpaved roads be deleted from the draft MS4 Permit.**

However, should the Water Board insist on retaining unpaved road requirements in this Permit, the Copermittees request the following revisions. These revisions are needed to ensure that all parties have a clear understanding of the requirements as clarified in Attachment 9. In summary, the Copermittees request:

- Clarification that these requirements apply to those unpaved roads that the Copermittees maintain in their road system.
  - This should be commonly understood, but the clarification is important to include due to complex legal limitations and rights associated with access, ownership, and maintenance of unpaved roads.
- Removal of language that specifies specific BMPs that must be implemented.
  - Specifying the method of compliance is prohibited pursuant to CWC Section 13360, and inappropriately forces the Copermittees to adopt particular solutions that may not best fit the situation.
- Removal of requirement for BMPs for private unpaved roads.
  - The proposed requirements would require the creation of an additional and unnecessary program element addressing privately owned unpaved roads. The Copermittees believe that a focused public outreach program should be implemented to educate property owners and associations about the need to properly maintain unpaved roads. This education program combined with existing IC/ID enforcement capabilities seems a more reasoned and responsible response to addressing this issue.

**Should Sections F.1.i, F.3.a.(11) and F.3.c.(5) regulating unpaved roads not be removed from the Permit, the Copermittees request they be modified as noted above. Specific redline edits to address the requested changes are contained in Attachment 9.**

#### **Post-Construction BMP Inspections**

Section F.1.f of the draft MS4 Permit includes new requirements for the Copermittees to verify that Post-Construction BMPs are being appropriately maintained. The new requirements appropriately develop a risk-based approach to inspections, defining eight factors that the Copermittees must consider in determining 'high-priority' projects.

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However, language in Section F.1.f.(2)(a) removes that discretion by stating:

*'At a minimum, high priority projects include those projects that generate pollutants (prior to treatment) within the tributary area of a 303(d) listed waterbody impaired for that pollutant; or those projects generating pollutants within the tributary area for an observed action level exceedance of that pollutant.'*

This language is excessively broad, and will require virtually all sites in the watershed to be designated as 'high priority' and, therefore, subject to annual inspections. This language is inconsistent with the goals of a socially responsible and affordable permit and should be modified for several reasons:

- Inspections frequencies should be based on risk of discharge. Annual inspections are not needed for all sites that *generate* a specific pollutant. For example, if a site generates a pollutant associated with 303(d) listing, but the site retains runoff onsite or stores those pollutants indoors, annual inspections would be unnecessary. However, sites that store 303(d) listed pollutants outdoors or otherwise have a high risk of discharge should be inspected more frequently.
- The language dilutes Copermittee resources by requiring annual inspections of low-risk sites, preventing the Copermittees from appropriately concentrating resources on problematic sites/sources. This is because when an action level is exceeded then all parties in the watershed are assumed guilty until proven innocent.

While the Copermittees are not opposed to implementing a program to verify that these BMPs are being maintained, it is critically important that they be provided the flexibility to determine which sites warrant annual inspections. **Specifically, the Permittees request that the language in F.1.f.(2)(a) be amended as follows prior to adoption of the Permit:**

*At a **minimum**, high priority projects include those projects that ~~generate pollutants (prior to treatment) within the tributary area of a 303(d) listed waterbody impaired for that pollutant; or those projects generating pollutants within the tributary area for~~ have been determined to be the source of an observed action level exceedance. ~~of that pollutant.~~*

### **Commercial and Industrial Inspections**

Section F.3.b. of the draft Permit includes requirements to inventory and inspect Commercial and Industrial businesses. The draft Permit expands upon existing inventory and inspection requirements in two problematic ways:

- It requires significantly more businesses to be inspected, and

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- It includes new requirements specifying what the Copermittees are required to inspect when they are onsite.

***More inspections***

Sections F.3.b.(1)(a)(i) and (ii) identify 42 categories of businesses that must be inventoried and inspected based on risk of pollutant discharge. However, Section F.3.b.(1)(a)(iii) adds virtually any business in the Permit area, independent of pollutant discharge risk:

*'All other commercial or industrial sites/sources within or directly adjacent to or discharging directly to receiving waters within environmentally sensitive areas (as defined in Attachment C of this Order) or that generate pollutants tributary to an observed exceedance of an action level.'* (Bold emphasis added)

In effect, section F.3.b.(1)(a)(iii) adds the following additional businesses:

- EVERY business that is adjacent to (or within) an Environmentally Sensitive Area (ESA), regardless of whether the business generates or discharges any pollutants, and
- EVERY business that 'generates' pollutants which happens to be upstream of an action level exceedance, *regardless* of whether the site has ever *discharged any* pollutants.

This language expands the list of sites far beyond the current requirements, and well beyond those sites that actually pose a threat to water quality. This is clearly unnecessary and should be removed for several reasons:

- It inappropriately separates 'risk' from the 'response', by requiring the Copermittees to inspect businesses irrespective of the risk that the business poses to water quality. For example, this language would require the Copermittees to expend resources and time inspecting hair salons, office buildings and other activities that happen to be adjacent to an ESA. This inappropriate broad-brush approach to permitting actually works to discredit the Copermittees' NPDES programs and dilute resources, rather than enhancing protection of water quality.
- It will further remove the flexibility that the Copermittees need to be able to re-allocate resources to inspecting and following up with sites/sources that are problematic.

**Therefore, the Copermittees request that the language in F.3.b.(1)(a)(iii) be amended as follows prior to adoption of the Permit:**

*All other commercial or industrial sites/sources ~~within or directly adjacent to or discharging directly to receiving waters within environmentally sensitive areas~~ (as*

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*defined in Attachment C of this Order) or that generate pollutants tributary to that have been determined to be the source of an observed exceedance of an action level.*

***Additional items to review during inspections***

Section F.3.b.(4)(a) specifies what the Copermittees must review when performing an inspection. The new requirements in subsections (i) and (ii) to review BMP implementation plans, and review facility monitoring data, respectively, are an unnecessary new mandate. They should be removed for several reasons:

- The requirements burden the Copermittees with reviewing information that is required under General Permits and is the responsibility of the Regional Board to enforce.
- The requirements would significantly increase the inspection time for sites with General Permits and endanger an existing collaborative inspection program (Compliance/Assistance Program (CAP)) that leverages the time highly trained Environmental Health Inspectors spend onsite for Certified Unified Program Agencies (CUPA) and Food Services inspections to also conduct NPDES inspections. The CAP program not only utilizes highly trained Environmental Health inspectors, but also regionalizes the inspections and, therefore, provides multiple benefits including uniformity, reduction in total number of inspections and higher-quality inspections. The Environmental Health HazMat inspection program administrators have indicated that they cannot accommodate the additional time required to implement the new requirements, as they would unduly cut into their ability to meet their own state-mandated inspection frequencies.
- By virtue of eliminating the CAP program, the requirements would effectively mandate a more fractured and disconnected set of inspections for the businesses, contrary to CAL EPA mandates for consolidated inspections, and in turn diluting the effectiveness of the program.

**The Copermittees request that the language in F.3.b.(1)(a)(iii) be amended as follows prior to adoption of the Permit:**

- (a) *Inspection Procedures: Inspections must include but not be limited to:*
- (i) *Review of ~~BMP implementation plans, if the site uses or is required to use such a plan;~~*
  - (ii) *Review of ~~facility monitoring data, if the site monitors its runoff;~~*
  - (iii) *Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification Number), if applicable;*
  - (iv) *Assessment of compliance with Copermittee ordinances and Copermittee issued permits related to runoff;*
  - (v) *Assessment of the implementation, maintenance and effectiveness of the designated minimum and/or enhanced BMPs;*

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### **Retrofit**

Section F.3.d. proposes a program to develop an inventory of existing developments that may be candidates for future water quality retrofits. The requirement goes on to encourage the Copermittees to collaborate with local property owners to promote urban retrofit in an effort to accelerate reductions in pollutant loading from existing urban areas.

Although laudable, this requirement has two significant problems:

- 1) The program is self-defeating as it contains no "carrots" to lure private property owners into participating in the program. Any property owner that is interested in volunteering in this effort would be required to fully comply with all provisions of the draft MS4 Permit. This includes preparation of compliance documents such as SSMPs, LID and hydromodification studies, subjecting themselves to additional regulatory scrutiny through business and BMP inspection programs required by the MS4 Permit, and otherwise incurring a myriad of costs and requirements. These costs and requirements would provide a strong disincentive to participate in a retrofit program. This program will only work if it is modified to remove these disincentives.
- 2) Current and projected economic conditions will limit the interest and participation of private property owners. Long-term economic predictions for Riverside County indicate that assessed valuations and property values will likely remain stagnant for the term of this Permit. Similarly, sales tax and unemployment are not expected to significantly improve either.

Without Co-Permittee resources to supplement private retrofit projects, the current economic disincentives for private redevelopment that are built into the program and the current impact of the economy on private property owners, there is no real value to the program.

**PREFERRED POLICY CHOICE:** The Permittees strongly request that this program be deleted for the aforementioned reasons.

**Alternatively,** and at minimum, the Copermittees request that the schedule for completion of the retrofitting program be revised to provide for development during the term of the Permit and submittal of the proposed program with the next ROWD. This will allow the Copermittees to defer expenditures related to development of the program until later in the Permit term when it is hoped that economic conditions and local revenues will improve. The Copermittees expect few opportunities for retrofit until the economy improves. Due to the Copermittees' limited ability to require retrofit on private property, our best opportunities for retrofit may be associated with approvals of proposed modifications of existing developments.

**ALTERNATE POLICY CHOICE:** If the Retrofit requirements are not removed, the Copermittees request that the Regional Board modify Section F.3.d. as follows:

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*Each Copermittee must develop and implement a retrofitting program that meets the requirements of this section upon submittal of the ROWD.*

### **Irrigation Runoff**

The draft MS4 Permit categorically prohibits the discharge of landscape irrigation; irrigation water; lawn watering; (collectively 'irrigation runoff') and non-emergency fire fighting flow runoff to the MS4. The basis for this requirement comes from the current Orange County stormwater permit within the San Diego Region (NPDES No. CAS0108740), which prohibits such discharges.

Although irrigation runoff may have been shown to be a problem in South Orange County, it has **not** been shown to be causing problems in receiving waters in the Santa Margarita Region. Attachment 6 summarizes the unique conditions and other facts that warrant the restoration of irrigation runoff as a non-prohibited non-stormwater discharge category. It is important to reiterate the three key points made in Attachment 6:

- Unlike the watersheds in South Orange County, the Santa Margarita Region is an ephemeral watershed;
- Unlike South Orange County, the Copermittees have **not** identified landscape irrigation, irrigation water or lawn water as an actual source of pollutants or conveyance of pollutants to waters of the U.S.;
- The draft MS4 Permit requires Copermittees to eliminate irrigation runoff **TO THE MS4**, which by definition, requires elimination of discharges to streets, curbs and gutters.

As noted above, the prohibition appears to hold the Copermittees responsible for any amount of irrigation runoff discharged to the curb and gutter, *regardless* of whether or not the discharge ever reaches receiving waters or causes or contributes to the exceedance of a water quality standard. This fact, combined with the fact that irrigation runoff has not been shown to be causing impairments in the local receiving waters, will make enforcement difficult to justify with residents and will likely result in community outrage over bans on irrigation. Further the Copermittees are not water purveyors, and as such, have little control over residential irrigation runoff outside of sending code enforcement officers out to look for incidents of excessive irrigation runoff. This is a very inefficient use of resources. In any event, the provisions as written will do little for water quality but potentially much for community outrage against water quality programs. The Copermittees do not believe this is the intent of the Board.

It is further worth noting that the Permit already contains an investigation and remediation process via Non-Stormwater Action Levels (NALs) by which the Copermittees will identify the source of problematic non-stormwater discharges. Should the source be found to be a conditionally exempt non-stormwater discharge, the permit requires the Copermittees to address that discharge or the entire category of discharges as appropriate. By allowing the NAL process to determine when and where



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conditionally exempt discharges need to be prohibited, the Copermittees are better positioned to justify any enforcement actions.

**PREFERRED POLICY CHOICE:** the Copermittees request that the Regional Board restore the conditional exemption for landscape irrigation, irrigation water and lawn watering as outlined in Attachments 6 and 7.

Alternatively, if the Regional Board nevertheless insists on prohibiting Irrigation Runoff, the Copermittees request that the draft MS4 Permit be revised to allow for irrigation runoff to be managed as a JRMP program, rather than as a prohibited discharge to the MS4. This alternative request is consistent with how the Permit currently deals with non-emergency fire fighting discharges, which was also removed from the list of non-prohibited non-storm water discharges. The Executive Officer stated that he would be open to consideration of a program for irrigation runoff that would address discharges from the MS4. This alternative approach allows the Copermittees to develop a program that focuses on irrigation runoff problem areas, as opposed to holding the Copermittees responsible for eliminating any instant case of over-irrigation to a street independent of threat to receiving water quality.

**ALTERNATIVE POLICY CHOICE:** The Copermittees request that the Regional Board clarify that irrigation runoff is only prohibited where it is discharged *from* an MS4 (into receiving waters) by adding the following language:

*B.4. As part of the JRMP, the Copermittees must develop and implement a program to address pollutants from landscape irrigation, irrigation water and lawn watering identified as significant sources of pollutants to waters of the United States.*

#### **Legal Issues**

The Copermittees have identified legal issues that raise fundamental questions regarding several of the key elements of the Tentative Order.

**The Copermittees request review of the legal issues and revision of the Tentative Order prior to adoption.**

Each of the legal issues and requested adjustments and justifications for each requested revision is further discussed in Attachments 7 and 8 to this letter.

#### **CONCLUSION**

It is fundamental that the MS4 Permit be economically, technically, and legally feasible. To be credible, and to pass legal muster, MS4 Permit requirements must demonstrable a nexus to water quality improvements. Instead the current requirements, although well intended but not always well

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developed, will put the Copermittees in non-compliance since we cannot afford to implement all the requirements and consequently this will not lead to water quality improvement.

The present economic crisis has made daily headlines over the past three years and Riverside County has been identified as the 11<sup>th</sup> most impacted county in the nation. In the ROWD and throughout the development of the draft MS4 Permit, the Copermittees have provided abundant publicly available information regarding the impact of this crisis on their revenues, staffing, and programs. Virtually every program and service, including public safety services, has been impacted, and others have been eliminated. Contingency reserves have been depleted to the lowest levels allowable to maintain operations. At this point, the Copermittees cannot increase water quality compliance spending without real risks to reducing spending on existing state and federal mandates or other much-needed local programs and services. As proposed, the draft MS4 Permit is economically infeasible.

In an effort to promote a viable 4<sup>th</sup>-term MS4 Permit, the Copermittees proactively engaged Regional Board staff in a collaborative dialogue with the intent of developing an economically feasible MS4 Permit that was protective of receiving water quality in the Santa Margarita Region. However, the following constraints have limited the benefits of the process:

1. The discussions were curtailed because the Board expected the draft MS4 Permit to be heard in October;
2. The Board had adopted the South Orange County MS4 Permit as a "model" permit, and, therefore, would have to approve any major revisions to the provisions of that Permit; and
3. The inclusion of several new provisions of the draft MS4 Permit addressing unpaved roads, inspection programs and monitoring requirements go well beyond the Orange County Permit.

As noted in the Executive Summary, the MS4 Permit adopted for South Orange County was ultimately developed for a region with substantial coastal resources and perennial streams, twice the population, significantly higher property tax revenues, and more affluent tax payers.

By contrast, the ephemeral conditions found in the Santa Margarita Region result in stream channels that are dry during dry weather conditions and receive less rain during wet season conditions. The stream flow conditions in the Santa Margarita Region are entirely unlike the significant perennial flow conditions found in South Orange County. The proposed changes contained herein address these realities. The proposed changes also address necessary changes to ensure that the Copermittees can continue to afford implementation of the draft MS4 Permit given the significant economic disadvantages faced by the Santa Margarita Region, disadvantages that have been exacerbated by the impacts of the recession.

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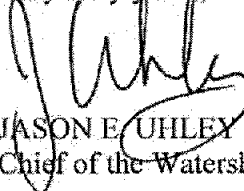
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The requirements in the Permit must protect beneficial uses in a cost effective manner. It is always a balance to protect water quality and avoid unnecessary increases in program compliance costs. Balancing local water quality needs and funding limitations should be paramount in the current economic climate. Proposed program expansions must be carefully weighed against economic realities and be justified by conditions actually found in the Santa Margarita Region. As described, unpaved roads and business inspections have been effectively addressed by existing programs, yet the draft MS4 Permit proposes requirements that can only be met by establishment of new compliance programs and, in the case of the business inspections, elimination of the highly effective CAP.

The legislature created Regional Boards to protect our beneficial uses while carefully considering the technical and economical feasibility of such protection. Even in the best of economic times, state and local government must carefully manage public revenues. A policy-level decision by the Regional Board is necessary to direct staff to work with the Copermittees to address the comments contained herein. The Copermittees request your support in our effort to develop an economically, technically, and legally feasible MS4 Permit that is appropriate to the Santa Margarita Region. As noted in the opening Executive Summary of this comment letter we specifically request that you direct Regional Board provide staff with direction to resolve the issues identified in this letter and attachments.

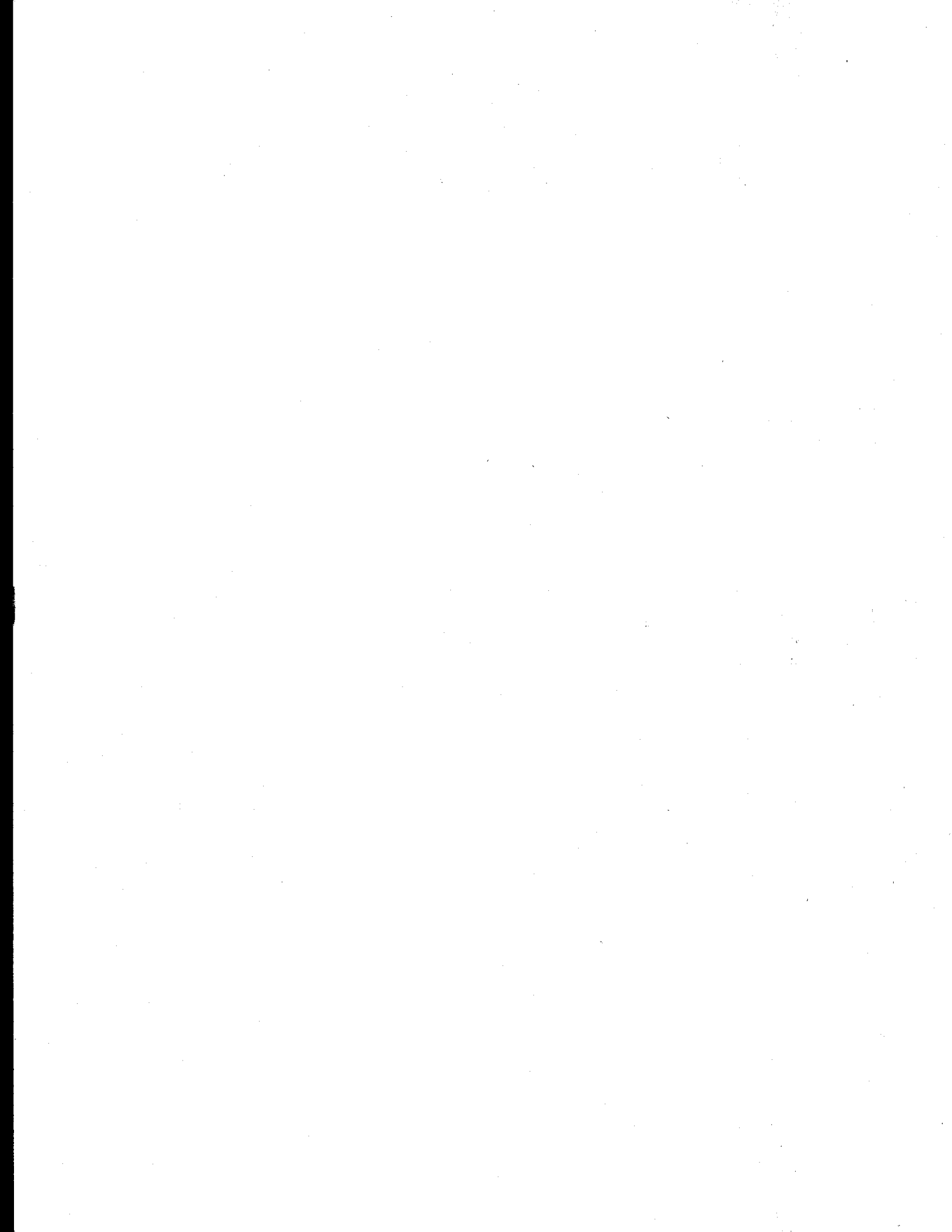
Thank you for your time and consideration. We look forward to discussing this issue further at the October 13<sup>th</sup> hearing.

Very truly yours,



JASON E. UHLEY  
Chief of the Watershed Protection Division

JEU:bjp



# Attachment 1: Summary of Proactive Efforts to Manage Stormwater

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## **Introduction**

Murrieta and Temecula Creeks and their tributaries are an important economic, environmental and social resource for the Santa Margarita Region. As an example, Murrieta Creek serves as the backdrop for Old Town Temecula, an important local tourist attraction. Several ecological preserves that are utilized by local residents and tourists are also located within the Santa Margarita Region. The Permittees are cognizant of these resources and their benefits and have implemented or initiated proactive programs beyond the requirements of the NPDES MS4 Permits to ensure that these resources remain viable and are protected for future generations.

## **Integrated Planning**

### **Upper Santa Margarita River Integrated Water Management (IRWM) Plan**

The County of Riverside, Riverside County Flood Control and Water Conservation District (District) and Rancho California Water District proactively entered into an agreement to form this program to manage the Upper Santa Margarita River Watershed. These three agencies have proactively engaged tribes, local stakeholders, and other local, state and federal agencies in an effort to develop a comprehensive plan to manage the watershed. Further, we have also built bridges to the San Diego County and Orange County IRWM programs to ensure proactive inter-regional planning of cross-jurisdiction watersheds such as the Santa Margarita River Watershed. The three-party agreement reached by the IRWM programs within the San Diego Region is the only one of its kind in California.

### **Santa Margarita River Executive Management Team**

The Permittees also coordinate more technical issues with San Diego County, the U.S. Bureau of Reclamation, Camp Pendleton, and other stakeholders to address coordination of monitoring and analysis of monitoring data within the region.

### **Murrieta Creek Flood Control, Environmental Restoration and Recreation Project**

Murrieta Creek poses a severe flood threat to the cities of Murrieta and Temecula. Overflow flooding from the undersized creek has periodically wreaked havoc on the communities – most recently in 1993 when nearly \$20 million in damages was incurred by the public and private sectors.

In 1997, at the request of District, the U.S. Army Corps of Engineers initiated studies on the Creek. The outcome of this endeavor was Congressional authorization in 2000 of a \$90 million, multi-faceted project known as the Murrieta Creek Flood Control, Environmental Restoration and Recreation Project. What was once viewed only as a needed local flood control project was now a federally cost shared, community endorsed corridor project that would not only safeguard the two cities from the ravages of uncontrolled flooding, but would celebrate the unique character of the communities by restoring and enhancing the environmental distinctiveness of the Creek bottom, utilizing the top of the river banks for hiking, biking and equestrian trails, and developing a 240-acre flow attenuation basin that would encompass 160 acres of new environmental habitat and a 50 acre sports park. The project is currently undergoing design of Phase II.

# Attachment 1: Summary of Proactive Efforts to Manage Stormwater

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## **Management of New Development**

### **LID BMP Design Manual**

The County, with input from the Permittees has spent the last five years developing and field testing a manual promoting Low Impact Development (LID). The manual is due to be published by December 31, 2010. The development of the manual was informed by meetings with authors of key LID manuals from throughout the nation, field visits to existing LID BMP sites to evaluate design and maintenance characteristics, and years of research into design methodologies and water quality effectiveness data. The manual includes detailed design criteria, standard drawings, maintenance requirements and other key information that will ensure that LID BMPs deployed in the Santa Margarita Region will provide long-term water quality benefits.

### **Public BMP Maintenance Mechanism**

The District has also been developing a plan for public maintenance of post-construction BMPs that meet specified requirements. This mechanism will go hand-in-hand with the release of the LID BMP Design Manual. Development projects that design their BMPs to the criteria in the manual and place the BMPs consistent with our guidelines will be able to opt into a public maintenance mechanism that will provide for consistent and ongoing maintenance of post-construction BMPs throughout the region.

## **Management of New Development**

### **LID BMP Testing and Demonstration Facility**

The LID BMPs incorporated into our LID BMP Design Manual are being incorporated into a \$3,000,000 retrofit of the District's headquarters in the City of Riverside. The project will provide a regional center for LID BMP training and demonstration, include a five-year study to collect water quality and field data on the effectiveness of the BMP designs and maintenance programs, and facilitate a cycle of continuous improvement for LID BMP techniques.

### **Southern California Stormwater Monitoring Coalition**

The Permittees voluntarily participate in a collaborative effort with the other Counties in southern California to conduct special studies to advance the science of stormwater management. These studies include regional bioassessment programs, inter-lab calibration programs, hydromodification management studies, programs to develop the scientific methods used to monitor for toxics, biological indicators and chemistry, and more.

## **Statewide Stormwater Leadership**

### **Pesticide Regulation**

The Permittees have proactively met with management of California Department of Pesticide Regulation and USEPA staff regarding negative receiving water impacts of authorized pesticides use in California. District staff have also submitted multiple comments and provided testimony at applicable state and federal listening sessions regarding the need to change the regulatory framework to better protect receiving waters.

# Attachment 1: Summary of Proactive Efforts to Manage Stormwater

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## **California Stormwater Quality Association (CASQA)**

The District proactively participates in the activities of this pre-eminent organization addressing stormwater issues in California. District staff serves on the Board of Directors, as the Chairs for the Legislative Committee and Conference and on several committees including Monitoring, Pesticides, and Policy and Permitting. This organization and these committees are developing the programs and science that are driving the management of stormwater programs forward.

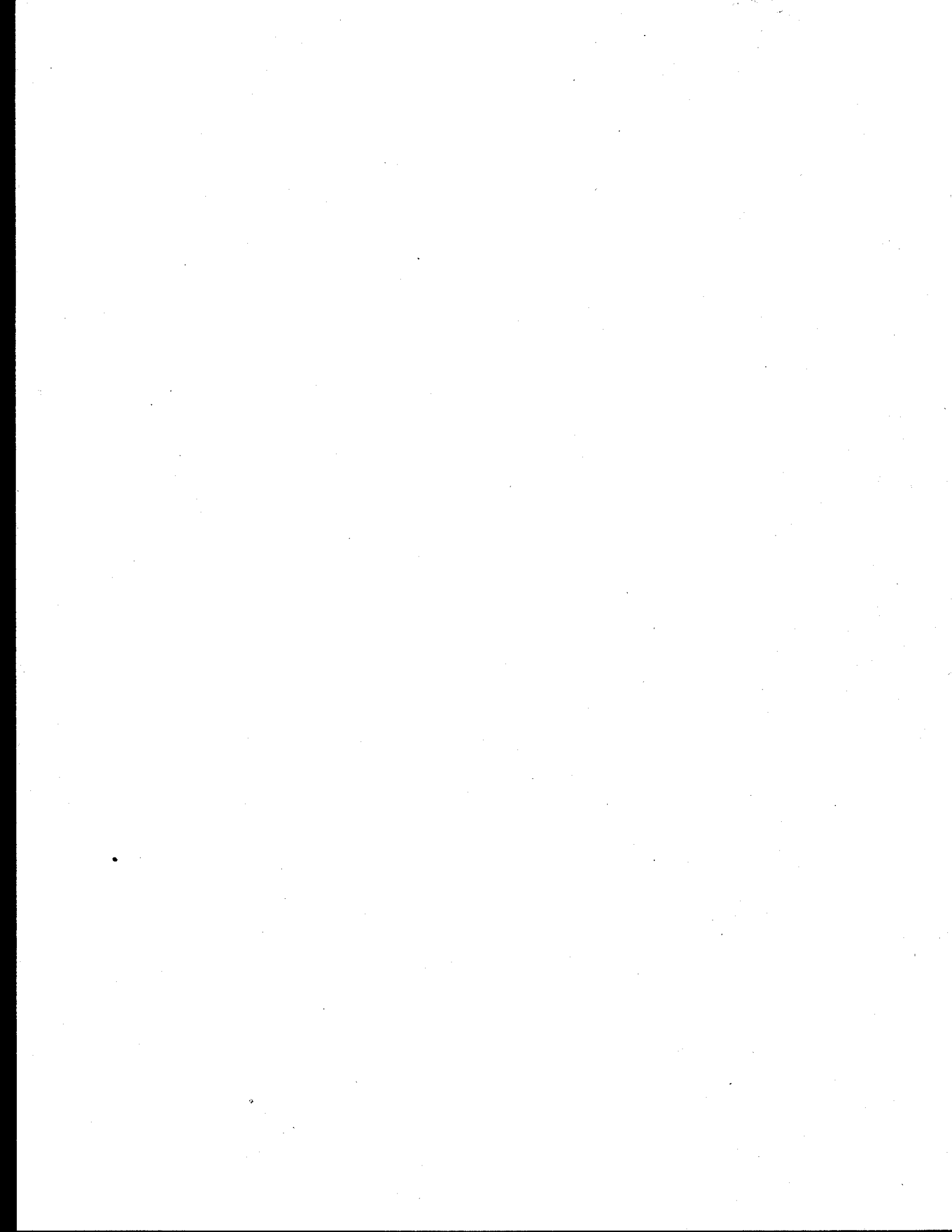
## **Habitat and Aquatic Resource Conservation**

### **Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)**

The Permittees have established the MSHCP to identify and proactively protect critical habitat for threatened and endangered species in Riverside County. The MSHCP establishes several key linkage corridors along existing streams and creeks to ensure protection of the habitat and safe paths of migration for species. The MSHCP will ultimately conserve over 40% of the lands within the Santa Margarita Region of Riverside County. Further, the plan proposes to purchase and preserve several of the remaining natural stream systems in the region for use as habitat conservation and species corridors.

### **Special Area Management Plan (SAMP)**

The Permittees have also entered into ongoing negotiations with the San Diego Regional Water Quality Control Board and United States Army Corps of Engineers staff regarding a SAMP to proactively identify and protect the most important aquatic resources in the Santa Margarita Region of Riverside County.





## Attachment 2: Economic Assessment

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### Economic Assessment Draft 2010 Santa Margarita Region MS4 Permit September 2, 2010

The Draft Municipal Separate Storm Sewer System Permit (Draft Tentative Order No. R9-2010-0016; NPDES No. CAS0108740) for the Santa Margarita Region of Riverside County (draft Permit) proposes new and expanded compliance requirements that would significantly increase the Copermittee compliance costs. Further, the draft Permit expands the compliance requirements and compliance costs beyond those required by the recently adopted MS4 Permit for South Orange County, a more populous and affluent area with significantly greater tax revenues to support the compliance programs. These additional requirements and costs are proposed at a time when the Copermittees have been severely impacted by the most significant economic downturn since the Great Depression. These impacts include high levels of unemployment and homes in default, sharply reduced Copermittee revenues and increased demands on public services. Moreover, these impacts have fallen disproportionately on communities in Riverside County relative to South Orange County and San Diego County, due in large part to the crash of the housing market.

Due to their reduced revenues, the Copermittees budgets and staffing have been significantly reduced for virtually all services and programs operated by the Copermittees, including police, fire, and paramedic services. Funding has been focused on essential public safety and existing state and federally mandated programs. Increases in funding for the water quality mandates contained in the draft Permit can only come from reduced funding for these basic priorities. Therefore, the expanded compliance requirements proposed in the draft Permit are economically infeasible. This paper describes the general economic conditions in the Santa Margarita Region, the Copermittees' current budget and budget projections, their assessment of projected increases in compliance costs, and economic forecasts provided by other parties.

#### **POPULATION**

Riverside County, which is subject to three NPDES MS4 permits, has a total population of 2,153,186. However, only 289,765 persons (approximately 13 percent) reside within the Santa Margarita Region.<sup>1</sup> Population and housing projections for the Santa Margarita Region are summarized in Table 1. MS4 discharges in Riverside County are regulated by separate NPDES stormwater permits issued by the Colorado River, Santa Ana, and San Diego Regional Water Quality Control Boards. Although these three MS4 permits address the same federal regulatory requirements, the provisions in the draft Permit are often not well aligned with the requirements of the other two MS4 permits. As such, the cost for complying with those requirements is borne entirely by the 289,765 residents within the Santa Margarita Region.

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<sup>1</sup> Riverside County Projections 2010 (RCP-10), Transportation and Land Management Agency, Administrative Services, Center for Demographic Research, June 23, 2010.

## Attachment 2: Economic Assessment

**Table 1: Santa Margarita Region Population & Housing Projections 2010<sup>2</sup>**

Jurisdiction	Population / Housing Units		
	2010	2015	2020
Murrieta	101,680/34,812	105,513/36,162	109,343/37,512
Temecula	102,727/33,194	109,136/35,270	112,242/36,321
Wildomar	32,720/11,123	37,289/12,722	42,475/14,537
Unincorporated	52,638/17,546	54,584/18,195	59,878/19,959
<b>Total</b>	<b>289,765/96,675</b>	<b>306,522/102,349</b>	<b>323,938/108,329</b>

### CURRENT ECONOMIC CONDITIONS

#### **Unemployment**

Higher unemployment directly impacts the revenue streams available to the County and the Cities for funding programs and services. As illustrated in Figure 1, the unemployment rate in Riverside County is currently 15.3 percent, which is 42 percent higher than the unemployment rate in San Diego County (9.8 percent) and 56 percent higher than the unemployment rate in Orange County (9.8 percent).<sup>3</sup>

### SOURCES OF LOCAL REVENUE

The Copermittee's primary revenue sources for implementation of programs and services are property taxes, sales taxes, and development/construction permit fees. Each of these sources has declined substantially since the beginning of the recession in FY 2006/2007. The 2009 per capita income in Riverside County (\$29,177) is 31% lower than the per capita income in San Diego County (\$42,094) and 32% lower than the per capita income in Orange County (\$46,898).<sup>4</sup> The population of the Santa Margarita Region (289,765) is 48% lower than the population of South Orange County (553,161<sup>5</sup>) and 91% lower than the population of San Diego County. As a less affluent area with relatively small

<sup>2</sup> Riverside County Projections 2010 (RCP-10), Transportation and Land Management Agency, Administrative Services, Center for Demographic Research, June 23, 2010.

<sup>3</sup> Monthly Labor Force Data for Counties, July 2010 – Preliminary, Labor Market Information Division, Employment Development Department, August 20, 2010. <http://www.calmis.ca.gov/file/lfmonth/countyur-400c.pdf>

## Attachment 2: Economic Assessment

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population, the Santa Margarita Region has far less revenue than South Orange County and San Diego County to fund local programs and services, and MS4 permit compliance costs.

Per Capita Income<sup>6</sup>

	Riverside County	Orange County	San Diego County
2006	29,148	49,098	42,110
2007	29,950	49,790	43,816
2008	30,088	49,650	44,438
2009	29,177	46,898	42,094
2010 (forecast)	28,117	47,435	42,651

**Figure 1. Unemployment Rates of California Counties (title for figure on next page)**

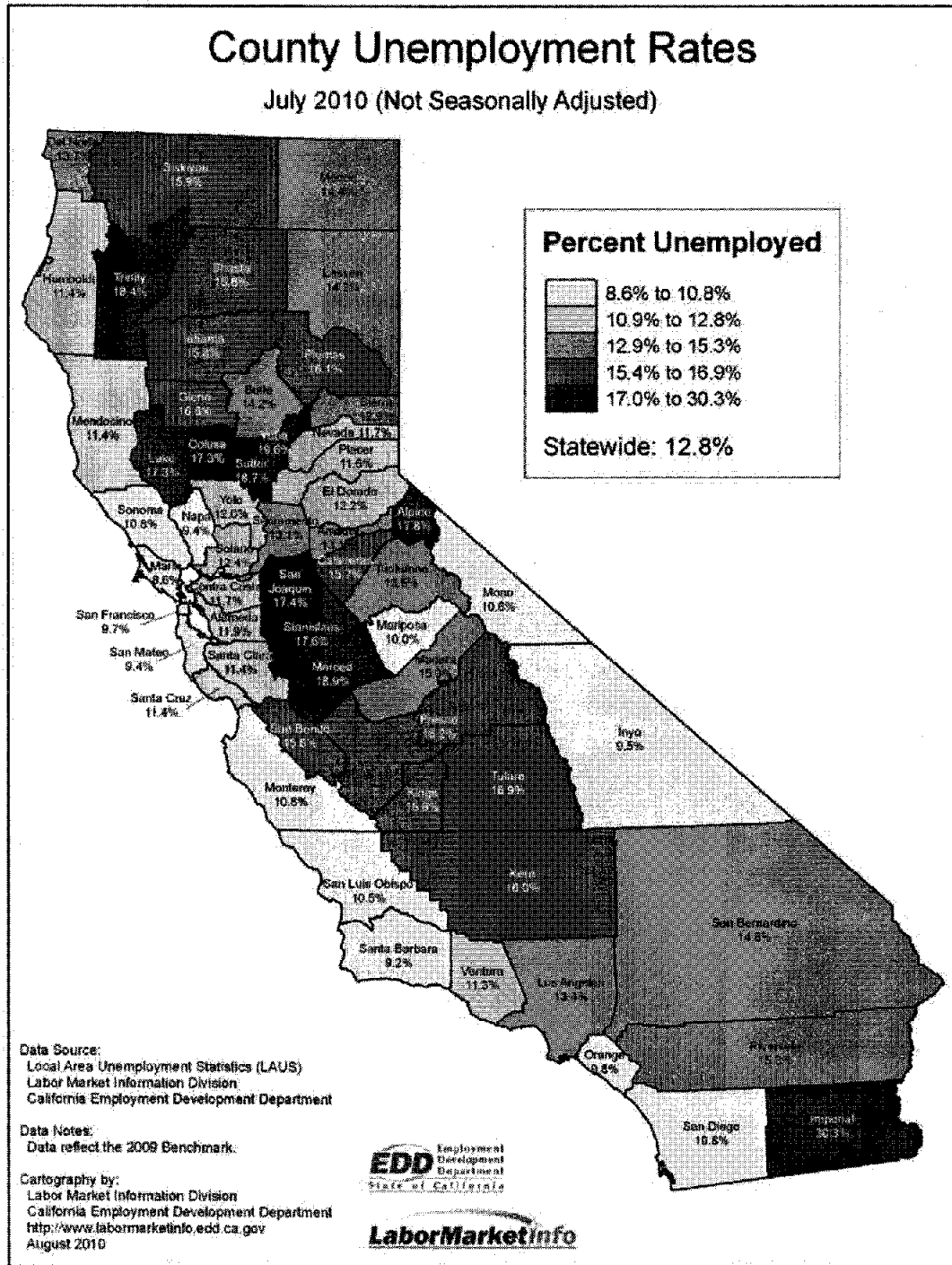
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<sup>4</sup> Economic Forecast, Los Angeles Economic Development Corporation, July 2010.

<sup>5</sup> Richard Boon, County of Orange, personal communication, September 1, 2010.

<sup>6</sup> Economic Forecast, Los Angeles Economic Development Corporation, July 2010.

## Attachment 2: Economic Assessment

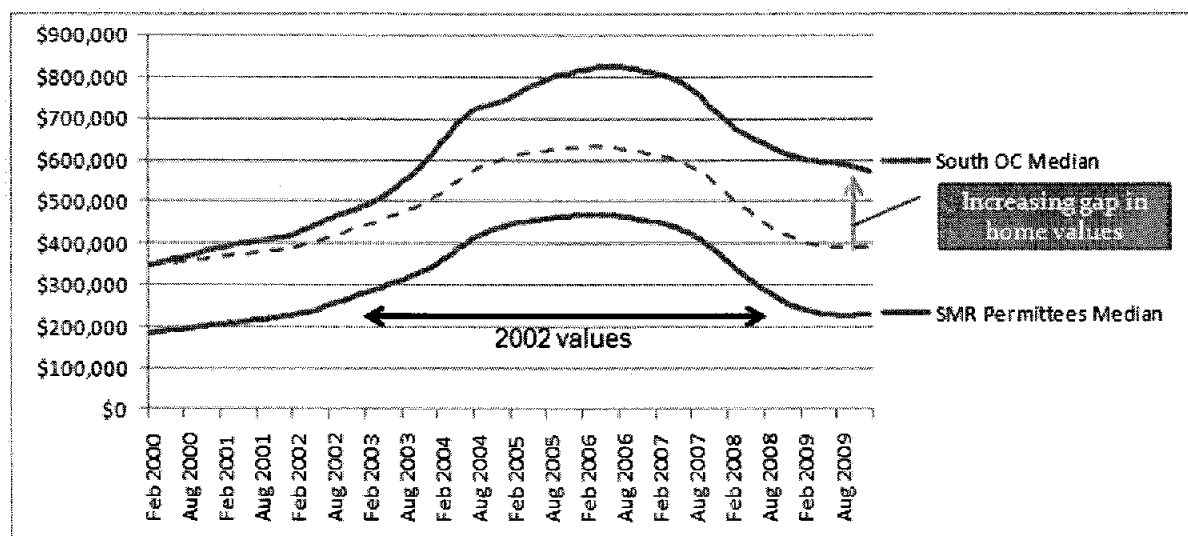


## Attachment 2: Economic Assessment

### Home Values/Property Tax Revenue

Property tax revenue, which is a major source of funding for the County and Cities, is a direct function of the total inventory of real estate and the assessed values of the real estate. With a small population relative to South Orange County and San Diego County and a limited amount of commercial and industrial property, the Santa Margarita Region is supported by a much smaller inventory of real estate from which to obtain property tax revenue. The high rate of foreclosures in Riverside County has also resulted in significant declines in real estate values and, consequently, property tax revenue. The Riverside County Auditor-Controller projects that property values will fall over 10 percent in FY 2009-10 and could fall further in FY 2010/2011.<sup>7</sup> Figure 3 illustrates the decline in median home values in the Santa Margarita Region and South Orange County. Although home values in both areas have declined, home values in the Santa Margarita Region have declined at a greater rate and the difference in home values between the two areas has grown with the recession.

Figure 3. Median Home Values<sup>8</sup>



The Inland Empire (Riverside and San Bernardino Counties) registered more defaults and foreclosures than any other area of Southern California.<sup>9</sup> The Inland Empire was ranked No. 5 in nationwide foreclosure activity during the first half of 2010, with almost 4.5 percent of households in default. A total 63,717 mortgage default notices, auction sale notices, and bank repossessions were recorded in the Riverside-San Bernardino-Ontario metropolitan area between January and June 2010, according to RealtyTrac. Accordingly, one in 23 households were in some stage of foreclosure during this six-month period. Additionally, almost 45 percent of homeowners with a mortgage in Riverside and San Bernardino Counties owe more on their homes than the homes are worth. As illustrated in Figure 3, Orange County

<sup>7</sup> Comprehensive Annual Financial Report of the County of Riverside for the Fiscal Year Ended June 30, 2009, Robert E. Byrd, Riverside County Auditor-Controller, December 9, 2009. P. vii. [http://www.auditorcontroller.org/opencms/publications/FinancialPub/cafr/CAFR\\_2009/Introductory.pdf](http://www.auditorcontroller.org/opencms/publications/FinancialPub/cafr/CAFR_2009/Introductory.pdf)

<sup>8</sup> Source: [www.zillow.com](http://www.zillow.com)

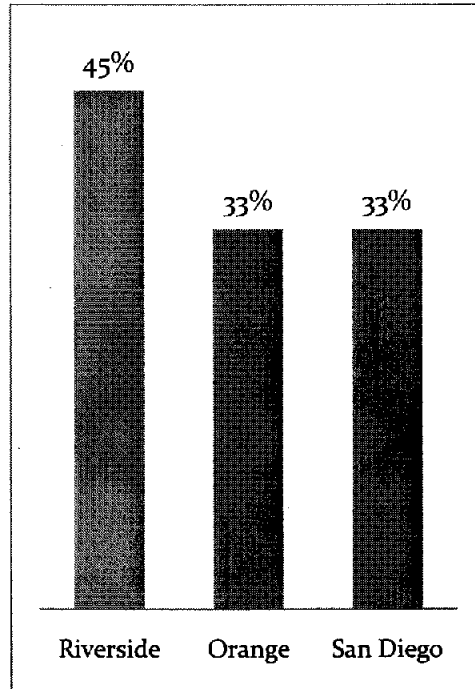
<sup>9</sup> Economic Forecast, Los Angeles Economic Development Corporation, July 2010, p. 50.

## Attachment 2: Economic Assessment

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and San Diego County have not been impacted by "upside-down mortgages" to the same extent as has Riverside County.

Figure 3. "Upside-Down Mortgages"



One expert, Professor Mason Gaffney of the UC Riverside Economics Department believes that the housing market is in a vicious cycle simply because there are too many homes. According to Professor Gaffney, because demand is down, prices will go down, and more people will go "upside-down" on their mortgage, and then go into foreclosure. Professor Gaffney estimates that the bottom of the housing market will not be seen for another three years, due to the previous overbuilding in Riverside County.<sup>10</sup>

Although the recession has impacted property values throughout Southern California, Riverside County remains at a distinct disadvantage relative to Orange and San Diego Counties. The average home value in Riverside County is \$207, 900, which is 58% less than the average home value in South Orange County (\$499,500) and 45% less than the average home value in San Diego County (\$378,800).<sup>11</sup> As a result, property tax revenues per home in Riverside County are 58% less than in Orange County and 45% less than in San Diego County. The larger populations and number of homes in Orange and San Diego Counties multiply this disparity in property tax revenue that can be used to help fund NPDES compliance programs. Based on population and average home value, South Orange County generates over four times the property tax revenue generated in the Santa Margarita Region, and San Diego County generates 20 times the property tax revenue of the Santa Margarita Region. Clearly, the Copermitees in the Santa Margarita Region receive significantly less property tax revenue than either Orange or San Diego Counties and are less able to fund additional MS4 permit compliance costs.

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<sup>10</sup> Ibid.

<sup>11</sup> Zillow Home Value Index – Riverside County, Zillow.com. August 10, 2010.

## Attachment 2: Economic Assessment

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### **Sales Tax Revenue**

The next most significant revenue source for program funding is sales tax. Sales tax revenue is a function of population and relative income. As described, the Santa Margarita Region has a less affluent and smaller population than South Orange County and San Diego County on which to generate sales tax revenue.

The high levels of unemployment in Riverside County have reduced disposable income which has further depressed sales tax revenues. Retail sales in Riverside County fell by nearly 27% in 2008 and 2009.<sup>12</sup> Statewide sales and use tax revenues for the second quarter of 2010 declined approximately 10.4 percent. Additionally, taxable sales for the first quarter of 2010 remained flat compared to a year earlier.<sup>13</sup> Although data specific to the Santa Margarita Region is not available, it is anticipated that taxable sales have been impacted more significantly than in Orange and San Diego Counties due to the higher unemployment rate in Riverside County.

Taxable sales are directly proportional to sales tax revenue. Based on data presented in the Los Angeles Economic Development Corporation's July 2010 Economic Forecast, South Orange County generates 2.6 times the taxable sales generated in the Santa Margarita Region and San Diego County generates 13.3 times the taxable sales of the Santa Margarita Region. Clearly, the Copermittees in the Santa Margarita Region receive significantly less sales tax revenue than either Orange or San Diego Counties and are less able to fund additional MS4 permit compliance costs.

### **Development and Construction Permit Fees**

Prior to the recession, development and construction permit fees funded a variety of compliance activities related to review, approval, inspection and enforcement associated with development and construction activities. Since the recession, revenues from these fees have been virtually eliminated. As a result, Copermittee inspection and enforcement of development and construction activities, including abandoned projects, has been funded by the Copermittees' general funds. General fund budgets are in turn supported by sales and property tax revenues which, as described, have declined significantly.

### **New Fees or Taxes**

Another potential source of funding would be the establishment of a new fee or tax. Such revenues would be subject to the requirements of Proposition 218. Recent efforts to pass supplemental fees have been mixed and given the current economic conditions, this option appears infeasible. For example, on the March 2006 ballot, an attempt by the City of Encinitas to pass a Clean Water Fee was defeated by the voters.<sup>14</sup> It is notable that this rejection of a Clean Water Fee occurred prior to the recession in a relatively affluent coastal city.

### **Economic Forecasts**

The Riverside County Executive Office assessed Riverside County's economy in a report to the Board of Supervisors submitted with the FY 2010/2011 Recommended Budget. In this assessment, it was noted that the economy is still staggering and that economic news has been mixed. Although a slightly rising

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<sup>12</sup> Economic Forecast, Los Angeles Economic Development Corporation, July 2010, p. 51.

<sup>13</sup> News release "Local Sales Tax Allocations Reduced in Many Areas of the State," California Board of Equalization, August 27, 2010. <http://www.boe.ca.gov/news/2010/92-10-G.pdf>

<sup>14</sup> FY 2008-2009 JURMP Annual Report, City of Encinitas, p. 10-3.

## Attachment 2: Economic Assessment

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stock market and other nationwide measures could be interpreted to signal improvement, persistently high unemployment and personal and national debt call for caution, and a double-dip recession is possible. Locally, while some experts project revenues will shrink again in FY 2011/2012, Riverside County's economic consultants foresee a long and gradual muted recovery and the County will be managing with drastically reduced budgets for an extended period. Budget reductions of approximately \$21 million are projected for FY 2011/2012. The County projects that it will see a balanced but significantly reduced budget in FY 2012/2013, with a total budget of \$670 million (compared to \$736 in 2007). Based on this assessment and reports in the media, it appears that the economy in Riverside County will stabilize at a reduced level and may not recover during the term of the SMR MS4 Permit.

### **Projected Increases in Compliance Costs**

The draft Permit proposes a significant expansion of compliance requirements that would significantly increase the Copermittee compliance costs. The draft Permit was developed by starting with the MS4 Permit for South Orange County. The requirements proposed in the draft Permit that would significantly increase compliance costs include:

#### Regional Compliance Requirements

- Monitoring and special studies (See Attachment 4)
- Hyrdomodification Management Plan (including monitoring)
- Retrofit study
- Other general program updates (JRMP)

#### Individual Copermittee Compliance Requirements

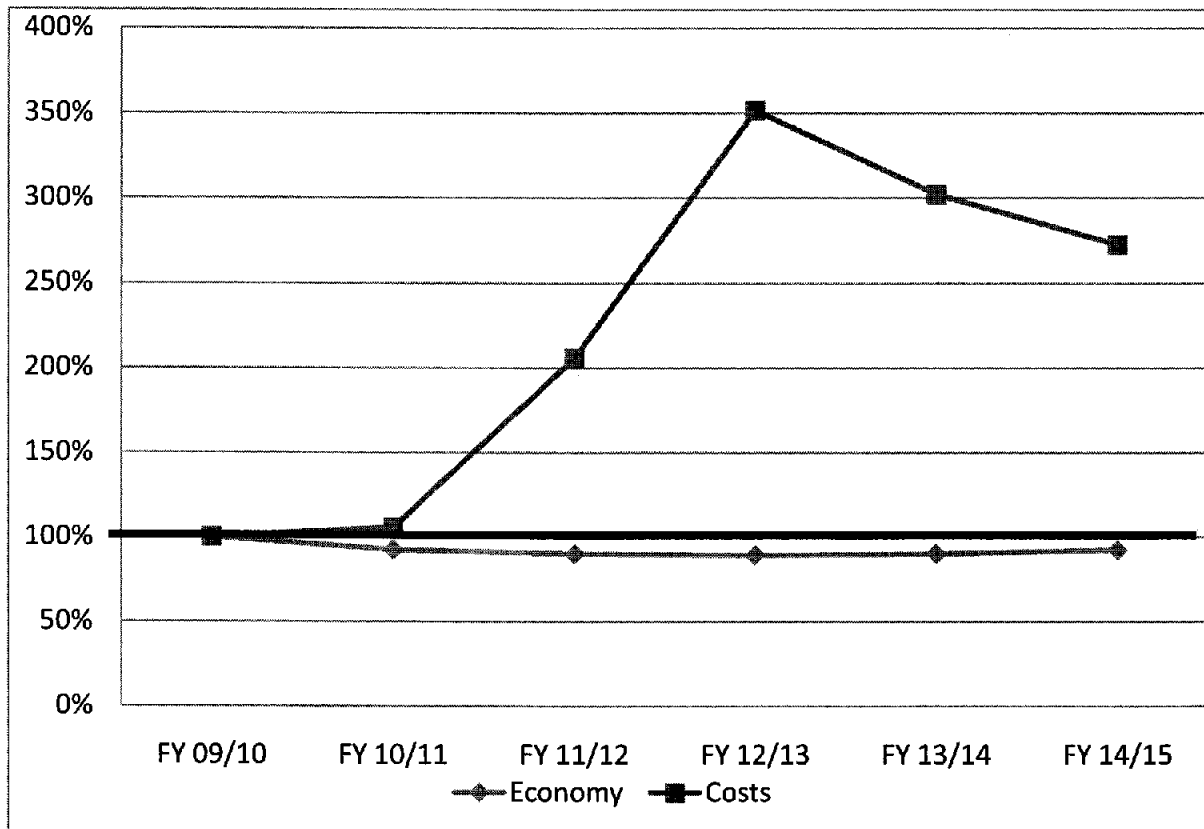
- Enforcement of Irrigation runoff prohibition (See Attachment 6)
- Significantly Increased business and BMP inspections
- BMP retrofit requirements
- Regulation of unpaved roads (See attachment #5)
- Hydromodification requirements
- Monitoring Source Identifications
- Expanded IC/ID requirements

Estimates for implementation of the regional compliance requirements have been prepared and Figure 4 illustrates the disparity between projected Copermittee revenues and costs for implementation of the proposed regional programs. Due to the fact that calculating costs for implementing entirely new programs is excessively difficult, cost estimates for the implementation of individual Copermittee compliance requirements have not been completed, although it is expected that their individual costs will parallel the regional costs presented in Figure 4.



## Attachment 2: Economic Assessment

Figure 3. Projected Revenues vs MS4 Permit Compliance Costs



### ECONOMIC SUMMARY

As all sources of revenues have been reduced significantly, the Copermittees have been required to reduce staffing through layoffs, attrition and furlough; reduce funding across the board for public services and programs, and, in some cases, completely eliminate public services and programs. For example, it is estimated that County of Riverside staffing has been reduced by 2,500 since FY 2006/2007 mostly in the form of early retirement and layoffs. It is estimated that an additional 500-700 staff positions will be eliminated by the County in FY 2011/2012.

Due to the loss of revenue, virtually all Copermittee programs or services have been reduced, including fire and police. As an example, the Riverside County FY 2010/2011 Recommended Budget for Riverside County proposes:

- Public safety department cuts of 3 – 5 percent
- Other department cuts averaging 19 percent
- Continued staff reductions

## Attachment 2: Economic Assessment

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After three years of modest cuts culminating in a 25% decrease, the Board of Supervisors approved an additional 19% cut in the general fund and a 4% cut to public safety for FY 2010/2011. These additional cuts will decrease spending by an additional \$71 million. The remaining budget gap will be filled from general fund reserves set aside for economic uncertainty. Since FY 2006/2007 Riverside County general fund reserves have declined from over \$300 million to \$30 million. The County cannot decrease the reserve fund any further without affecting the County's ability to obtain credit. According to the Associated Press Economic Stress Index, of counties with populations of at least 25,000, Riverside County was identified as the eleventh most economically stressed county in the nation based on its June 2010 stress scores.<sup>15</sup>

All County departments have been directed to only provide those core services that the County is mandated to provide. At this point, the Copermittees are struggling to maintain the existing compliance programs required by the 2004 MS4 Permit with available staff and funding. Implementation of expanded or new Permit compliance requirements would require the Copermittees to either further reduce implementation of other mandated programs or reduce the level of implementation of MS4 Permit compliance programs - at risk of receiving an NOV and ACL. In other words, the Copermittees cannot increase MS4 Permit compliance expenditures without directly impacting compliance with other state or federally-mandated programs.

### CONCLUSION

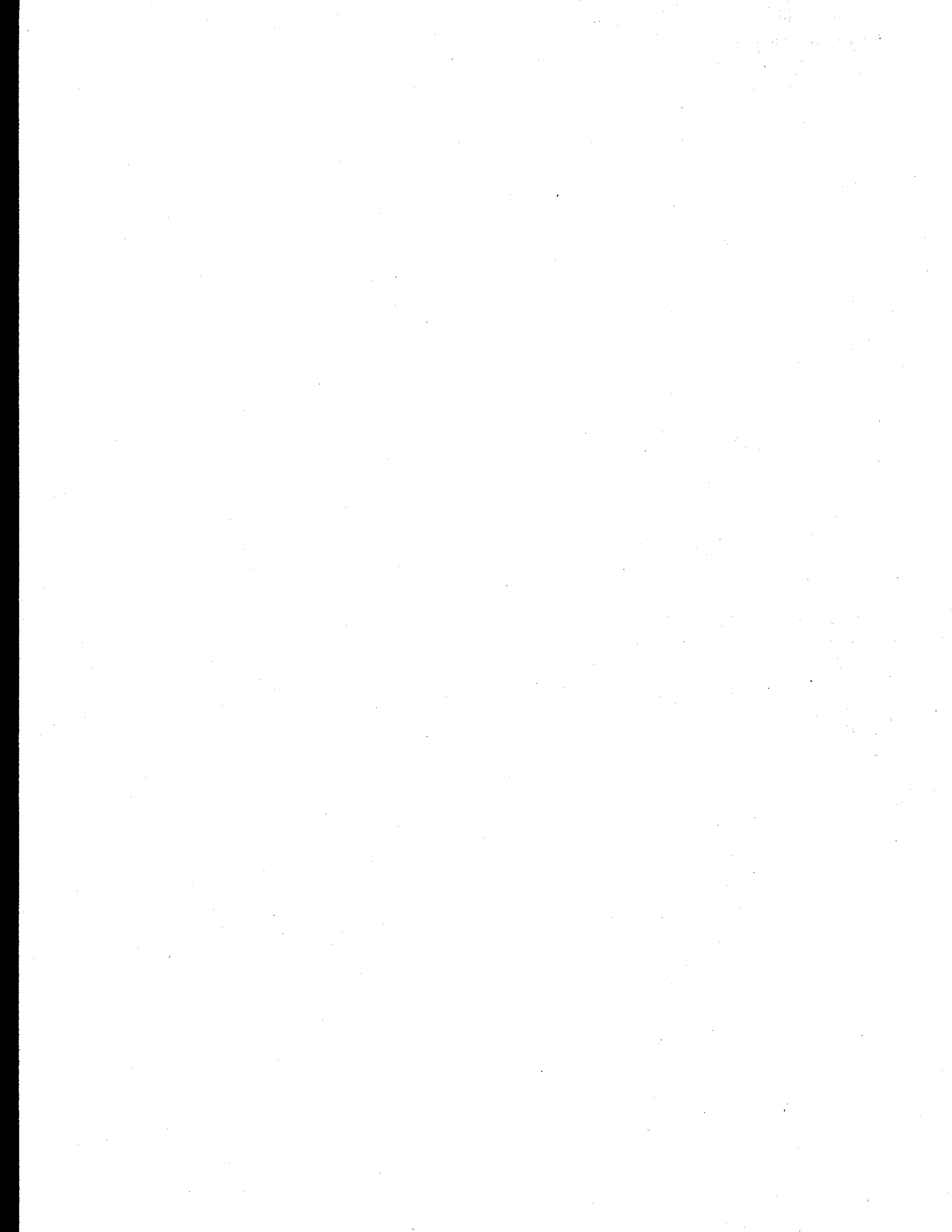
The draft Permit was developed by starting with the MS4 Permit for South Orange County. This represented a significant expansion of compliance requirements and compliance costs relative to the 2004 Permit issued to the Copermittees in the Santa Margarita Region, and by no means are the costs incremental in nature. South Orange County is a permit area with twice the population, 2.6 times the sales tax revenue, and over four times the property tax revenue of the Santa Margarita Region. The draft Permit was then expanded to include additional compliance and monitoring requirements, further increasing compliance costs. Plainly, it is unrealistic to impose greater, or even the same Permit requirements on the Santa Margarita Region, as have been imposed on South Orange County.

In addition to having a lower property tax revenue based on lower property tax base and lower per capita retail sales, the Santa Margarita Region has also been hit harder by the recession, which has further diminished funding resources. It is projected that revenues will continue at a reduced level for an extended period with recovery not expected within the term of the Permit term. Therefore, the available resources to fund public safety, existing state and federal mandates, and expanded water quality permit requirements are much less than San Diego and Orange Counties.

The economy has resulted in reductions of reserves to minimum levels and virtually all local services and programs have been reduced or eliminated. As increases in funding for the water quality mandates contained in the draft Permit can only come from reduced funding for public safety, existing state and federal mandates, the expanded compliance requirements proposed in the draft Permit are economically infeasible.

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<sup>15</sup> "20 Most Stressed, 20 Least Stressed Counties, The Associated Press, August 2, 2010.



# Attachment 3: Language Changes Supported by Board Staff and Copermittees

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## Introduction

This document highlights the agreed upon revisions resulting from detailed discussions between Water Board Staff and the Copermittees on program implementation. The intent of these revisions is to ensure that requirements in the Draft MS4 Permit continue to be protective of water quality while allowing the Copermittees flexibility in resource allocation and cost efficiencies. This collaborative process enhanced a mutual understanding of these goals and, consequently, many of the Permit's requirements are streamlined, clearer, implementable and protective. This document highlights specifically the Low Impact Development (LID) and the Interim Hydromodification requirements that have been revised from the Orange County NPDES MS4 Permit in order to recognize the Copermittees' advanced efforts.

## Important Program Revisions

### *Low Impact Development (LID)*

The Copermittees strongly support the language in the draft Permit with regard to Low Impact Development (LID) BMPs (Section F.1.d.(4)). Through discussions with staff, the Copermittees have presented their commitment and vision for LID, emphasizing that their programs' goals are in line with the intent of the LID language found in the Orange County permit. The District and the County, with input from the Copermittees, have invested five years into developing a well thought through LID program including:

- The design of a detailed and thoroughly researched LID BMP Manual,
- An implementation policy focused on a tiered approach to BMP selection,
- Incorporation of a public maintenance mechanism, and
- Construction of a \$3,000,000 LID BMP retrofit, demonstration and testing facility.

These various features are already in effect in the unincorporated County, or in the process of being finalized, for broader use.

The LID BMP manual provides the development community guidance for designing LID BMPs that will be effective at reducing pollutants from the site to the MEP. While the current program is based on a tiered approach that encourages landscaped LID BMPs first, above detention BMPs, and those above proprietary/mechanical BMPs, this tiered approach will be further revised to support Staff's goal for more onsite BMPs to infiltrate runoff, although some Copermittees are still concerned with the infiltration mandate. Specifically, this tiered approach will prioritize BMPs for new development and redevelopment that:

- Provide for the harvest and reuse of stormwater through safe infiltration of site runoff, similar to natural conditions where such runoff can then help replenish the groundwater table,
- Treat site stormwater runoff on a project scale, generally providing a more robust system as compared to individual lot features,

## Attachment 3: Language Changes Supported by Board Staff and Copermittees

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- Are the most protective of surface water resources, providing 100% 'removal' of pollutants for the water quality volume infiltrated,
- Even for runoff that is biotreated, provide substantial benefit by ensuring that BMP designs maximize the opportunities for incidental infiltration and runoff capture,
- Focus on passive/landscape BMPs that do not require extensive or special maintenance, or that rely on external factors to function for water quality purposes,
- Provide hydromodification mitigation by more closely mimicking pre-development hydrology,
- Ensure that all sites will have runoff water quality that is consistent.

Not only are the Copermittees committed to implementing effective BMPs, they are also committed to effective maintenance. The District's proposed public maintenance mechanism will bolster BMP maintenance for areas where private BMP maintenance has historically been found to be lacking, thus ensuring a higher level of protection for receiving waters. Lastly, the retrofit, demonstration and testing facility will be used to confirm the effectiveness of BMPs included within the BMP manual, provide Copermittees data to review and enhance the program, and provide a demonstration of BMPs for the Copermittees, developers, and the general public.

The Copermittees also believe the passive-treatment BMPs, as opposed to capture and re-use BMPs, are the most reliable for the ongoing protection of water quality. For example, properly designed infiltration BMPs provide benefit during and between storms, without intervention from site owners, operators or occupants, and only require occasional and relatively simple landscape contractor maintenance on an annual basis. This concept has been integrated into the LID BMP Manual through conservative designs that provide a significant margin of safety against failure, and have design features that facilitate proactive maintenance (e.g., integrated landscape features). For the purposes of requiring BMPs that will be most protective of water quality, the Copermittees have de-emphasized the use of BMPs that harvest stormwater for on-site use, since the BMP will not operate passively, and if the BMP 'use' or maintenance should not occur, the BMP will bypass 100% of runoff without treatment. The Copermittees believe that the draft Permit appropriately encourages such water conservation technologies, while not mandating their use.

Regional Board Staff has recognized the efforts, thoughtfulness, and funding that the County has invested in their LID BMP approach, and have, in coordination with the Copermittees, developed a prioritization process that supports the Copermittees' investment in a plan for LID, while ensuring that an appropriate prioritization for the most effective BMPs is implemented. As such, infiltration BMPs must be used for all sites unless it is technically infeasible to infiltrate. Technical infeasibility will be based on criteria that will be developed by the Copermittees and approved by the Regional Board. Only when infiltration is deemed infeasible through the approved analysis can other LID BMPs be used in place of infiltration. These LID BMPs must be consistent with the Copermittees design manual or other regional LID manuals, which have been developed to ensure these LID BMPs are designed to have the greatest pollutant removal

## Attachment 3: Language Changes Supported by Board Staff and Copermittees

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over the life of a project. If LID BMPs are found to be technically infeasible due to poor site or other conditions, then conventional BMPs must be implemented and the project must participate in the LID waiver/mitigation program that will ensure pollutant removal effectiveness consistent with the preferred LID BMPs.

One other important consideration for new development and LID requirements in MS4 permits is the ability for the project proponent (developer) to understand and easily comply with the requirements, such that they can easily be incorporated into projects. Recently adopted MS4 permits, such as the south Orange County MS4 Permit, have very complicated new development and LID requirements. The result of such requirements is a WQMP guidance document that can be confusing, and may be difficult to implement consistently and in a way that will provide consistent protection of water quality. The Copermittees and Regional Board staff, working together, have crafted new development LID requirements that are easily understood, and will ensure the highest likelihood of integration of LID features consistently into projects.

### *Interim Hydromodification Criteria*

Pursuant to discussions between the Copermittees and Water Board staff, the proposed interim hydromodification criteria is aligned with the Copermittees' existing hydromodification program. This agreed language ensures that adequate hydromodification protection measures continue to be in place, while allowing the Copermittees to focus resources and funds on developing the Final Hydromodification Management Program and avoid diversion of scarce resources to developing new interim criteria that will only be in effect for a short duration. In addition, this approach will save the development community from confusion as to which requirements are in effect.

The Copermittees' current hydromodification mitigation program is described in the WQMP, but has been slightly modified as presented in the draft MS4 Permit. Although the Copermittees request the minimal changes to the language shown in the attached redlines, the Copermittees otherwise support the currently drafted interim hydromodification requirements. Under the proposed interim requirements, project applicants must either demonstrate numerically that the project will not adversely impact downstream alluvial channels, or, they must mitigate both the two-year and 10-year recurrence interval storms to pre-project levels in the post-project condition. All analysis must be performed by a registered civil engineer specializing in water resources. Mitigation of both the two-year and the 10-year storms to pre-project levels has been demonstrated to be consistent with the range of flows that are the primary determinants of the stream geomorphology in the southern California area. By maintaining these storm events at pre-project levels, impacts to the downstream alluvial channel should be mitigated to a level of less than significant. Additionally, the Copermittees believe that the onsite LID requirements will further reduce the need for on-site hydromodification controls that would otherwise be required with conventional treatment BMPs. The final comprehensive hydromodification mitigation program will further develop more detailed analysis methods, as well as establish a monitoring program to help verify the effectiveness of the HMP requirements.

# Attachment 3: Language Changes Supported by Board Staff and Copermittees

## Revisions tentatively agreed to with Board Staff

Per discussions between the Water Board Staff and Copermittees the following revisions were agreed upon.

<u>Section</u>	<u>Alternate Permit Language</u>	<u>Page in T.O.</u>
<b>Non-Stormwater Dry Weather Action Levels (NALs)</b>		
C.2	In response to an exceedance of an NAL, the Copermittee(s) having jurisdiction must investigate and <u>seek to</u> identify the source of the exceedance in a timely manner.	20
<b>Legal Authority</b>		
E.1	Each Copermittee must establish, maintain, and enforce adequate legal authority <u>within their jurisdiction</u> to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means.	24
E.2	Each Copermittee must submit on or before June 30, 2012, a statement certified by its chief legal counsel that the Copermittee has taken the necessary steps to obtain and maintain full legal authority <u>within their jurisdiction</u> to implement and enforce each of the requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and this Order.	25
<b>Jurisdictional Runoff Management Program - JRMP (Development Planning)</b>		
F.1.c.(8)	Rain water harvesting, where feasible, <del>must shall be implemented</del> <u>encouraged</u> as part of the site design and construction, <del>and to supplement offsite beneficial uses.</del>	29
F.1.d.(4)(b)(i) Footnote	Maintain or restore natural storage reservoirs and drainage corridors (including depressions, areas of permeable soils, swales, and ephemeral and intermittent streams) to the extent feasible <sup>12</sup> .  <sup>12</sup> Priority Development Projects proposing to dredge or fill materials in waters of the U.S. <u>must obtain a CWA §401 Water Quality Certification and/or Priority Development Projects proposing to dredge or fill materials in waters of the State must obtain a CWA §401 Water Quality Certification and/or Waste Discharge Requirements.</u>	34

## Attachment 3: Language Changes Supported by Board Staff and Copermittees

<u>Section</u>	<u>Alternate Permit Language</u>	<u>Page in T.O.</u>
F.1.f.(1)	Inventory of SSMP projects: Each Copermittee must develop and maintain a watershed-based database to track and inventory all projects <u>within their jurisdiction</u> , that have a final approved SSMP (SSMP projects), and its structural post-construction BMPs <u>implemented therein</u> <del>within its jurisdiction since July, 2005</del> . LID BMPs implemented on a lot by lot basis <del>in low density residential areas</del> <u>for at single family residential homes</u> , such as rain barrels, are not required to be tracked or inventoried.	38-39
F.1.f.(2)(b)(iv)	<del>At least 20 percent of all approved and inventoried SSMP projects must be inspected by the Copermittee annually;</del>	39
F.1.h.(2)	In addition to the control measures that must be implemented by Priority Development Projects per section F.1.h.(1)(d), the HMP must include a suite of management measures <del>to that can be used</del> <u>that can be used</u> on Priority Development Projects to mitigate hydromodification impacts, protect and restore downstream beneficial uses and prevent or further prevent adverse physical changes to downstream channels.	43
F.1.h.(3)	As part of the HMP, the Copermittees may develop a waiver program that allows a redevelopment Priority Development Project, as defined in Section F.1.d.(1)(b), to implement offsite mitigation measures. A waiver may be granted if onsite management and control measures are technically infeasible to fully achieve post-project runoff flow rates and durations that do not exceed the pre-development (naturally occurring) runoff flow rates and durations. Redevelopment projects that are granted a waiver under the program must not have post-project runoff flow rates and durations that exceed the pre-project runoff flow rates and durations. The <u>estimated</u> incremental hydromodification impacts from not achieving the pre-development (naturally occurring) runoff flow rates and durations for the project site must be fully mitigated.	43
<b>Commercial / Industrial</b>		
F.3.b.(2)(b)	Designate / Update Minimum BMPs: Each Copermittee must designate a minimum set of BMPs for all inventoried industrial and commercial sites/sources. Where BMPs have already been designated, each Copermittee must review and update its existing BMPs for adequacy <u>within one year of permit adoption</u> <del>by no later than the submittal of the JRMP</del> . Copermittees may continue to regularly review and update their designated BMPs for adequacy and subsequently submit any updates in their Annual Report.	58

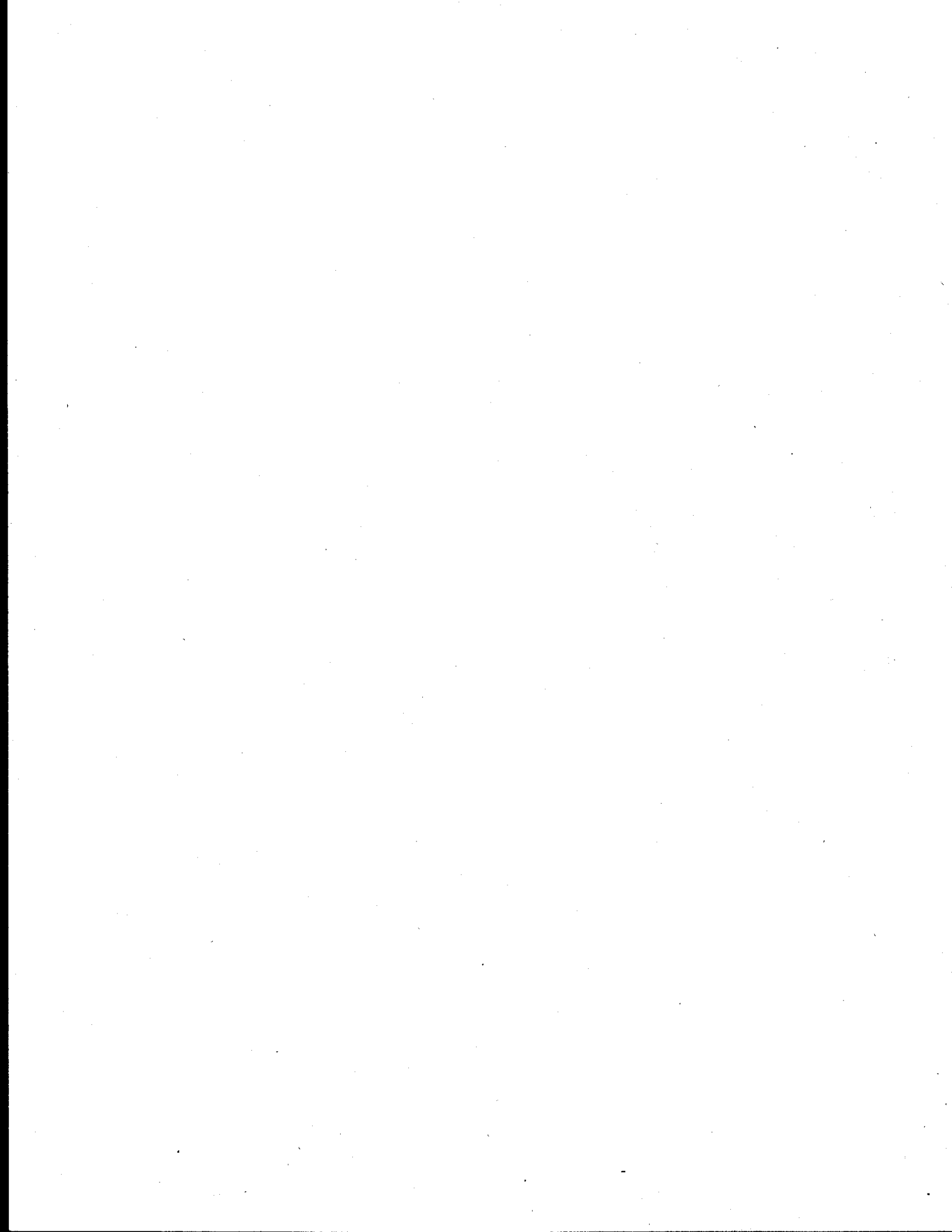


## Attachment 3: Language Changes Supported by Board Staff and Copermittees

Section	Alternate Permit Language	Page in T.O.
<p>F.3.b.(4)(b)</p> <p>And</p> <p>NEW</p> <p>F.3.b.(6)(a)</p>	<p>F.3.b.(4)(b) Each Copermittee must annually notify the San Diego Water Board, prior to the commencement of the rainy season, of all Industrial Sites and Industrial Facilities subject to the General Industrial Permit or other individual NPDES permit with alleged violations of the Copermittees ordinances, that pose a significant threat to water quality.</p> <p>F.3.b.(6)(a) – New</p> <p>(6) <u>Reporting of Non-Compliant Sites</u></p> <p>(a) <u>Each Copermittee must annually notify the San Diego Water Board, prior to the commencement of the wet season, of any unresolved high level enforcement action (as defined in the Copermittees' JRMP) that poses a significant threat to water quality in its jurisdiction as a result of violations of their stormwater ordinances.</u></p>	<p>60-62</p>
<b>Retrofit</b>		
<p>F.3.d.</p>	<p>Each Copermittee must develop and implement a retrofitting program that meets the requirements of this section. The goals of the existing development retrofitting program are to <u>provide a means to the Copermittees to address the impacts of existing development through retrofit projects that reduce impacts from hydromodification, promote LID, support riparian and aquatic habitat restoration, reduce the discharges of stormwater pollutants from the MS4 to the MEP, and prevent discharges from the MS4 from causing or contributing to a violation of water quality standards.</u></p>	<p>64</p>
<p>F.3.d.(5)</p>	<p>The completed retrofit BMPs must be tracked in accordance with Section F.1.f. Retrofit BMPs on publicly owned properties must be inspected per section F.1.f. Privately owned retrofit BMPs must be inspected as needed <del>to ensure proper operation and maintenance.</del></p>	<p>65</p>
<b>IDDE</b>		
<p>F.4.b</p>	<p>Remove the following language: <del>all known locations of access points (i.e. manholes) to the Copermittee's MS4</del></p>	<p>67</p>

# Attachment 3: Language Changes Supported by Board Staff and Copermittees

Section	Alternate Permit Language	Page in T.O.
<b>Education</b>		
F.6.	Quasi-Governmental Agencies / Districts (i.e., educational institutions, water districts, sanitation districts, etc.)	
<b>Watershed Workplan</b>		
G.1.d.	Develop a watershed BMP implementation strategy to attain receiving water quality objectives in the identified highest priority water quality problem(s) and locations. The BMP implementation strategy must include a schedule for implementation of the BMP projects to abate specific receiving water quality problems and a list of criteria to be used to evaluate BMP effectiveness. Identified watershed water quality problems may be the result of jurisdictional discharges that will need to be addressed with BMPs applied in a specific jurisdiction in order to generate a benefit to the watershed. This implementation strategy must include a map of <u>any</u> implemented and/or proposed <u>structural</u> BMPs.	72
<b>Principal Copermittee Responsibilities</b>		
M.3.	<del>Produce and submit</del> Coordinate the submittal of the documents and reports as required by section K of this Order and Receiving Waters and MS4 Discharge Monitoring and Reporting Program No. R9-2010-0016 in Attachment E of this Order.	84



# Attachment 4: Monitoring and Reporting Program Requirements

## Introduction

Tentative Order R9-2010-0016 (draft MS4 Permit) includes proposed requirements within Attachment E Monitoring and Reporting Program (draft MRP) that are not necessary to address management questions related to water quality, beyond requirements dictated to Orange County and beyond the Copermittees' ability to fund. Due to the expansion of monitoring requirements proposed by Regional Board staff, costs for monitoring program compliance are two and half times more expensive for Santa Margarita Region residents than to South Orange County residents. The Copermittees recognize monitoring and data collection are necessary to assist with program effectiveness assessment and address stormwater management questions within the Santa Margarita Region. However, the proposed revisions provided within this paper allow these assessments and questions to be answered in a more cost effective manner while retaining all major components of the draft MRP. The proposed revisions prune requirements that are not necessary to answer key management questions for this MS4 program, eliminate elements that may be of general interest and therefore should be handled at a more regional, state or federal level and/or correct provisions that are contrary to, or not aligned with, methods of practice established by the Southern California Stormwater Monitoring Coalition or other MS4 Permits approved by your Board. The changes proposed herein result in annual savings of approximately \$780,000 while maintaining the integrity of the MRP. Even with these proposed revisions, this MRP is significantly more expensive than the Copermittees' current program.

**Table 1 - Cost Savings resulting from proposed MRP changes**

Section	Component	Requested Change	Cost reduction
A	Mass Loading Stations	1) Wet Weather - 3 wet -> 2 wet	~\$79,000
		2) Dry Weather - Composite -> Grab	~\$66,000
B	Toxicity Testing (MLS and Bioassessment)	3) 3 organisms -> 2 organisms	~\$14,000
C	Bioassessment	4) 6 stations -> 3 stations	~\$158,000
		5) 2X each -> 1X each	~\$95,000
D	Action Levels	6) 'Representative Number/Percent' -> Representative - and remove 'within each sub area'	~\$241,000
		7) SAL Composites -> Grab	~\$165,000
E	Inland Aquatic Habitat Monitoring	8) Eliminate requirement	~\$140,000
F	Special Studies	9) 6 special studies -> 4 studies, and Replace with more locally appropriate studies	~\$220,000/year
	<b><u>TOTAL ESTIMATED SAVINGS</u></b>	Net savings of all recommended changes (annualized)	<b><u>~\$780,000/year</u></b>

*Note: Red text refers to the requirements that are beyond the MRP requirements in the OC permit.*

# Attachment 4: Monitoring and Reporting Program Requirements

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## **Draft Monitoring and Reporting Program Requirements**

### ***Background***

Prior to the release of the first draft of the MRP requirements to the Copermittees, Water Board staff indicated the program would be similar to the South Orange County MS4 Permit (OC Permit) yet scaled appropriately to the Santa Margarita Region. The first draft of the MRP was not released until three weeks prior to the public release draft MRP. To our surprise, instead of being appropriately scaled, the draft MRP actually exceeded the scope and costs of the OC Permit MRP. Due to limited time, Water Board staff recommended the discussions regarding MRP requirements be brought before the Regional Board at the appointed October 13, 2010 Board Hearing. This was particularly frustrating as it was not consistent with our mutual goal to resolve technical issues at the staff level and bring only necessary policy issues to the Regional Board.

One of the most significant issues with the MRP is that the Copermittees proposed several new special studies in the ROWD. The Copermittees moved forward on these studies in good faith, including a \$3,000,000 LID Demonstration and Testing Facility at the District headquarters in Riverside. The final MRP does not recognize any of these efforts, and instead mandates six new special studies and a habitat monitoring program. Initially, Board staff indicated that these six studies were for discussion and that it was not their intent to include all of the studies, however, later Board staff changed their position and mandated all of the studies. Further, the habitat monitoring program was actually removed from the Orange County MS4 Permit due to the addition of the NAL/SAL monitoring which was expected to effectively address the underlying habitat monitoring questions. These unnecessary additions put the Copermittees in the precarious position of having to abandon special studies that were already deemed by local stakeholders to be of critical value to managing stormwater within our region.

### ***Cost Saving Requirement Revisions – Overview***

The proposed draft MRP includes additional stations, constituents, data analysis and multiple special studies that exceed other programs such as South Orange County's or established standards of practice. These elements will not add substantively to the understanding of MS4 water quality impacts within the Santa Margarita Region and vastly exceed the ability of the Copermittees ability to pay and staff. Table 1 summarizes the Copermittees' requested revisions to the draft MRP and the costs savings from each revision.

These changes are also critical as the draft MRP proposes a program that exceeds available monitoring staffing and equipment resources. The District is currently in the process of recruiting for budgeted positions that were based on the monitoring program contained in our ROWD. However, review of the MRP has determined that our estimations were woefully inadequate. The MRP special studies and other requirements require scientists and other staff with specialized training and backgrounds that are not readily available. The District will likely have to find staff with generalized knowledge in related fields and spend significant resources training them to be knowledgeable in the science of stormwater management. Even if we were to consult out most of the work, we would still need specialized staff to scope, manage and review the consultants' work. It is not feasible to find, recruit and train the necessary staff and also deploy the proposed MRP in the time allotted. The Copermittees' proposed revisions scale

# Attachment 4: Monitoring and Reporting Program Requirements

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requirements to a more financially attainable and manageable level. Detailed justifications for each revision are described below.

## ***Cost Saving Requirement Revisions – Section A***

### **Mass Loading Station Monitoring - Attachment E: II.A.1.b & II.A.1.c**

Revision: Request wet weather monitoring to be required twice a year instead of three times a year.

Justification: (1) The Water Board Staff has referenced the SMC guidance and indicated not enough data has been collected to warrant a requirement change from three wet weather samples to two. However this guidance states once three wet weather samples have been collected for three years, sampling for two wet weather events is acceptable. This data has been collected by the Copermittees. The Copermittees successfully collected three wet weather events for three reporting periods; in addition, the Copermittees have over 10 years of data to form the basis of future analyses. Although the methods of collection have changed, our statistical analysis indicates that there is no statistically significant difference between data sets collected during prior terms and the current term. (2) The current OC and SD Permits require only two wet weather samples. (3) The Santa Margarita Region is semi arid with ephemeral flows, sampling for a third storm event has proven, and will continue to prove difficult and may result in non compliance due to climate (lack of storm events). (4) The cost to Copermittees to fund a third wet weather monitoring event during this permit term is significant.

### **Mass Loading Station Monitoring - Attachment E: II.A.1.d**

Revision: Request dry weather sampling method to be changed from composite sampling to grab samples.

Justification: (1) The Copermittees currently conduct dry weather sampling using an instantaneous grab sample. The MRP proposes 24-hour composite sampling, which represents a significant cost increase due to the need to construct infrastructure at the sampling sites to secure and facilitate portable automatic sampling equipment. (2) Composite samples will mask illicit discharges which is one of the primary reasons for dry weather monitoring. (3) Due to dry weather flows' steady nature, the flows can be accurately characterized using a grab sample. (4) The SMC Regional Bioassessment Program, which effectively defines the standard of practice for receiving waters monitoring, has found that chemistry samples must be collected at the most downstream transect (Transect A) to be representative of the flow through the assessed reach. This program therefore uses Grab samples collected immediately prior to benthomacroinvertebrate (BMI) and periphyton sampling. If composite sampling was required, it similarly must be done at the downstream transect; however, the composites would not be representative as they would pick up sediment, nutrients and other pollutants that had been unnaturally introduced by the BMI and periphyton collection activities. This would create an unrepresentative sample and the sampling equipment would be at risk of failure due to the suspension of sediment.

## ***Cost Saving Requirement Revisions – Section B***

### **Toxicity Testing - Attachment E: II.A.1.h**

Revision: Request change in toxicity testing from three organisms to two organisms.

# Attachment 4: Monitoring and Reporting Program Requirements

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Justification: (1) The MRP specified in the OC Permit requires toxicity testing of two organisms and this permit should not go beyond requirements found within the OC Permit due to limited funding and resources. This is an example of a simple change where cost-savings can be realized. (2) The USEPA only has chronic toxicity protocols for *Pseudokirchneriella. Subcapitata* (formerly, *Selenastrum capricornutum*). Therefore there are no established protocols for the other two species, and data collection results will be difficult to compare to other regions.

## **Cost Saving Requirement Revisions – Section C** **Stream Assessment Monitoring - Attachment E: II.A.2.a**

Revision: Request that three stream assessment stations be monitored instead of six stations.

Justification: (1) The existing MS4 Permit requires three stream assessment stations annually. These stations are our mass loading stations. It should be noted that this is an ephemeral watershed. The current stations were selected because they were the only stations that had flowing water during the bioassessment sampling periods, not because they were necessary representative of urban runoff (although they are downstream of the entire MS4 system). Specifically, during dry weather, none of the current receiving waters stations receive runoff from the MS4 due to the ephemeral nature of the watershed. Similarly, efforts to find flowing water for the Regional Bioassessment Program have been challenging. For example, in 2009, the first year of the program, 35 random sites were evaluated before one perennial site could be identified. In 2010, 39 random sites were evaluated. The final sites that were selected were actually our CURRENT mass loading stations as they were the first randomly selected sites that had flow. This lack of flow was recognized by SCCWRP in establishing the distribution of Regional Bioassessment Stations in southern California. This is why southwest Riverside County is only assigned one Bioassessment station. (2) As is demonstrated above, the Copermittees are not likely to find three additional flowing stations that are indicative of impacts from MS4 discharges. The Permit requirement therefore puts the Copermittees in unavoidable non-compliance with the Permit. (3) The cost of monitoring the additional three stations is substantial, and given the relative size of the MS4 system and population of RC to OC, the additional stations are not appropriate on an environmental, economic or social justice scale.

## **Stream Assessment Monitoring - Attachment E: II.A.2.b**

Revision: Request frequency be changed from twice per year to once per year for stream assessment monitoring.

Justification: (1) The Water Board Staff and Executive Officer agreed to make this change as a trade for the Copermittees participation in the SMC Regional Bioassessment special study. The change was based on findings by the Southern California Coastal Watershed Research Project (SCCWRP) scientists indicating that there is no seasonally significant difference in bioassessment scores. The Copermittees volunteered to implement the Regional Bioassessment Program ahead of the necessary changes to the NPDES MS4 Permit program to reduce the bioassessment sampling events in a good faith effort. (2) To determine if two sampling events are in fact necessary, the Copermittees evaluated the difference in biological community scores between Spring and Fall for data collected at Lower Murrieta, Lower Temecula and

## Attachment 4: Monitoring and Reporting Program Requirements

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Adobe Creeks during May and October from 2007 through 2009. Utilizing a Two-Way Analysis of Variance of Southern California Index of Biological Integrity (IBI) scores, with season (Spring/Fall) and year (2007 through 2009) as variables, results indicated no statistical difference between years for any of the Permittee's three sites. No seasonal statistical difference in IBI scores ( $p \geq 0.19$ ) was noted within any of the three stations, indicating that the IBI scores were consistent across seasons, regardless of the year. This data confirmed SCCWRP findings that there is not a change in the biological communities between the Spring and Fall seasons. (3) Further, the MRP within the OC Permit states that stations with year-round flow conditions may be monitored in May/June or September/October. Current assessment stations at Murrieta Creek, Temecula Creek, and Adobe Creek are perennial stations. Consistency across programs would denote assessments of these creeks once per year.

### ***Cost Saving Requirement Revisions – Section D***

**MS4 Outfall Monitoring - Action Levels** - Attachment E: II.B.1 and II.C.1.b.(1)

Revision: Request "a representative percentage of the major outfalls within each hydrologic subarea" (II.B.1) and "a representative number of major outfalls within each hydrologic subarea" (II.C.1.b.(1)) be changed to "representative major outfalls" as shown in the redlines attached to this comment letter.

Justification: (1) The draft MRP requires sampling of a representative number or representative percentage of major outfalls. This is a problematic compliance target as it focuses the program on a particular and open-ended "number" or "percent" of outfalls. By revising the language to require monitoring of "representative major outfalls", the burden is on the Copermittees to come up with a program that is truly representative, without requirements to meet an arbitrary number or percent of outfalls. The Copermittees are concerned about subareas that have many outfalls, which could require sampling of more sites than are economically feasible. These costs could escalate beyond the initial sampling event because if a NAL or SAL exceedance is recorded, source assessments studies are triggered that require additional staff time and resources. If this requirement is not revised, costs will quickly rise beyond the Copermittees' ability to sustain the MS4 compliance program.

**MS4 Outfall Monitoring - Action Levels** - Attachment E: II.B.1 and II.C.1.b.(1)

Revision: Request the following text revisions in footnote:

"A representative percentage determination must consider hydrologic conditions, total drainage area of the site, ~~population density of the site, traffic density, age of the structures or buildings in the area, and land use types (commercial, residential and industrial)~~, costs and other considerations as appropriate."

Justification: (1) The Copermittees originally asked for clarification on what factors would be considered for "representative percentage" and Water Board staff agreed to cost being included. The failure to include cost as a factor results in a program that reduces resources and diminishes funds quickly. The revision of the above allows for cost to be included through "other considerations as appropriate". (2) Deletion of percentage is consistent with previous comments. (3) Hydrologic conditions, population density of the site, traffic density and age of the structures or building in the area are all proposed



## Attachment 4: Monitoring and Reporting Program Requirements

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deletions because each subarea may not be sensitive to these factors and if one of this factors is applicable it will be included under the addition "other considerations as appropriate".

### **MS4 Outfall Monitoring - Action Levels - Attachment E: II.B.1.a**

Revision: Request samples for Storm Water Action Levels (SALs) to be changed from 24-hour composite to grab.

Justification: (1) Composite sampling would result in significant increased cost due to the cost of purchasing additional automatic sampling equipment and constructing the necessary infrastructure to support its use. (2) Grab samples are likely more conservative. The Copermittees propose that grab samples be collected first and then, if a problem is indicated, the Copermittees would specify needed follow-up monitoring in the Source Assessment Monitoring Plan. (3) Freed resources can be dedicated to other key components of the program, such as follow-up source assessment studies.

### ***Cost Saving Requirement Revisions – Section E***

#### **High Priority Inland Aquatic Habitat Monitoring - Attachment E: II.D**

Revision: Request removal of the High Priority Inland Aquatic Habitat Monitoring requirements.

Justification: (1) This is an entirely new monitoring program. This monitoring program was initially proposed in the Orange County NPDES MS4 Permit, but later deleted when the NAL/SAL monitoring requirement was added. This trade was made as it was expected that the outfall monitoring data from the NAL and SAL program would effectively answer the underlying management question – "are MS4s impairing beneficial uses in priority aquatic habitat areas?" The underlying logic for removing the requirement in Orange County similarly applies here. Given the current economic conditions and the fact that this was considered and deleted from the OC Permit; the Copermittees respectfully request that this requirement similarly be deleted from the Riverside County MRP.

### ***Cost Saving Requirement Revisions – Section F***

#### **Special Studies - Attachment E: II.E**

Revision: Request alteration of Special Study Program.

Justification: The Draft Permit requires six special studies to be conducted (TMDL Development and Implementation, Sediment Toxicity, Trash and Litter Investigation, Agricultural, Federal and Tribal Input Study, MS4 and Receiving Water Maintenance Study and Intermittent and Ephemeral Stream Perennial Conversion Study). *This is in excess of the four special studies required by the OC MRP.* Given the larger MS4 Permit Area, population and resources available to South Orange County, the additional studies proposed on Riverside County are inappropriate from a social, economic and environmental justice standpoint. (1) Water Board staff acknowledged multiple studies were added to the draft MRP with the intention of that would be eliminated. (2) The issues addressed by these studies are not all specific to the Santa Margarita Region and would be more appropriate to be evaluated as part of a broader regional study, such as the Sediment Toxicity study. (3) The Agricultural, Federal, and Tribal Input Study is specifically inappropriate as it requires the Copermittees to monitor the discharges of other entities subject to separate NPDES regulations. (4) The Intermittent and Ephemeral Stream Perennial Riverside County MS4 Copermittees

## Attachment 4: Monitoring and Reporting Program Requirements

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Conversion Study is specifically inappropriate as it incorrectly presumes that such ephemeral streams are actually being converted to perennial systems within the permit area due to MS4 discharges. Some additional specific points include:

- **Sediment Toxicity** – In the waterbodies found in the Santa Margarita watershed (which are intermittent at best and dry most of the time) the idea of investigating sediment toxicity and its impacts on benthic macroinvertebrates seems a reach. Current sediment toxicity monitoring in the State is focused on year round streams and estuaries (e.g. the Delta ). Furthermore the current state of sediment toxicity monitoring is at best in its infancy as is the State's policy regarding Sediment Quality Objectives. It would seem that a more reasonable approach associate with sediment toxicity is to allow the science to catch up with the policy and for the Copermittees to learn from these other statewide efforts.
- **Agricultural, Federal, and Tribal Input Study** - Ongoing monitoring efforts in the Central Valley and the Los Angeles Regions for the Agriculture Waiver Program are more robust and statistically valid to make any efforts by Riverside County to be pale in comparison and likely insignificant. Likewise, monitoring in watersheds (e.g. Lake Tahoe, and the northwest part of the State) where water bodies are impaired by sediment and where Federal and Tribal land uses have inputs to the impaired water bodies is significant and should take precedent over any efforts in Riverside County. As previously noted, it is inappropriate to require the Copermittees to not only monitor their own discharges, but also expend resources monitoring the discharges of others. The Regional Board has authorities to require these sources to collect their own data and should exercise that authority appropriately if such studies are required.
- **MS4 and Receiving Water Maintenance Study** - It is likely that every flood control district in the State and Caltrans would be impacted by the MS4 and Receiving Water Maintenance Study; therefore it would be imperative to have a well thought out, comprehensive, and regional study to answer the questions being posed in the MRP. Requiring the Copermittees to take on this responsibility is misleading and will not be sufficient to answer the broad questions being posed in the MRP. A more reasonable approach would be to model a regional program similar to the current SCCWRP efforts to assess hydromodification requirements for southern California.
- **Intermittent and Ephemeral Stream Perennial Conversion Study** – Finally, review of historical water resource data by the Copermittees (as indicated in the ROWD), USGS and state and federal courts have all found that the construction of Vale and Skinner dams has significantly increased the ephemeral nature of local watersheds, resulting in much drier conditions than naturally occurred. This is why Rancho California Water District is required to discharge raw water down the Santa Margarita River at the County Line. Requiring a study to study the impacts of ephemeral conversion demonstrates a clear lack of understanding of historical and current receiving water conditions. Further, similar to our comment above regarding the MS4 and Receiving Water Maintenance Study, this study is better addressed at a regional or statewide level. It is not possible to develop a sufficient local database to statistically validate any impacts from non-stormwater discharges within any reasonable timeframe. Furthermore any minimal

# Attachment 4: Monitoring and Reporting Program Requirements

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monitoring effort that could be provided by the Copermittees would not comprehensively address the questions being proposed in the MRP and would be a waste of resources. Again a regional approach, whether it be SCCWRP or other combination of stormwater Copermittees, would be a more logical and constructive approach to address this issue. The Copermittees have proposed maintaining two of the special studies (TMDL Development and Trash Assessment), while replacing the other four with locally preferred special studies already in place (Regional Bioassessment Program and LID BMP design, maintenance, and effectiveness study). The Copermittees believe the alternate proposal provides information that is directly relevant and beneficial to the Santa Margarita Region. This would result in an annual cost savings of \$314,000 per year. This would maintain parity with the OC Permit, which only has four special studies, three of which are identical to the studies proposed below (TMDL Development, Regional Bioassessment, Trash and Litter investigation). Specific language to incorporate the new studies is included in the redline markup of the MRP.

The Copermittees propose the following studies, the write-up for which can be found in Attachment 9 to the comment letter:

1. TMDL Development and Implementation
2. **LID BMP design, maintenance and effectiveness study and demonstration**

This study will be valuable in ensuring BMPs that are required are effective and the benefit and integration of LID BMPs into a site is understood. This proposed study would directly affect the Copermittees ability to ensure effective LID BMPs are being implemented.

3. **Regional Bioassessment study**

All the Southern California counties have committed to participate in this study, with the understanding that it would be written into the MS4 permits as a special study for which they would get credit. The Copermittees have been proactively implementing this study without a MS4 Permit requirement, and want to be able to continue to support these regional studies.

4. Trash and Litter Investigation

## ***Other Changes***

### **Table 1: Analytical Testing for Mass Load (A.1) and Bioassessment (A.2)**

Revision: Request "Carbamates" be removed as a constituent for analytical testing in Table 1.

Justification: The testing of carbamates should be dictated by the completion of toxicity identification evaluations (TIEs). The use of carbaryl in urban areas throughout California dropped approximately 80% between 2004 and 2008<sup>1</sup>. This drop is also matched by an 80% reduction in the number of USEPA-registered carbaryl products between 2004 and 2008. A downward trend since 2006 likely reflects a long-

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<sup>1</sup> TDC Environmental, LLC (2010). *Annual Urban Pesticide Use Data Report 2010*. Prepared for the Urban Pesticide Pollution Prevention Project (UP3 Project) and the San Francisco Estuary Partnership (SFEP) through grant agreement from the State Water Resources Control Board (Agreement 09-305-550-1). June.

## Attachment 4: Monitoring and Reporting Program Requirements

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term reduction in the availability of carbaryl products due to USEPA regulatory requirements.<sup>2</sup> Further, once the USEPA completes its regulatory process for the full implementation of new carbaryl restrictions<sup>3</sup>, urban carbaryl use is likely to continue to decline.

Revision: Request "Hexavalent Chromium" be removed as a constituent for analytical testing in Table 1.

Justification: Since 2004, monitoring in the Santa Margarita Region has reflected that out of 62 total samples, there were 60 non-detected levels of Hexavalent chromium. The 2 detected levels of Hexavalent chromium occurred in April 2007 in wet weather samples. It may be noted that 2007 was the driest year on record for the region and analyzed samples reflect an extended period between wet weather events.

Revision: Request "Biological Oxygen Demand, 5day" and "Chemical Oxygen Demand" be removed as constituents for analytical testing in Table 1.

Justification: The reference in the Fact Sheet supporting the inclusion of these constituents is to the initial Phase 1 application requirements. It should be noted that the initial constituent list is not required of future permits. Further, these constituents are costly to analyze and do not provide new information that is relevant to the management of the NPDES MS4 Program.

Revision: Request "Total Organic Carbon" and "Dissolved Organic Carbon" be removed as constituents for analytical testing in Table 1.

Justification: The reference within the Fact Sheet does not require these constituents and there is a significant cost in analyzing the constituents. It is not clear what additional information these constituents provide that would be useful in managing the MS4 program that is not already addressed through the collection of other constituents.

### **Table 4: Analytical Testing for Wet Weather MS4 Discharges**

Revision: Request "Biological Oxygen Demand, 5day" and "Chemical Oxygen Demand" be removed as constituents for analytical testing in Table 4.

Justification: The reference in the Fact Sheet supporting the inclusion of these constituents is to the initial Phase 1 application requirements. It should be noted that the initial constituent list is not required of future permits. Further, these constituents are costly to analyze and do not provide new information that is relevant to the management of the NPDES MS4 Program.

Revision: Request "Total Organic Carbon" and "Dissolved Organic Carbon" be removed as constituents for analytical testing in Table 4.

Justification: The reference within the Fact Sheet does not require these constituents and there is a significant cost in analyzing the constituents. It is not clear what additional information these constituents

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<sup>2</sup> USEPA (2008). Amended Reregistration Eligibility Decision (RED) for Carbaryl. EPA-738-R-08-010. August.

<sup>3</sup> USEPA (2007). Reregistration Eligibility Decision (RED) for Carbaryl. EPA-738-R-07-018. September.

## Attachment 4: Monitoring and Reporting Program Requirements

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provide that would be useful in managing the MS4 program that is not already addressed through the collection of other constituents.

### **Attachment E: II.B.2**

Revision: Request the following text revisions:

"The Copermittees must collaborate to develop and implement a ~~monitoring program~~ to identify sources of pollutants causing the priority water quality problems within each hydrologic subarea. The ~~monitoring program~~ must include focused monitoring ~~which moves upstream into each watershed as necessary to identify source areas, or other methods to identify the societal sources of pollutants, as appropriate.~~ This ~~monitoring program~~ must be ~~implemented within each hydrologic subarea and must begin no later than the 2012-2013 monitoring year.~~"

Justification: As drafted, the permit requires source identifications to start at the end point of the watershed and move upstream. The requested revisions are intended to provide flexibility to allocate resources appropriately based on field judgements. The second part of the revision is to acknowledge some pollutant contributions to the MS4 are in-fact, non-point source, and cannot be pinpointed through focused source ID Monitoring.

### **Attachment E: II.C.1.b.(2)**

Revision: Request text additions:

"Sampling of non-storm water discharges may be done utilizing grab samples. If a ponded MS4 discharge is observed at a monitoring station, the Copermittee(s) must record the observation and collect at least one (1) grab sample, however ponded water samples will not be used in determining action level exceedances. If flow is evident, a 1-hour composite sample may be taken. The Copermittee(s) must estimate the flow using techniques such as by measuring the width of water surface, approximate depth of water, and approximate flow velocity."

Justification: The first text addition is to avoid triggering action levels due to increased concentrations caused by evaporation of ponded water. Evaporation of ponded water will result in increased concentrations of any constituents contained in the water. NALs are based on Water Quality Objectives that are based on stable, flowing stream conditions. The second text addition is to allow flexibility in measuring stream flows. In some cases, flow gauges or flow meters may be available to estimate flow.

### **Attachment E: III.A.2.**

Revision: Request text additions:

## Attachment 4: Monitoring and Reporting Program Requirements

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Monitoring Annual Report: The Principal Copermittee must submit the Receiving Waters and MS4 Discharge Monitoring Annual Report to the San Diego Water Board on October 1 of each year, beginning on **October 1, 2013**. Receiving Waters and MS4 Discharge Monitoring Annual Reports must cover the monitoring activities and results from the previous fiscal year, and must meet the following requirements:

Justification: All of the Copermittees' activities are tracked and reported on a Fiscal Year basis. This facilitates clearer data and cost tracking, and results that can be more effectively integrated into the JRMP reports in a clear and understandable manner, since the reporting periods are aligned. This change is important, so as to allow for a simpler transition from the existing monitoring and data tracking methods, to those that will be developed for compliance with the permit.

### Attachment E: III.A.2.e

Revision: Request the following text revisions:

~~"Annual~~The 4<sup>th</sup> year monitoring report must include identification and analysis of any long-term trends in the Copermittees' MS4 storm water discharges or receiving water quality. Appropriate statistical methods shall be used to evaluate the water quality data. ~~Trend analysis must use nonparametric approaches, such as the Mann-Kendall test, including exogenous variables in a multiple regression model, and/or using a seasonal nonparametric trend model, where applicable"~~

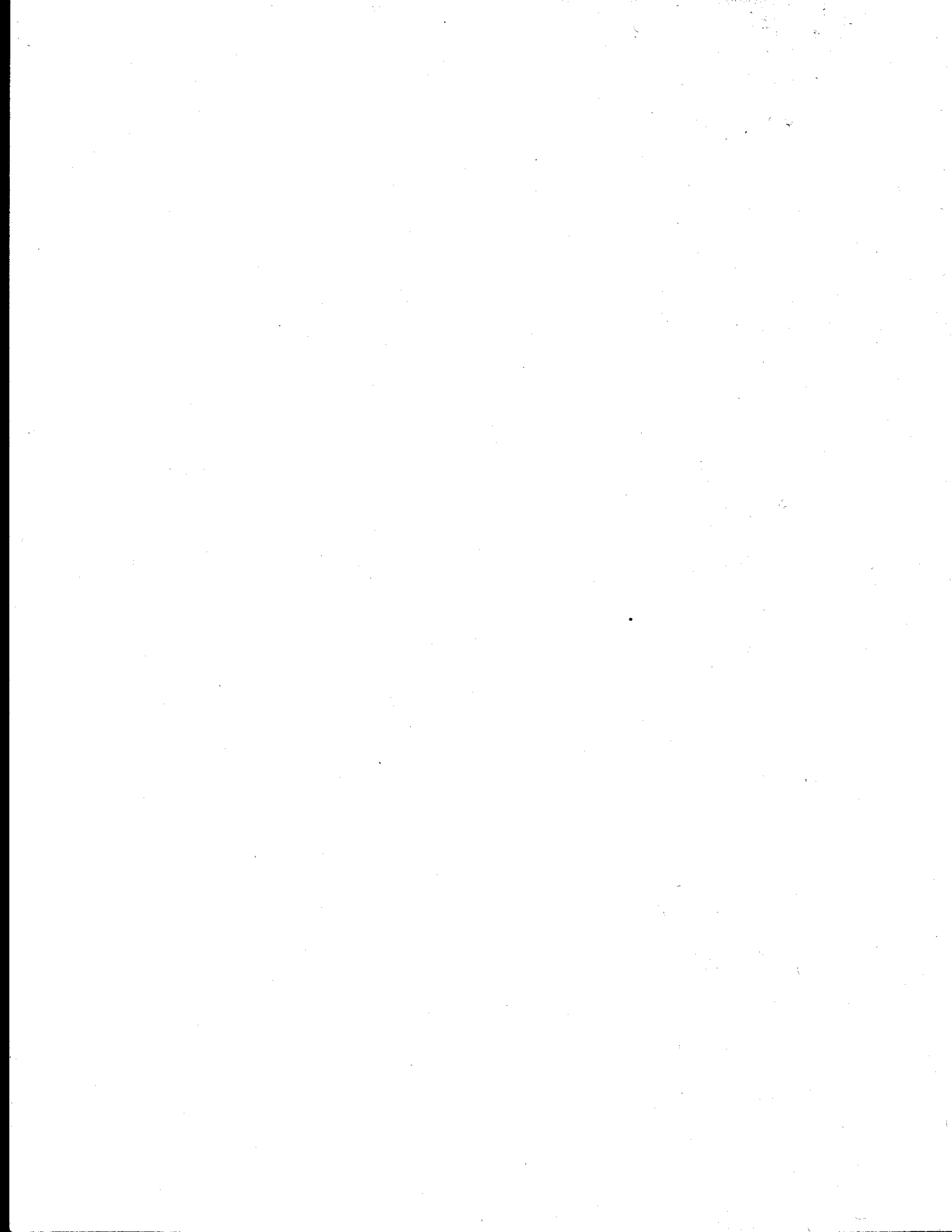
Justification: The first edit is to require the long term statistical analyses be performed on a time schedule consistent with submission of the ROWD. Requiring long-term statistical trend analyses on an annual basis is unnecessary and inappropriately increases analysis and reporting costs and complexity. The second edit recognizes a multitude of different statistical methods could be used and others may be more appropriate to the dataset than those identified in the draft MRP.

### Attachment E: III.A.2.f

Revision: Request elimination of requirement for annual monitoring reports to include total pollutant loads (wet weather loads plus dry weather loads) due to MS4 Discharge for each of the hydrologic subareas.

Justification: Many assumptions go into the calculations of total loads, making their use in statistical analyses questionable at best. The Copermittees have continued to provide this data, but do not see that it has any value.

*Note: Other redlines noted but not included in this paper are for clarification purposes and to make sure permit language is consistent with requested changes throughout Attachment E.*



# Attachment 5: Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit

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## Executive Summary

The Draft Municipal Separate Storm Sewer System Permit (Draft Tentative Order No. R9-2010-0016; NPDES No. CAS0108740) for the Santa Margarita Region of Riverside County (Draft MS4 Permit) includes proposed findings and requirements for development and maintenance of unpaved roads that are redundant to existing regulatory requirements. The proposed requirements for maintenance of unpaved roads may lead to the unintended consequence of discouraging maintenance of the majority of the unpaved roads in the Santa Margarita Region, which may increase the potential for erosion and sediment discharge from such roads. Statements in the Fact Sheet and Findings, monitoring data, and Permittee observations and experience do not support identification of unpaved roads as a significant source of pollutants to receiving waters in the Santa Margarita Region, thereby warranting additional regulation of unpaved roads.

The Copermittees request that the proposed requirements for development and maintenance of unpaved roads be removed from the Draft MS4 Permit. The Copermittees believe that enhancement of existing programs by identifying Best Management Practices (BMPs) specific to maintenance of unpaved roads and providing public education to owners and contractors providing maintenance of privately maintained unpaved roads will be as effective as the program in the draft Permit at substantially less cost. If the San Diego Regional Board determines that unpaved roads within their jurisdiction require further regulation, the Permittees believe that the appropriate regulatory mechanism is a General Permit (Waste Discharge Requirements or NPDES Permit) since the Draft MS4 Permit addresses only a fraction of unpaved roads within the jurisdiction of the San Diego Regional Board.



# Attachment 5: Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit

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## 1.0 Background

The stream system in the Santa Margarita Region is ephemeral, with only small isolated segments exhibiting natural perennial flow due to rising groundwater. Such a stream system does not support fish migration. Runoff from the Santa Margarita Region naturally exhibits high sediment loads due to precipitation patterns, limited vegetative cover, soil types and steep topography.

Most existing unpaved roads in the Santa Margarita Region are private roads on private property that have not been engineered and have evolved through use. Such unpaved roads consist of earthen materials that have been compacted by vehicular use and do not include improved drainage, engineered grading or surface improvement. However, proposed unpaved road projects are subject to the development requirements of the MS4 Permit and the Construction General Permit and would be engineered.

In contrast to paved roads, unpaved roads are predominantly lightly traveled and found in rural areas serving economically disadvantaged residents. Many of these roads remain unpaved for economic reasons. Moreover, some residents do not want paved roads as they desire to preserve the rural/rustic nature of their communities.

Maintenance of unpaved roads in the Santa Margarita Region is generally limited to smoothing washboard depressions that have been created by vehicle use and to improve drainage by properly sloping the surface. The smoothed road surface is compacted by the grading equipment and, subsequently, by regular traffic use. This routine maintenance activity is intended to maintain original lines and grade, and the original purpose of the unpaved road. Repair of landslides and washouts, and replacement of culverts is also performed as needed, in some instances on an emergency basis. Landslide and washout repairs may require the implementation and maintenance of temporary erosion and sediment control BMPs until the disturbed area is stabilized.

The Permittees voluntarily provide limited maintenance of Copermittee maintained, dedicated and accepted unpaved roads for public access. This voluntary maintenance is provided for public safety, including emergency vehicle access, and to maintain utility of the public easement. There is no requirement that the Permittees provide this maintenance.

Most unpaved roads in the Santa Margarita Region are not maintained by the Permittees, but instead are private roads located on private property. Permittee staff is only allowed to enter private property if a crime or illegal activity is observed. The County of Riverside has not accepted maintenance of unpaved roads since the late 1940s and now only accepts paved roads that have been designed and constructed to County standards. Murrieta and Temecula will only approve new subdivisions with paved roadways constructed to their standards. In some instances, the Permittees maintain unpaved roads under contract to Home Owners' Associations or through Community Service Areas. However, the Permittees are prohibited by law from using Gas Tax funds for maintenance of unpaved roads on private property.

Other entities that are not under the legal authority of the Permittees also own unpaved roads in the Santa Margarita Region. These entities include:

# Attachment 5: Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit

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- Agricultural Operators
- Eastern Municipal Water District
- Federal Lands
- Metropolitan Water District of Southern California
- Nature Conservancy
- Railroads
- Rancho California Water District
- Southern California Edison
- State of California
- Tribal Lands

## 2.0 Findings Addressing Proposed Requirements for Unpaved Roads

Finding D.1.c of the Draft MS4 Permit states:

This Order contains new or modified requirements that are necessary to improve Copermittees' efforts to reduce the discharge of pollutants in storm water runoff to the MEP and achieve water quality standards. Some of the new or modified requirements, such as the revised Watershed Water Quality Workplan (Watershed Workplan) section, are designed to specifically address these high priority water quality problems. Other requirements, such as for unpaved roads, are a result of San Diego Water Board's identification of water quality problems through investigations and complaints during the previous permit period. Other new or modified requirements address program deficiencies that have been noted during audits, report reviews, and other San Diego Water Board compliance assessment activities. Additional changes in the monitoring program provide consistency with the Code of Federal Regulations, USEPA guidance, State Water Board guidance, and the Southern California Monitoring Coalition recommendations.

The discussion of Finding D.1.c states:

The Copermittees are required to update and expand their runoff management programs on jurisdictional and watershed levels in order to improve their efforts to reduce the contribution of storm water pollutants in runoff to the MEP and meet water quality standards. Changes to Order No. R9-2004-001's requirements have been made to help ensure these two standards are achieved by the Copermittees.

The Orders' jurisdictional requirements have changed based on findings by the San Diego Water Board during typical compliance assurance activities, audits, or receipt of complaints. Where the audits found common implementation problems, requirements have been altered to better ensure compliance. In addition, the San Diego Water Board conducted reviews of the jurisdictional annual reports submitted by the Copermittees. Updates to the requirements for the Copermittees' programs are also based in part on

## Attachment 5: Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit

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information found in the Copermittees' ROWD requirements that were included in the San Diego and Orange County MS4 permits, and discussions with the Riverside County Copermittees.

To better focus on attainment of water quality standards, the Order's jurisdictional and watershed requirements have been improved. The conditions of the receiving waters now drive management actions, which in turn focus diminishing resources on the highest priority water quality problems within the receiving waters in the watershed. Improvements to jurisdictional and watershed requirements were also made to facilitate a mutually clear understanding of the requirements between the San Diego Water Board and Copermittees.

During the previous permit period, the San Diego Water Board identified, through investigations and complaints, sediment discharges from unpaved roads as a significant source of water quality problems in the Riverside County portion of the San Diego Region. Enforcement and inspection activities conducted by the San Diego Water Board during the previous permit term have found a lack of source control for many unpaved roads within the jurisdiction of the Copermittees. Unpaved roads are a source of sediment that can be discharged in runoff to receiving waters, especially during storm events. Erosion of unpaved roadways occurs when soil particles are loosened and carried away from the roadway base, ditch, or road bank by water, wind, traffic, or other transport means. Exposed soils, high runoff velocities and volumes, sandy or silty soil types, and poor compaction increase the potential for erosion. Road construction, culvert installation, and other maintenance activities can disturb the soil and drainage patterns to streams in undeveloped areas, causing excess runoff and thereby erosion and the release of sediment. Poorly designed roads can act as preferential drainage pathways that carry runoff and sediment into natural streams, impacting water quality. In addition, other public works activities along unpaved roads have the potential to significantly affect sediment discharge and transport within streams and other waterways, which can degrade the beneficial uses of those waterways.

USEPA also recognizes that discharges from unpaved roads are a threat to water quality. USEPA guidance emphasizes the threat of unpaved roads to water quality:

"Dirt and gravel roads are a major potential source of these pollutants [sediment] and pollutants that bind to sediment such as oils, nutrients, pesticides, herbicides, and other toxic substances]. Many roads have unstable surfaces and bases. Roads act like dams, concentrating flows that accelerate erosion of road materials and roadsides. Both unstable surfaces and accelerated erosion then lead to sediment and dust."

There are several guidance documents, developed by the USEPA, the US Forest Service, the University of California, and others, that include design and construction specifications and BMPs that are readily available for implementation by private and

# Attachment 5: Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit

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public entities. Implementing design and other source control BMPs for unpaved roads in the region is necessary to reduce and minimize the impacts of sediment discharged during storm events from unpaved roads to the MS4s and receiving waters.

**Comment:** The evidence cited in the Finding, water quality monitoring data, and Permittee observations and experience since establishment of the MS4 Permit in 1990 do not identify unpaved roads as a significant source of pollutants resulting in water quality impairments. The Copermittees support the continued application of development and construction requirements and maintenance of temporary erosion and sediment control BMPs as specified in existing permits.

The requirements for development and maintenance of unpaved roads were proposed by Regional Board staff for inclusion in the Draft MS4 Permit just prior to its release for public comment. Prior to that time, and dating from the original establishment of the MS4 Permit requirements in 1990, unpaved roads had not once been mentioned by Regional Board staff as a significant source of water quality impairment requiring additional regulatory.

The discussion of Finding D.1.c. states that the inclusion of unpaved road requirements was based on "investigations and complaints" reviewed by the San Diego Regional Board. However, Regional Board staff identified only one recent case regarding an unpaved road in the Santa Margarita Region as a problem. The Copermittee in question has investigated this case and it is being addressed as an enforcement action. Although the Copermittees have not had the opportunity to review the investigations and complaints cited by Regional Board staff, no feedback from these investigations was reported to the Copermittees at the MS4 Permit discussions prior to the proposal of the unpaved road requirements. This indicates to the Copermittees that unpaved roads do not in fact present a significant water quality concern.

The Copermittees have reviewed the documents cited by Regional Board staff in the discussion of Finding D.1.c. and the conditions in the Santa Margarita Region are vastly different from those in Pennsylvania and Northern California cited in those documents. These areas receive regular precipitation, have significant vegetative cover, and perennial streams, some of which may support migrating fish. Nothing in these documents suggests that unpaved roads are a significant source requiring special attention in the Santa Margarita Region. Further, no data collected during Copermittee monitoring nor their observations support a conclusion that unpaved roads are a significant source of pollutants warranting special regulatory attention.

The lack of evidentiary support for the unpaved roads provisions makes their inclusion in the Draft MS4 Permit arbitrary and capricious. The Copermittees therefore request deletion of Finding D.1.C.

## 3.0 Fact Sheet Addressing Proposed Requirements for Unpaved Roads

Page 146 of the Fact Sheet states:

**Section F.1.i** (Unpaved Roads Development) specifically requires the Copermittees to implement or require implementation of BMPs for erosion and sediment control after construction of all new unpaved roads. As discussed for Finding D.1c, design and source control BMPs for unpaved roads are needed to minimize the discharge of sediment to the MS4s and receiving waters,

## Attachment 5: Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit

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especially during storm events. There are several guidance documents available (see Discussion for Finding D.1.c) that include design and source control BMPs that can be readily implemented by the Copermittees for the development of new unpaved roads.

Page 155 of the Fact Sheet states:

**Section F.3.a.(10)** (Unpaved Roads Maintenance) requires the Copermittees to implement or require implementation of BMPs for erosion and sediment control during and after maintenance activities on unpaved roads, particularly in or adjacent to stream channels or wetlands. As discussed for Finding D.1.c, source control BMPs for unpaved roads are needed to minimize the discharge of sediment to the MS4s and receiving waters. There are several guidance documents available (see Discussion for Finding D.1.c) that include BMPs that can be readily implemented by the Copermittees for the development of new unpaved roads. This requirement is necessary to ensure the Copermittees minimize the discharge of sediment from their unpaved roads used for their maintenance activities.

Page 160 of the Fact Sheet states:

**Section F.3.c.(5)** (Privately Owned Unpaved Roads Maintenance) includes requirements for privately owned unpaved roads. The Copermittees must require implementation of BMPs for erosion and sediment control during maintenance activities on privately owned unpaved roads, particularly roads that are in or adjacent to receiving waters. As discussed for Finding D.1.c, BMPs for unpaved roads are needed to minimize the discharge of sediment to the MS4s and receiving waters. There are several guidance documents available (see Discussion for Finding D.1.c) that include design and source control BMPs that can the Copermittees can readily require to be implemented.

In addition, where the Copermittees identify illegal construction and maintenance grading activities on privately owned unpaved roads, the Copermittees must enforce their ordinances to prevent illicit discharges of sediment and other pollutants from privately owned unpaved roads to their MS4s and receiving waters.

**Comment:** For the reasons set forth above, there is no evidence that unpaved roads require special regulatory attention in the MS4 Permit. Moreover, proposed requirements specific to unpaved roads are redundant to existing requirements in both the existing Permit and the draft MS4 Permit, the state General Construction Permit, and the Copermittees' Stormwater ordinances. To the extent that unpaved roads are of concern to Regional Board staff, those concerns can be effectively addressed by minor adjustments to these existing compliance programs. In a time of tight regulatory budgets, adding these additional requirements, especially where there is no demonstrated need for them, is arbitrary and capricious. The Copermittees request deletion of requirements specific to unpaved roads (see discussion below) as well as these statements in the Fact Sheet.

# Attachment 5: Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit

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## 4.0 Draft MS4 Permit Requirements for Unpaved Roads

### 4.1 *Unpaved Road Development Requirements*

Proposed requirements for the development of unpaved road projects appear on page 45 in section F.1.i of the Draft MS4 Permit. The proposed requirements state:

#### **i. Unpaved Roads Development**

The Copermittees must develop, where they do not already exist, and implement or require implementation of erosion and sediment control BMPs after construction of new unpaved roads. At a minimum, the BMPs must include:

- (1) Practices to minimize road related erosion and sediment transport;
- (2) Grading of unpaved roads to slope outward where consistent with road engineering safety standards;
- (3) Installation of water bars as appropriate;
- (4) Unpaved roads and culvert designs that do not impact creek functions and where applicable, that maintain migratory fish passage.

Virtually all unpaved road development activities would be greater than one acre and/or be part of a priority development project of one acre or more. Such development projects are required to prepare and implement project-specific Standard Urban Stormwater Mitigation Plans (SUSMPs) under Section F of both the existing MS4 Permit and the Draft MS4 Permit. The SUSMPs identify post-construction BMPs that will be implemented for all elements of the project, including the unpaved road elements of the project. Unpaved road projects are also required to comply with the state General Construction Permit, which requires preparation of a SWPPP that identifies construction-phase BMPs and post-construction BMPs. These development and construction phase requirements are applicable to unpaved roads and are imposed by the Copermittees during the development review process, during the issuance of grading permits and during construction inspections. Either the general requirements for development projects in the existing or Draft MS4 Permit and/or the General Construction Permit already require identification and implementation of post-construction BMPs, including erosion and sediment control BMPs, when developing new unpaved roads. Therefore, additional requirements for development of unpaved roads are redundant and the Copermittees request that these redundant requirements be removed from the Draft MS4 Permit.

### 4.2 *Unpaved Road Maintenance Requirements*

Proposed requirements for the maintenance of unpaved roads appear on page 56 in Section F.3.a(10) and on page 64 in Section F.3.c(5) of the Draft MS4 Permit. The proposed requirements state:

#### **F.3.a. (10) Unpaved Roads Maintenance**

# Attachment 5: Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit

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- (a) The Copermittees must develop, where they do not already exist, and implement or require implementation of BMPs for erosion and sediment control measures during such maintenance activities on unpaved roads, particularly in or adjacent to receiving waters.
- (b) The Copermittees must develop and implement or require implementation of appropriate BMPs to minimize impacts on streams and wetlands during unpaved road maintenance activities.
- (c) The Copermittees must regularly maintain their unpaved roads adjacent to streams and riparian habitat to reduce erosion and sediment transport;
- (d) Re-grading of unpaved roads during maintenance must be sloped outward where consistent with road engineering safety standards;
- (e) Through their regular maintenance of unpaved roads, the Copermittees must examine the feasibility of replacing existing culverts or design of new culverts or bridge crossings to reduce erosion and maintain natural stream geomorphology.

### **F.3.c. (5) Privately Owned Unpaved Roads Maintenance**

- (a) The Copermittees must require implementation of BMPs for erosion and sediment control during maintenance activities on privately owned unpaved roads, particularly in or adjacent to stream channels or wetlands.
- (b) The Copermittees must enforce their ordinances against illegal construction and maintenance grading activities on privately owned unpaved roads, so as to prevent impacts to water quality.

The documents,<sup>1,2,3</sup> cited in Finding D.1.c discuss shaping of the surface of unpaved roads during smoothing, and maintenance of temporary sediment and erosion control BMPs associated with maintenance activities, such as repair of landslides and wash outs. The temporary erosion and sediment control BMPs identified include straw bales and silt fencing. The documents do not describe conditions in the Santa Margarita Region, but rather in Pennsylvania and Northern California.

### **Unpaved Roads Maintained by Copermittees**

The conditions in the Santa Margarita Region are vastly different from the conditions found in Pennsylvania and Northern California. Nevertheless, the Copermittees conduct surface grading and maintain temporary erosion and sediment control BMPs as appropriate following completion of maintenance on unpaved roads. These BMPs associated with the routine maintenance of unpaved roads

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<sup>1</sup> USEPA 2006 "Environmentally Sensitive Maintenance for Dirt and Gravel Roads." Gesford and Anderson, USEPA-PA-2005.

<sup>2</sup> US Forest Service, 1996. Forest Service Specifications for Construction of Roads & Bridges. EM-7720-100. Revised August 1996.

<sup>3</sup> University of California Division of Agriculture and Natural Resources, 2007. Rural Roads: A Construction and Maintenance Guide of California Landowners. Publication 8262.

## Attachment 5: Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit

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will be documented and procedures formalized in the Riverside County Drainage Area Management Plan (DAMP).

### **Unpaved Roads Maintained by Others**

As previously described, the vast majority of unpaved roads within the jurisdiction of the Copermittees are not maintained by the Copermittees, but are maintained by others, typically private property owners. As these are public easements over private property, however, the underlying property owner is under no legal obligation to provide maintenance. To provide reasonable access, maintenance of such unpaved roads is voluntarily provided by property owners and, in some cases, home owners' associations. State law prohibits the use of Gas Tax funds by the Copermittees for the maintenance of unpaved roads on private property. Requirements for implementation and maintenance of temporary erosion and sediment control BMPs in areas under the legal jurisdiction of the Copermittees are addressed by the general requirements of the Copermittees' stormwater ordinances and, where grading activities are significant, through the Copermittees' grading ordinances. As maintenance of unpaved roads on private property is voluntary, more aggressive regulation of such private roads may in fact discourage routine maintenance of unpaved roads, likely resulting in an increase in erosion and sediment discharge from such roads.

As an alternative, maintenance of unpaved roads can be effectively addressed by enhancing existing programs. There is no need to create a new compliance program requirement specific to unpaved roads, especially where such programs cannot in any event be implemented by the Copermittees on private property. The Copermittees believe that a better approach is to provide public education to property owners and grading contractors in areas served by unpaved roads, focusing on the proper methods of shaping unpaved road surfaces and the benefits of implementing and maintaining temporary erosion and sediment controls.

The Copermittees request that these proposed provisions be removed from the Draft MS4 Permit.

### **5.0 Alternative Regulation of Unpaved Roads**

There is nothing unique about potential discharges from unpaved roads under the legal jurisdiction of the Copermittees such that they would require special regulation. As discussed above, there is significant mileage of unpaved roads in the Santa Margarita Region that are not under the legal jurisdiction of the Copermittees. If there is concern about the impact of unpaved roads on water quality (a concern that, for the reasons already stated, is not supported by the evidence), there is no reason to believe that unpaved roads not under the legal jurisdiction of the Copermittees do not present the same potential to affect receiving water quality.

If it is determined that development and maintenance of unpaved roads requires special additional regulation, then such regulation should apply equally and on the same schedule to all unpaved roads under the jurisdiction of the San Diego Regional Board, not just those under the legal authority of the Copermittees. The Copermittees request that, if staff continues to maintain that unpaved roads require additional regulation, those requirements be addressed through a general permit for unpaved roads, and not in the Draft MS4 Permit.



## Attachment 5: Proposed Unpaved Road Requirements of the Draft 2010 Santa Margarita Region MS4 Permit

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### 6.0 Conclusion

No evidence, whether statements in the Fact Sheet and Findings, monitoring data, or Copermittee observations and experience, supports identification of unpaved roads as a significant source of pollutants to receiving waters in the Santa Margarita Region warranting additional regulation. The proposed unpaved road requirements are redundant to requirements of existing permits, including the state General Construction Permit, as well as existing Copermittee ordinances and programs. To the extent that unpaved roads may be a source of pollutants to the MS4 and thence to receiving waters, the Copermittees believe that enhancement of existing programs by documenting BMPs specific to maintenance of unpaved roads and providing public education to owners and contractors who provide maintenance of privately maintained unpaved roads will be as effective in reducing such pollutants, at a much reduced cost.

If the Regional Board determines that unpaved roads within its jurisdiction require further regulation, the appropriate method for addressing those roads is through a General Permit (Waste Discharge Requirements or NPDES Permit) rather than the Draft MS4 Permit, since a General Permit would address all unpaved roads in the San Diego Region, not just the subset of unpaved roads under the legal jurisdiction of the Copermittees.



# Attachment 6: Prohibition of Irrigation Runoff

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## Introduction

The Draft Municipal Separate Storm Sewer System Permit (Draft Tentative Order No. R9-2010-0016 (NPDES No. CAS0108740) for the Santa Margarita Region of Riverside County (Draft SMR MS4 Permit) categorically prohibits the discharge of landscape irrigation; irrigation water; lawn watering; (collectively 'irrigation runoff') and non-emergency fire fighting flows runoff to the MS4. The basis for this requirement comes from the current Orange County Stormwater Permit within the San Diego Region (NPDES No. CAS0108740), which prohibits such discharges.

## Context of Requested Changes

### Stream and Watershed Characteristics

Unlike the watersheds in South Orange County, the Santa Margarita Region is an ephemeral watershed that includes Murrieta and Temecula Creeks which are perennial interrupted streams, i.e., they include some reaches in which the flow is continuous and others where flow is ephemeral. However, the areas of perennial flow in the Santa Margarita Region are located in mountain area tributaries outside of the urbanized areas serviced by the MS4s. These perennial flows quickly disappear by seepage into the sands and gravels and resurface upstream of the confluence of Murrieta and Temecula Creeks. The creeks in the urbanized areas of the watershed, located primarily in the valley, are ephemeral and flows are only observed during and immediately following significant storm events<sup>1</sup>.

Rising groundwater is currently observed in Murrieta Creek below its confluence with the Santa Gertrudis Channel, an observation consistent with the observations made by the State of California in 1956.<sup>2</sup> Rising groundwater is also observed in Temecula Creek approximately one quarter mile upstream of the Interstate 15 Bridge. In 1956, the State observed more extensive rising groundwater conditions occurring as far upstream as the Highway 79 Bridge. Based on the virtual absence of non-stormwater flows and the rising groundwater conditions observed in lower Murrieta and Temecula Creeks prior to development of the watershed, there is no evidence that the rising groundwater currently observed is due to Urban Runoff nor that Urban Runoff has affected the quality of rising groundwater.

### Irrigation Runoff is Not a Source of Pollutants

Finding C.15 states:

*Non-storm water discharges to the MS4 granted an influent exception [i.e., which are exempt from the effective prohibition requirement set forth in CWA section 402(p)(3)(B)(ii)] under 40 CFR 122.26 are included within this Order. Any exempted discharges identified by Copermittees as a source of pollutants are subsequently required to be addressed (emphasis added) as illicit discharges through prohibition and incorporation into existing IC/ID programs. Furthermore, the USEPA contemplates that permitting agencies such as the San Diego Water Board may also identify exempted discharges as a source of pollutants required to be addressed as illicit discharges (See VOI.*

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<sup>1</sup> Riverside Flood Control and Water Conservation District, "Hydrologic Data for 1975-76 Season," March 1982, p. 49.

<sup>2</sup> State of California Department of Public Works Division of Water Resources, Bulletin No. 57, "Santa Margarita River Investigation," Volume I, June 1956, p. 48.

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*55 Fed. Reg. 48037). The San Diego Water Board and the Copermittees have identified landscape irrigation, irrigation water and lawn water, previously exempted discharges, as a source of pollutants and conveyance of pollutants to waters of the U.S. Of course, rising groundwater is exempt from regulation under 40 CFR 122.26 as a non-prohibited non-storm water discharge.*

The last sentence of this Finding does not accurately reflect the facts. Unlike Orange County, and despite Board staff's contentions in the fact sheet the Copermittees have **not** identified landscape irrigation, irrigation water or lawn water as a source of pollutants or conveyance of pollutants to waters of the U.S. Rather, this statement is based on the efforts in Orange County where that County found that the significant perennial flows throughout the urbanized areas were caused by irrigation runoff. Not only has irrigation runoff not been found to be a source of pollutants to waters of the U.S. in the Santa Margarita Region as a category, no individual discharges of irrigation runoff in the region have been found to be a source of pollutants. As described in the Stream Flow Characteristics section above, during dry weather there is no perennial flow in the waters of the U.S. in the urbanized area until rising groundwater occurs just before the confluence of Murrieta and Temecula Creeks. This is unlike streams in South Orange County, that it was found that the significant perennial flows throughout the urbanized areas were caused by irrigation runoff. In the Santa Margarita Region, any weather runoff that does reach receiving waters quickly seeps into the alluvial soils.

Second, the Discussion of Finding C.15 in the Fact Sheet fails to demonstrate the need for a prohibition of this irrigation runoff as a non-stormwater runoff *category*. The discussion references conditions outside of and unlike those found in the Santa Margarita Region and misconstrues statements in public education materials that encourage runoff management as justification for the proposed prohibitions. Finally, no justification is provided in this discussion or elsewhere to support the prohibition of the non-emergency fire fighting flows runoff as a category.

### **Prohibition Not Economically Justifiable**

A prohibition of irrigation runoff will result in significant costs to the public and the Copermittees as the prohibition is ***TO THE MS4***, which is defined to include streets, curbs and gutters. As the MS4 Permit has eliminated the MEP protections for dry weather non-stormwater discharges (see also legal comments in Attachment 7 to the comment letter), this makes the Copermittees responsible for every incidence of over-irrigation, regardless of whether such discharges ever affect receiving waters. As such, the cost to eliminate these discharges is not commensurate with any measurable environmental benefit. The Copermittees cannot impose fees to recover the costs of enforcing this new requirement and, as described in the Economics White Paper (Attachment 2 to the comment letter), the Copermittees have even fewer resources to carry out the requirements of the current MS4 Permit than in past years, much less carry out the additional requirements set forth in the draft Permit, including the development and implementation of a new program to prohibit irrigation runoff.

As this prohibition would also apply to Copermittees' facilities, retrofit of existing facilities would likely be immediately required to ensure compliance. The City of Murrieta, for example, has estimated that retrofit of their sprinklers to a drip system to avoid irrigation runoff from their facilities alone would cost \$250,000.

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### **Irrigation Runoff Addressed by Existing Requirements and Programs**

Management of irrigation runoff is currently addressed by existing requirements and programs and the additional requirements proposed in the draft Permit are unnecessary. The use of reclaimed water is regulated under Waste Discharge Requirements (WDRs) issued by the Regional Board.

The draft Permit also provides other mechanisms to address irrigation runoff. **First**, if a discharge of irrigation runoff was determined to be a source of stormwater pollutants, the Copermittees already have the legal authority to take appropriate enforcement action to control the discharge as an illegal discharge, under their existing storm water ordinances. **Second**, the non-stormwater action level monitoring required by this draft Permit will identify any potentially problematic non-stormwater discharges and identify the source of those discharges. Should the source be determined to be irrigation runoff, it will require the Copermittees to address that discharge. Both mechanisms are better suited (financially and legally) to deal with irrigation runoff than a complete prohibition provision in the absence of local data showing it as a problem.

Finally, local water purveyors are better equipped and able to address irrigation runoff. As an example, Rancho California Water District and Eastern Municipal Water District actively promote water conservation programs, which are supported by the Metropolitan Water District of Southern California. The County and the cities have adopted water conservation ordinances as required by the Water Conservation in Landscaping Act (AB 1881, Laird). Given these facts, there is even less justification for an extensive and expensive program to address an irrigation runoff issue that is not, in fact, a source of pollutants causing or contributing to a violation of water quality standards in the Santa Margarita Region.

### **Preferred Requested Permit Revisions**

**Specifically, the Permittees request that the language in the Permit be amended as follows prior to adoption of the Permit:**

#### **Delete Finding C.15**

As the last sentence of this Finding is not supported by fact, the Permittees request that it be deleted as noted in the following text and the entirety of the Discussion of Finding C.15 in the Fact Sheet be deleted.

*Non-storm water discharges to the MS4 granted an influent exception [i.e., which are exempt from the effective prohibition requirement set forth in CWA section 402(p)(3)(B)(ii)] under 40 CFR 122.26 are included within this Order. Any exempted discharges identified by Copermittees as a source of pollutants are subsequently required to be addressed (emphasis added) as illicit discharges through prohibition and incorporation into existing IC/ID programs. Furthermore, the USEPA contemplates that permitting agencies such as the San Diego Water Board may also identify exempted discharges as a source of pollutants required to be addressed as illicit discharges (See VOL. 55 Fed. Reg. 48037). ~~The San Diego Water Board and the Copermittees have identified landscape irrigation, irrigation water and lawn water, previously exempted discharges, as a source of pollutants and conveyance of pollutants to waters of the U.S.~~*

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## Restore Conditional Exemption

The Permittees request that the landscape irrigation; irrigation water; lawn watering; and non-emergency fire fighting flows runoff categories be restored to the list of non-prohibited, non-stormwater discharges identified in B.2 of the draft SMR MS4 Permit as noted below. In the event that an individual irrigation runoff discharge is determined to be a source of pollutants as identified by the non-stormwater dry weather action level (NAL) process, appropriate action can be taken by the Permittees to control that source.

### B.2. Non-Stormwater Discharges

This item includes a listing of discharges that are not prohibited unless a discharge is determined to be a source of pollutants to waters of the U.S. Landscape irrigation, irrigation water, lawn watering and non-emergency fire fighting flows were deleted from this list as noted:

- a. Diverted stream flows;
- b. Rising groundwaters;
- c. Uncontaminated groundwater infiltration [as defined at 40 CFR 35.2005(20)] to MS4s;
- d. Uncontaminated pumped groundwater<sup>3</sup>;
- e. Foundation drains<sup>3</sup>;
- f. Springs;
- g. Water from crawl space pumps<sup>3</sup>;
- h. Footing drains<sup>3</sup>;
- i. Air conditioning condensation;
- j. Flows from riparian habitats and wetlands;
- k. Water line flushing<sup>4,5</sup>;
- l. Landscape irrigation;
- m. Discharges from potable water sources not subject to NPDES Permit No. CAG679001, other than water main breaks;
- n. Irrigation water;
- o. Lawn watering;
- p. Individual residential car washing;
- q. Non-emergency fire fighting flows; and
- r. Dechlorinated swimming pool discharges

### Additional Clarifications

It is not practicable for the Copermittees to prevent or eliminate irrigation runoff. The Permittees request that the following requirements be revised as noted to provide achievable compliance requirements:

F.1.c.(1) Approval Process Criteria and Requirements for All Development Projects states:

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<sup>3</sup> Requires enrollment under Order R9-2008-002. Discharges into the MS4 require authorization from the owner and operator of the MS4 system.

<sup>4</sup> This exemption does not include fire suppression sprinkler system maintenance and testing discharges. Those discharges may be regulated under Section B.3.

<sup>5</sup> Requires enrollment under Order R9-2002-0020.

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Performance Criteria: Discharges from each approved development project must be subject to the following management measures:

(1) Source control BMPs that reduce stormwater pollutants of concern in runoff; ~~prevent~~ reduce the potential for illicit discharges into the MS4; ~~prevent~~ reduce the potential for irrigation runoff; storm drain system stenciling or signage; properly design outdoor material storage areas; properly design outdoor work areas; and properly design trash storage areas.

F.1.d.(5) Source Control BMP Requirements states:

Each Copermittee must require each Priority Development Project to implement applicable source control BMPs. The source control BMPs to be required must:

- (a) Prevent illicit discharges into the MS4;
- (b) Minimize storm water pollutants of concern in runoff;
- (c) ~~Eliminate~~ Reduce the potential for irrigation runoff;
- (d) Include storm drain system stenciling or signage;
- (e) Include properly designed outdoor material storage areas;
- (f) Include properly designed outdoor work areas;
- (g) Include properly designed trash storage areas;
- (h) Include water quality protection requirements applicable to individual priority project categories.

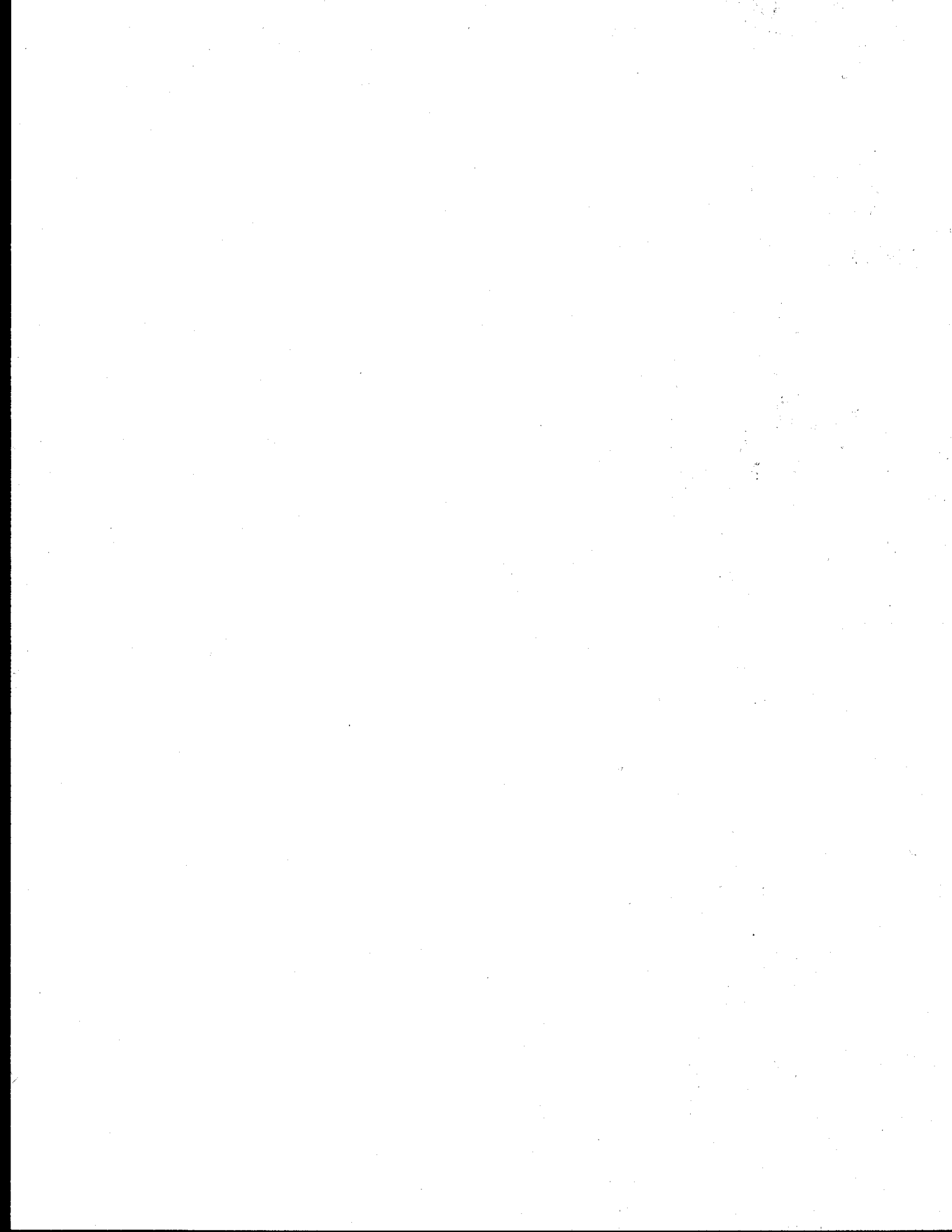
### Alternative Requested Permit Revisions

#### ***Regulate irrigation runoff discharges from the MS4, rather than as prohibited discharge to the MS4***

If the Regional Board nevertheless insists on prohibiting irrigation runoff, the Copermittees request that the draft MS4 Permit be revised to allow for irrigation runoff to be managed as a Jurisdiction Runoff Management Plan (JRMP) program, rather than as a prohibited discharge to the MS4. This alternative request is consistent with how the Permit currently deals with non-emergency fire fighting discharges, which was also removed from the list of non-prohibited non-stormwater discharges. The Executive Officer stated that he would be open to consideration of a program for irrigation runoff that would address discharges from the MS4. This alternative approach allows the Copermittees to develop a program that focuses on irrigation runoff problem areas, as opposed to holding the Copermittees responsible for eliminating any instant case of over-irrigation independent of threat to receiving water quality.

**As the alternative to restoring the conditional exemption, the Copermittees request the Board to ADD Provision B.4 as follows:**

**B.4. As part of the JRMP, the Copermittees must develop and implement a program to address pollutants from landscape irrigation, irrigation water and lawn watering identified as significant sources of pollutants to waters of the United States.**





## Attachment 7: General Legal Comments

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**LEGAL COMMENTS OF THE RIVERSIDE COUNTY FLOOD CONTROL AND  
WATER CONSERVATION DISTRICT ON TENTATIVE ORDER NO. R9-2010-0016,  
WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM THE  
MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) DRAINING THE  
COUNTY OF RIVERSIDE, THE INCORPORATED CITIES OF RIVERSIDE COUNTY,  
AND THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION  
DISTRICT WITHIN THE SAN DIEGO REGION**

The following comments are made by the Riverside County Flood Control and Water Conservation District (District) with respect to legal issues raised by the above-referenced Tentative Order (Order). These comments are being made on behalf of the District and, with respect to issues common to the other Copermittees, also on behalf of the County of Riverside and the Cities of Menifee (to the extent that this City will remain as a Co-Permittee under the Order), Murrieta, Temecula and Wildomar. We also understand that the County and the individual Cities will be filing comments on the Order under separate cover. The comments contained in this document are intended to complement, but not supersede, the individual comments of the County and the City. Also, the District will be filing separate comments concerning issues specific to it.

The District reserves the right to make additional legal comments on the Order prior to the close of the public hearing to adopt the order. In addition, legal comments may also be included in the Technical Comments separately filed herewith by the District.

The redlined version of the Order submitted with the District's comment letter also addresses the following and additional comments, along with requested changes in the text of the Order.

**General Comments:**

**1. *Dual Requirement to Adopt Programs and Guarantee Results***

Throughout Part F. of the Tentative Order relating to the Jurisdictional Runoff Management Program, the language requires not only that the Copermittees adopt programs intended to achieve control of pollutants but also requires such programs to achieve certain ends. See, for example, Part F.1., where each Copermittee must implement a development planning program which meets the requirements of Section F of the Tentative Order *and* which requires such a program to (1) reduce development project discharges from the MS4 to the MEP, (2) prevent such discharges "from causing or contributing to a violation of water quality standards", (3) prevents illicit discharges to the MS4, and (4) manages increases in runoff discharge rates. A similar requirement is set forth in other provisions, including Part F.3, relating to existing development, Part F.3.b., relating to commercial/industrial programs, Part F.3.c., relating to residential programs and Part F.6, relating to the education component where, in each case, the Copermittees are required to develop programs and ensure their performance.

This dual requirement, to develop a program and then to ensure that it achieves the intended ends, is unlawful, as it goes beyond the requirements of the MS4 regulations and requires the Copermittees to guarantee the results of activities that will often be in the control of third parties.

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The MS4 regulations require that the MS4 permittees develop the required programs. See, for example, 40 CFR § 122.26(d)(2)(iv)(A)(2), which requires the Copermittees to, among other things, develop and implement a management program including a "description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment". The Copermittees certainly could be liable under the permit if they failed to adequately "develop, implement and enforce controls". However, the MS4 regulations do not require that the Copermittees guarantee, under threat of being found in violation of the permit, that such controls achieve the desired ends of the management programs. It should be also noted that in many other parts of the Order, the Copermittees are directed to develop programs "designed" to achieve water quality goals.

Further, the iterative BMP approach required by the State Water Resources Control Board ("State Board") in precedential State Board Order WQ 99-05 and subsequent rulings would be made meaningless if the Copermittees were strictly liable for ensuring in their programs that discharges did not cause or contribute to a violation of a water quality standard. It is appropriate for the Board to set forth in these sections the "elements needed in the Copermittees' program to fulfill the goals of [the] directive", as set forth in staff's Response to Comment 297 on the Orange County MS4 permit, Order No. R9-2009-0002. However, the Board has no authority to require the Copermittees to guarantee that such goals will be fulfilled, as the current language appears to require.

In addition to the portions of the Order cited, the Copermittees also request changes to similar provisions found at Sections F.1.d, F.1.d.5, F.2, F.3.a, F.4, and G. The attached redline identifies those and any additional parts.

### **2. Requirement to Follow State Law on Requirements Not Required by Federal Law**

A number of requirements in the Tentative Order exceed the requirements of federal law. The Board may have discretion to impose such requirements under state law (*Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9<sup>th</sup> Cir. 1999)), however, the California Supreme Court has determined that to the extent such state law requirements are included in an NPDES permit, the Board must consider the factors set forth in Water Code § 13263(a) and § 13241, including the water quality that could reasonably be achieved by the requirements and economic considerations. *City of Burbank v. State Water Resources Control Board* (2005) 35 Cal. 4<sup>th</sup> 613. See also Water Code § 13000, setting forth that the activities and factors which may affect the quality of the waters of the state "shall be regulated to attain the highest water quality which is reasonable, considering all demands being made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible".

The Fact Sheet and findings for the Tentative Order do not establish that staff has considered such factors or, to the limited extent the factors were considered, staff used out-of-date and incomplete information. In particular, the economic analysis contained in Section VI of the Fact Sheet uses out-of-date information on the economic viability of the cities in the Santa Margarita Region, ignoring the impact of the national recession, which has hit the Region with particular force and which has caused a major reduction in property tax and sale tax revenues available to

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fund water quality activities under the Order. For a more complete economic analysis, please see Attachment 2 to the comment letter.

### Findings in Tentative Order:

**Finding A.4:** This finding states that responses to comments on the Order would be "incorporated by reference" into the findings supporting the Order.

**Comment:** Incorporating responses to comments as to which interested parties have no chance to comment prior to the hearing on the Order raises a due process concern.

**Finding C.14:** This finding states, in relevant part, that "[n]on-storm water (dry weather) discharge from the MS4 is not considered a storm water (wet weather) discharge and therefore is not subject to regulation under the Maximum Extent Practicable (MEP) standard . . . .". The finding further asserts that such discharges are to be "effectively prohibited" from discharge into the MS4.

**Comment:** The rationale for this finding, as set forth in the Fact Sheet, relies on a State Board precedential decision, Order No. WQ 2009-0008. This order has been vacated by order of the Los Angeles County Superior Court in *County of Los Angeles v. State Water Resources Control Board*, Case No. BS 122724 (July 16, 2010). Thus, the order has no further effect and cannot be cited or relied upon by the Board in support of this finding or any other finding or directive in the Order.

Moreover, the finding incorrectly states that discharges of non-stormwater from the MS4 are not subject to the MEP standard. This parsing of "stormwater" and "non-stormwater" is not found in the Clean Water Act, which states only that the MS4 permit "shall require controls to reduce the discharge of *pollutants* to the maximum extent practicable . . . .". 33 U.S.C. 1342(p)(3)(B)(iii) (emphasis supplied). The preamble to the MS4 regulations promulgated by U.S. EPA moreover also acknowledges that "MEP control measures" would be implemented to address not only pollutants in "stormwater" but also from "non-stormwater discharges."

As the preamble states:

[Copermittees are required] to develop management programs for four types of pollutant sources which discharge to large and medium municipal storm sewer systems. Discharges from [such systems] are usually expected to be composed primarily of: (1) Runoff from commercial and residential areas; (2) storm water runoff from industrial areas; (3) runoff from construction sites; and (4) *non-storm water discharges*. Part 2 of the permit application has been designed to allow [permittees] the opportunity to propose *MEP control measures for each of these components of the discharge*". 55 Fed. Reg. at 48052 (emphasis supplied).

This language sets forth EPA's understanding of the plain language of the Act: "pollutants" must be controlled to the MEP from the MS4 "discharge", not merely stormwater. While State Board Order No. WQ 2009-0008 improperly attempted to ignore this distinction and liken non-stormwater discharges to prohibited "illicit discharges", that order has been vacated and cannot be cited by the Board.

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Moreover, the interpretation that the Clean Water Act requires controls of dry weather discharges from the MS4 in the same manner as if such discharges were from an industrial wastewater source ignores the factual complexity of the MS4 discharge. For example, some of that discharge will be composed of exempt discharges, such as car washing runoff, swimming pool drainage, rising groundwater, foundation drains and other such sources. As to these types of discharges, U.S. EPA stated that "it is unlikely Congress intended to require municipalities to effectively prohibit . . . *seemingly innocent flows that are characteristic of human existence in urban environments and which discharge to municipal separate storm sewers*". 55 Fed. Reg. at 48037 (emphasis added). Other parts of that discharge will be comprised of industrial discharges separately permitted by the Board, such as well development discharges. These discharges cannot be distinguished from possible illicit discharges, yet they must still be treated to the MEP. There is no requirement in the Clean Water Act, or in the implementing regulations, to ensure that these mixed dry weather discharges must be "effectively prohibited" in the same way that an industrial plant would be required to control its discharges.

**Finding C.15:** This finding states, in relevant part, that the Board and the Copermittees have identified "landscape irrigation, irrigation water and lawn water, previously exempted discharges, as a source of pollutants and conveyance of pollutants to waters of the U.S." The finding further asserts that such non-exempt discharges are required to be "addressed" as "illicit discharges" and effectively prohibited from entry into the MS4.

**Comment:** The rationale for this prohibition lacks both a factual and legal basis. The factual issues are discussed in the District's technical comments on this issue. With regard to legal issues, the justification for removing the preexisting exemption for these discharges (referred to hereafter as "irrigation water") is completely lacking. First, given that the justification is based on State Board Order WQ 2009-0008, which likens dry weather discharges to "illicit discharges" required to be "effectively prohibited" from entry into the MS4, the vacation of this order by the Los Angeles County Superior court eliminates this Order as a justification for the prohibition.

Second, EPA, in the preamble to the federal MS4 regulations, required that a *permittee* must make a finding that the "irrigation water" discharges must be a "source of pollutants to waters of the United States . . .". 55 Fed. Reg. 48037. Moreover, such discharges must represent a "significant" source of pollutants to waters of the United States "under certain conditions". U.S. EPA *Guidance Manual for the Preparation of Part 2 of the NPDES Permit Application for Discharges from Municipal Separate Storm Sewer Systems*, November 1992 ("EPA Part 2 Guidance Manual"), at p. 6-33. These conditions require a focus not on an entire category of discharges, but rather a discharger-by-discharger examination.

In the MS4 regulatory preamble, EPA stated that "[i]n general, municipalities will not be held responsible for prohibiting some specific components of discharges or flows listed below through their [MS4], even though such components may be considered non-storm water discharges, unless such discharges *are specifically identified on a case-by-case basis as needing to be addressed*". 55 Fed. Reg. 47995 (emphasis supplied). In the Guidance Manual, EPA states:

If an applicant knows . . . that landscape irrigation water from a *particular site* flows through and picks up pesticides or *excess* nutrients from fertilizer applications, there may

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be a reasonable potential for a storm water discharge to result in a water quality impact. In such an event, the applicant should contact the NPDES permitting authority to request that the authority order *the discharger* . . . to obtain a separate NPDES permit (or in this case, the discharge could be controlled through the storm water management program of the MS4).

EPA Part 2 Guidance Manual, p. 6-33 (emphasis added).

Third, the finding asserts that the Board has the authority to "identify exempted discharges as a source of pollutants" and that it has identified the irrigation discharges "as a source of pollutants and conveyance of pollutants to waters of the U.S." Read in the context of the previously cited language, however, the Board has no power greater than a municipality and must identify specific discharges, and not entire categories of discharges. See 55 Fed. Reg. 48037. And, as noted in the white paper on irrigation runoff, the Copermittees have not, in fact, identified irrigation discharges as a source of pollutants or a "conveyance of pollutants" to waters of the United States.

**Finding D.1.b.:** This finding states that "MS4 discharges, however, continue to cause *or contribute to* violations of water quality standards as evidenced by the Copermittees' monitoring results". (Emphasis added)

**Comment:** With respect to discharges that "contribute to" violations of water quality standards, it should be noted that for concentration-based water quality standards, an MS4 discharge at concentrations *below* the water quality standard cannot, as a matter of simple scientific fact, *contribute to* a violation of such a water quality standard. If the discharge is below the standard in question, that discharge will never exceed the water quality standard, no matter the volume of the discharge.

**Finding D.2.g:** This finding, which concerns the effects of urbanization on the characteristics of stormwater flow, states in part that "[h]ydromodification measures for discharges to hardened channels are needed for the future restoration of the hardened channels to their natural state . . . ."

**Comment:** Hardened flood control channels are in place in the Santa Margarita Region due to the need to protect the lives and property of Riverside County residents from floodwaters. Such channels, and other flood control structures, have been established by the District in accordance with its statutory obligations set down by the Legislature in California Water Code App. § 48-9. In particular, we draw the Board's attention to that section of the Water Code setting forth the power of the District to "control the flood and storm waters of said district" and to save and conserve in any manner all or any of such waters and protect from damage from such flood or storm waters the watercourses, watersheds, public highways, life and property in said district." Water Code App. § 48-9(8).

The Board has no statutory jurisdiction under the MS4 program to alter any flood control structures or channels of the District or to some jurisdiction over the construction or location of such structures or channels. Any such alteration or construction must be done with the cooperation and agreement of the District and in accord with the District's statutory mandate to protect the citizens of Riverside County. Please see changes in redline.

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**Finding D.3.c:** This finding states in part that "urban streams", whether natural, anthropogenic or partially modified, are considered part of the "MS4" if they are used as a conveyance for runoff.

**Comment:** The definition of "MS4" does *not* include any natural watercourse. This is evident both from the definition of "MS4" in the federal Clean Water Act regulations and from EPA's comments in the preamble to those regulations. First, the definition of "MS4", in relevant part, states that it consists of "a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains" "owned or operated by" a municipality "having jurisdiction over disposal of . . . storm water" that is "designed or used for collecting or conveying storm water". 40 CFR § 122.26(b)(8). Nothing in that definition even suggests that natural watercourses are part of the MS4, only improved watercourses.

Second, U.S. EPA, in the preamble to the original MS4 regulations, stated unequivocally that "[t]he Agency also wants to clarify that streams, wetlands and other water bodies that are waters of the United States are not storm sewers for the purpose of this rule". 53 Fed Reg. 49442 (December 7, 1988).<sup>1</sup>

Moreover, none of the Copermittees "own" or "operate" a natural stream. Such streams are waters of the State and are "owned" by the people of California.

The authority cited in the Fact Sheet for this finding, a response filed with the State Board in opposition to a petition challenging an MS4 permit issued by the Board to San Diego County, contradicts the federal definition and, under the Supremacy Clause, cannot be employed. Please see changes in redline.

**Finding E.1:** This finding states that the RWL language in the Tentative Order "requires compliance with water quality standards, which for stormwater discharges compliance is to be achieved through an iterative approach requiring the implementation of improved and better-tailored BMPs over time".

**Comment:** The District has two comments regarding this finding, one relating to the language of the finding and one relating to the Fact Sheet discussion of the finding. First, the language of State Board Order WQ 99-05, which establishes the RWL language required to be placed in MS4 permits statewide, is not limited to "stormwater" discharges, but rather to all discharges into receiving waters. See State Board Order WQ 99-05. This is consistent also with the requirement that "discharges" from the MS4, not merely stormwater discharges, must be controlled to the MEP and are not required to meet numeric effluent limitations. 33 U.S.C. § 1342(p)(3)(B)(iii). Second, while the language of the finding correctly states that compliance with water quality standards "is to be achieved through an iterative approach", language in the Fact Sheet improperly contradicts this finding by asserting that compliance with the iterative BMP process

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<sup>1</sup> EPA saw no need to further clarify this point in the final rulemaking for the MS4 regulations. The absence of any discussion of this point in the final rulemaking does not, contrary to comments made by Board staff in responses to comments on the South Orange County MS4 Permit, Order No. R9-2009-0002, indicate that EPA abandoned this reading of the Act.

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"does not shield the discharger from enforcement actions for continued non-compliance with water quality standards". Fact Sheet, page 91.

Such an interpretation contradicts the plain language of Order WQ 99-05 and appears to represent an "end-run" around the entire iterative process and the concept of MEP, which is a flexible concept, intended to allow the development of site-specific permit conditions based on the judgment of the permit writer. See, e.g., 55 Fed. Reg. 48038. The interpretation is, therefore, not consonant with the requirements of the State Board precedential order and the MS4 regulations and should be deleted from the Fact Sheet.

**Finding E.6:** This finding purports to determine that the Tentative Order "does not constitute an unfunded local government mandate subject to subvention under Article XIII B, Section(6) of the California Constitution".

**Comment:** This finding has no place in the Tentative Order. The exclusive jurisdiction over a determination as to whether a mandate constitutes an unfunded state mandate lies with the Commission on State Mandates. The Commission has exclusive authority to determine, in the first instance, whether a requirement constitutes an unfunded state mandate. Government Code §§ 17751 and 17552; *Lucia Mar Unified School District v. Honig* (1988) 44 Cal.3d 830, 837; *Hayes v. Commission on State Mandates* (1992) 11 Cal.App.4<sup>th</sup> 1546, 1596-97. The findings of an agency that has no jurisdiction to make those findings are entitled to no weight.

Second, the finding is erroneous on several grounds. It is erroneous in its assertion that the Tentative Order "implements federally mandated requirements under CWA §402". While true, the Order also contains separate state-mandated requirements. As the California Supreme Court has held, NPDES permits (like the Tentative Order) can contain both federal and state requirements. See *City of Burbank, supra*, 35 Cal. 4<sup>th</sup> at 618, 628. Where those non-federal requirements constitute a new program or higher level of service ordered by the state or exceed federal requirements, those requirements can qualify as a state mandate requiring a subvention of funds. See *Long Beach Unified School District v State of California* (1990) 225 Cal.App.3d 155, 172-73. Even if the requirement derives from federal law, the requirement can still constitute an unfunded state mandate if the state agency has a choice as to whether to impose the requirement on the permittees, e.g., *Hayes*, 11 Cal.App.4<sup>th</sup> at 1593-94.

Recently, the Commission on State Mandates held that both the Los Angeles County MS4 Permit and the San Diego County MS4 Permit contained requirements that constituted an unfunded state mandate, not required by federal law. *In re Test Claim on Los Angeles Regional Quality Control Board Order No. 01-182*, July 31, 2009; *In re Test Claim on San Diego Regional Water Quality Control Board Order No. R9-2007-0001*, March 26, 2010.

The finding further asserts that the obligations to be imposed on the Copermittees are "similar to, and in many respects less stringent than" obligations on non-governmental discharges. A similar argument was considered and rejected by the Commission in the Los Angeles and San Diego MS4 Permit Test Claims. The District disagrees with this assertion, as there are numerous requirements in the Tentative Order that are uniquely applicable to governmental entities. This is, however, a question that would be addressed by the Commission on State Mandates were a test claim to be filed, the only procedure for the determination of this issue.

## Attachment 7: General Legal Comments

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The finding further asserts that Copermittees "have the authority to levy service charges, fees, or assessments to pay for compliance with this Order". This finding is both erroneous on the facts and without any basis in the record. The question of how a state mandate is to be funded is beyond the scope of the Board's expertise and, again, is exclusively within the jurisdiction of the Commission on State Mandates. The finding also asserts that the "Copermittees requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in CWA §301, subdivision (a)". A similar argument was made and rejected in the Los Angeles and San Diego MS4 Permit Test Claims. The finding further asserts that prohibitions against conditions of pollution or nuisance predate the enactment of Article XIII B Section 6 of the California Constitution. The requirements of the Tentative Order far exceed such requirements. And, in any event, whether such requirements predate Article XIII B Section 6 is an issue for the Commission on State Mandates.

The finding is not supported by evidence in the record and is in fact contradicted by controlling legal precedent. Even were it to be included in the Tentative Order, it is entitled to no weight since the Board lacks jurisdiction to make such a finding. For these reasons, the finding and any associated discussion in the Fact Sheet should be deleted. Please see changes in redline.

### **Directives in Tentative Order:**

**Section A.1:** This directive mandates, among other things, that discharges "into" MS4s that would cause or threaten to cause a condition of "pollution, contamination, or nuisance" in receiving waters of the state are prohibited.

**Comment:** While the Board in this Order has jurisdiction to prohibit discharges "from" the MS4, it cannot regulate conditions within the MS4, since these are not in fact "receiving waters of the state". In any event, the language is superfluous, since regulation of a discharge from the MS4, which is subject matter of the Tentative Order, accomplishes the same end. Please see the accompanying redline.

**Section A.3:** This directive both recites the prohibition against discharges that cause or contribute to the violation of water quality standards and introduces the iterative process required by the State Board for MS4 permittees.

**Comment:** To clarify that the iterative process specifically applies to the Copermittees' compliance requirements in Section A.3, language has been added in the redline.

**Section A.3.b:** This directive relates to the requirement that the Copermittees repeat the iterative process to comply with receiving water limitations for continuing or recurring exceedances of the limitations.

**Comment:** Clarifying language changes are requested in the redline.

**Section A.3.c:** This directive indicates that nothing prevents the Board from enforcing any provision of the Order while the Copermittees are preparing and implementing the receiving water limitation report.



## Attachment 7: General Legal Comments

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**Comment:** Clarifying language changes are included in the redline to make clear that so long as the Copermittees are in compliance with the requirements of Section A.3, they are not in violation of the section.

**Section B.2:** This section categorizes the types of non-stormwater discharges that are not prohibited from discharge into the MS4, and thus not subject to the "effectively prohibit" requirement in Section B.1. However, this section improperly omits several categories of non-stormwater discharges, landscape irrigation, irrigation water, lawn watering and non-emergency fire fighting flows. In addition, this section states that the Water Board may require controls for "non-anthropogenic sources".

**Comment:** As discussed above in the District's comment concerning Findings C.14 and C.15, the Board lacks authority to delete an entire category of discharge from the non-stormwater designation. Such authority must be exercised primarily by the Copermittees, based on their evaluation of source-specific facts. And, the ability of the RWQCB to liken such flows to "illicit discharges", apparently authorized by State Board Order No. WQ 2009-0008, is no longer in effect, as that Order has been vacated. Moreover, there is no requirement in the MS4 regulations for controls on "non-anthropogenic sources". Such natural sources are not within the control of the MS4 Copermittees. Moreover, controlling such natural sources as rising groundwater or springs by sealing the MS4 could raise concerns about interference with water rights. Given the natural source of such springs, the incidental presence of pollutants in the waters would have occurred whether an MS4 was in existence or not. Please see the accompanying redline as well as the District's technical comments on this directive.

**Section C:** This section establishes "non-stormwater dry weather action levels" ("NAL") monitoring and the requirements to be followed when NALs exceedances are identified.

**Comment:** In addition to the District's technical comments on this part, the District has the following concerns regarding legal aspects of this directive. The District wishes to incorporate its comments on Findings C.14 and C.15, which discuss the requirements applicable to any discharge from an MS4, which is that the Copermittees control pollutants in such discharges to the MEP. Such a requirement applies not only to discharges of stormwater, but also dry weather discharges, which may (as discussed above) include not only non-exempted non-stormwater discharges but also discharges from exempted non-stormwater sources (those identified in Section B.2 of the Order) as well as discharges from sources holding separate NPDES permits. We note that Section C.2.d. requires prompt notice to the RWQCB of a source that may require a separate NPDES permit. The Board must be prepared to address such sources and not require further investigation by the Copermittees.

As also noted above, in the preamble to the MS4 regulations, U.S. EPA indicated that the MEP control requirement would apply to all discharges from MS4s, including "non-stormwater discharges". 55 Fed. Reg. 48052.

**Section E.1.a:** This directive requires the Copermittees to have legal authority to, among other things, "control the quality of runoff from industrial and construction sites", including sites that have coverage under the general industrial and construction stormwater permits.

## Attachment 7: General Legal Comments

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**Comment:** As separate NPDES permits, the general construction and general industrial stormwater permits allow discharge into the MS4 so long as those permits are being complied with. Copermittees do not have authority to contradict the requirements of the general permits. This requirement is vague and ambiguous, and goes beyond the requirements of the MS4 regulations, which require that Copermittees demonstrate that they have legal authority to control discharges into their MS4 systems.

**Sections E.1.j and k:** These directives require the Copermittees to have legal authority to require the use of BMPs to prevent or reduce the discharge of pollutants into MS4s from stormwater to the MEP and to require documentation on such BMPs.

**Comment:** The Copermittees are required under the Clean Water Act to control discharge of pollutants *from* their MS4 to the MEP standard. 33 U.S.C. § 1342(p)(3). There is no requirement that discharges *into* the MS4 meet this standard, though the Copermittees are free to impose such a standard voluntarily. These provisions are not required and should either be removed or made optional for the Copermittees. The requirements of these directives are also duplicative of Section E.1.i., which already requires the Copermittees to have the legal authority to require reports from dischargers to the MS4.

**Section F.1.h(h):** This directive requires that where Priority Development Projects are adjacent to or will modify stream channels, the use of hardscape and other materials is forbidden.

**Comment:** As noted above, the District has a statutory mandate to protect the lives and property of the citizens of Riverside County from floodwaters. If, in the professional judgment of the District's engineers, hardscape or other engineering improvements are required in a stream channel affected by this directive due to flood control concerns, the District must be allowed to make that judgment. The Board does not have the hydrologic/hydraulic expertise, nor is it authorized by the Legislature to make flood control judgments and presumably would not wish to be a defendant in a lawsuit brought by flood victims whose lives or property was affected by the inability of the District to make necessary flood control decisions.

In making this comment, the District wants to be clear that it is not unwilling to accommodate potential future channel rehabilitation efforts where flood control will not be affected. Please see the accompanying redline for suggested language to address these concerns.

**Section F.2.a:** This directive requires the Copermittees to update their grading and other ordinances as necessary to comply with the Order and including requirements for implementing all designated BMPs and other measures.

**Comment:** The drafting and enforcement of ordinances by a municipality is a municipal function that cannot be directed by the Regional Board. Article XI, section 7 of the Constitution guarantees municipalities the right to "make and enforce within [their] limits all local police, sanitary and other ordinances and regulations not in conflict with general laws". Thus, specific requirements as to the content of ordinances cannot be directed by the Board. The redline requests deletion of this directive.

**Section F.3.b.(5):** This directive requires that the Copermittee stormwater ordinances must contain certain enforcement components.

## Attachment 7: General Legal Comments

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**Comment:** The drafting and enforcement of ordinances by a municipality is a municipal function that cannot be directed by the Regional Board. Article XI, section 7 of the Constitution guarantees municipalities the right to "make and enforce within [their] limits all local police, sanitary and other ordinances and regulations not in conflict with general laws". Thus, specific requirements as to the content of ordinances cannot be directed by the Board. The redline requests deletion of this requirement.

**Section F.3.c.(4):** This directive requires that each Copermittee "must ensure that effective measures exist and are implement or required to be implemented to ensure that runoff within and from common interest developments, including areas managed by associations and mobile home parks, and meets the objectives of this section and Order".

**Comment:** The Fact Sheet inappropriately states that the Tentative Order "interprets common interest areas as property subject to the codes and ordinance and enforcement mechanisms of the city or county in which it resides and, therefore, holds the local government responsible for the discharge of wastes from storm water conveyance systems located within these areas".

The Tentative Order regulates discharges from the MS4. Drainage systems and the runoff handled *within* a private development or common interest area generally are not part of the Copermittees' MS4, as the Copermittees (unless they actually maintain their MS4 within such areas) have no right to maintain or regulate such internal systems, beyond the enforcement of local ordinances regulating discharges *into* the Copermittees' MS4 or through the requirement to install and maintain BMPs. Discharges from such systems are thus no different than discharges from any other private property within the Copermittees' jurisdiction. The first full paragraph in this section should be deleted because it is merely prefatory language to the specific requirements set forth in the remainder of the section.

**Section F.3.c.(5):** This directive requires the Copermittees to enforce their ordinances with respect to grading activities on privately owned unpaved roads "so as to prevent impacts to water quality".

**Comment:** In addition to the general objection to the requirement to regulate unpaved roads, found in a separate white paper and in the general comment letter, this specific directive violates the constitutional requirement that the drafting and enforcement of ordinances by a municipality is a municipal function that cannot be directed by the Regional Board. Article XI, section 7 of the Constitution guarantees municipalities the right to "make and enforce within [their] limits all local police, sanitary and other ordinances and regulations not in conflict with general laws". Thus, specific requirements as to the content of ordinances cannot be directed by the Board. Moreover, the scope of the Order is to address discharges from the MS4, not discharges from non-point or non-MS4 sources that may affect "water quality". The redline requests deletion of this requirement.

**Section F.6:** This directive includes a description of the purposes of the education program with respect to stormwater and non-stormwater discharges.

**Comment:** The redline includes revisions that correctly state the requirements of the Clean Water Act.

## Attachment 7: General Legal Comments

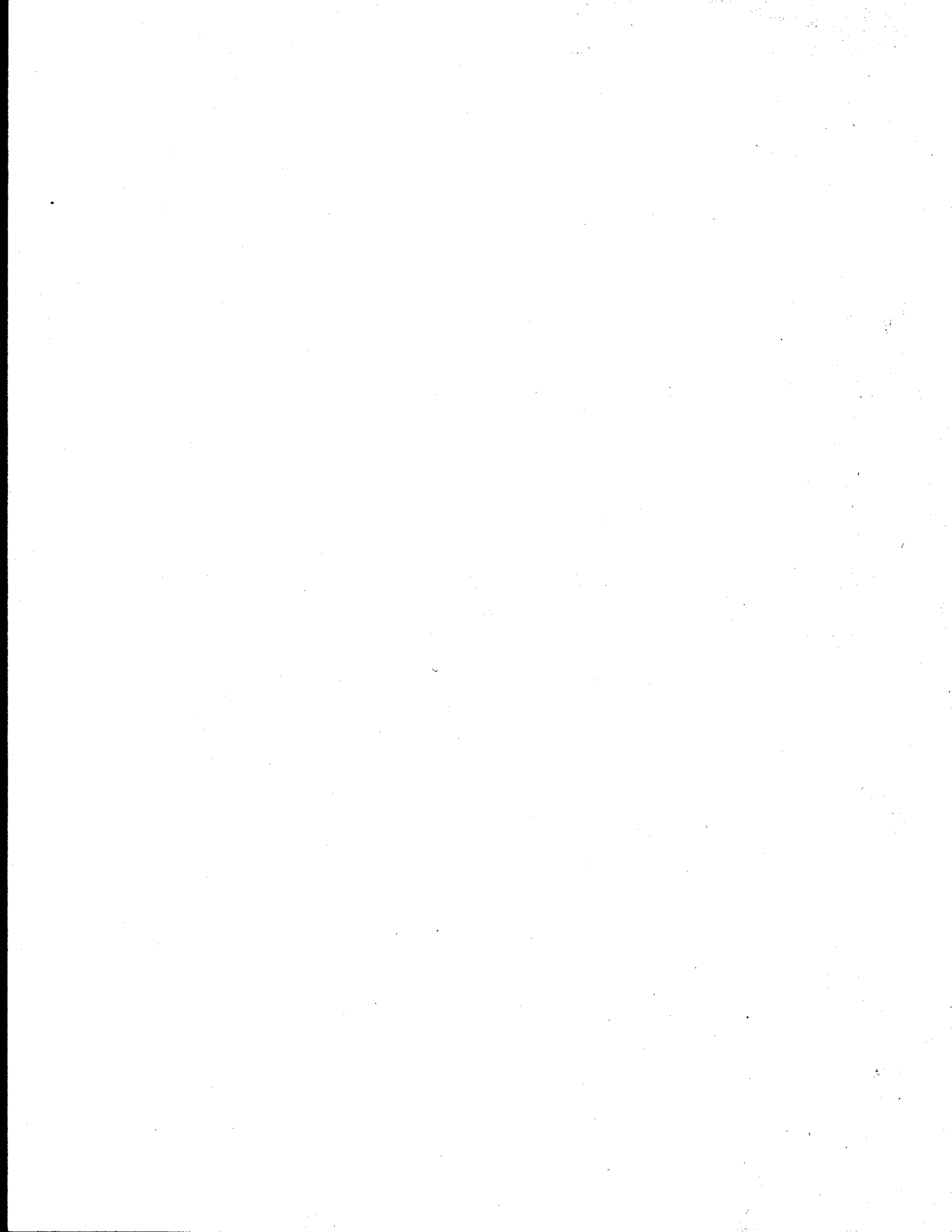
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**Section H.1:** This directive requires that each "Copermittees must exercise its full authority to secure the resources necessary to meet all requirements of this Order".

**Comment:** There is no statutory or regulatory authority for this requirement. The MS4 regulations require *only* that the Copermittees submit a "fiscal analysis" of the resources required to accomplish permit program activities, including a description of the sources of funds. 40 CFR § 122.26(d)(2)(vi). Moreover, this requirement is inherently vague and ambiguous and is, therefore, especially troublesome given the economic conditions now faced by the County and the Cities within the Santa Margarita region. This directive should be deleted, or at minimum, revised as shown in the redlines.

**Standard Provisions, Attachment B:**

In the Standard Provisions, it is stated that the Order "may be modified, revoked and reissued, or terminated for cause", citing 40 CFR § 122.41(f). However, the Standard Provisions do not cite 40 CFR § 122.62 or provide that any such modification, revocation or reissuance may only be carried out upon prior notice and hearing. See Water Code § 13263 (regional board, "after any necessary hearing", may prescribe requirements for waste discharges). The Standard Provisions should make clear that any modification, revocation or reissuance of the Order can only be accomplished at a noticed public hearing, with opportunity for comment.



## Attachment 8: District-Specific Comments

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### **DISTRICT-SPECIFIC COMMENTS OF THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT ON TENTATIVE ORDER NO. R9-2010-0016, WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) DRAINING THE COUNTY OF RIVERSIDE**

The following comments are made by the Riverside County Flood Control and Water Conservation District (District) with respect to District-specific issues raised by the above referenced Tentative Order (Order) as the Order pertains to the District. These comments are in addition to the comments made by the District and on behalf of the other Copermittees, the County of Riverside and the Cities of Menifee (to the extent that this City will remain as a Copermittee under the Order), Murrieta, Temecula and Wildomar. We also understand that the County and the individual Cities will be filing comments on the Order under separate cover. These comments are intended to supplement those comments filed by the District on behalf of itself and the other Copermittees.

The District reserves the right to make additional comments on the Order prior to the close of the public hearing to adopt the Order.

The focus of these comments is to apprise Regional Board staff of the limited jurisdiction of the District within the Santa Margarita Region and to suggest language clarifying the requirements of the Order to reflect the District's limited jurisdiction. While aspects of the Order clearly apply to the District as an owner and operator of the Municipal Separate Storm Sewer System (MS4) serving the watershed, because of the limited nature of the District's jurisdiction over land areas within the watershed, many cannot. For example, the District, unlike other Copermittees, does not control activities on land not directly owned by the District, nor does it have ordinances or issue permits governing the use of such land. The District simply does not have statutory authority to govern the activities of the residents within a municipal area, unlike the other Copermittees.

Thus, a number of the provisions in the Order are not applicable to the District in the same manner and some are entirely not applicable. This letter highlights those provisions. The comments noted below also are reflected in the redline of the Order submitted with these and other comment white papers.

#### **Comments on Findings**

**1. Need for New Finding B.2:** Section B in the findings describes the regulated parties. The District requests a new finding B.2, which provides as follows:

The Riverside County Flood Control and Water Conservation District (District) is not a municipality but rather operates various elements of the MS4 system within the San Diego Region in the form of flood control structures, including channels. Such channels and other flood control structures have been constructed and are operated by the District in accordance with its statutory obligations established by the Legislature in California Water Code App. § 48-9, to "control the flood and storm waters of said district" and to save and conserve in any manner all or any of such waters and protect from damage from such flood or storm waters the watercourses, watersheds, public highways, life and property in said district." Water Code App. § 48-9(8). As

## Attachment 8: District-Specific Comments

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a creature of state law, and not a municipal corporation, the District does not exercise jurisdiction over land areas within the San Diego Region and the activities carried out on those land areas outside of its limited rights-of-way. Please see redline.

2. **Findings, Section D.3:** This section of the Findings referring to "Construction and Existing Development" is of limited applicability to the District, since the only construction projects that would be overseen by the District are of or within its own facilities. The redline sets forth a change to clarify this limited applicability.

### COMMENTS ON DIRECTIVES

1. **Section F.1.a:** The District, as a non-municipality, does not prepare a General Plan or equivalent because it does not govern development within a geographical area. Thus, the requirements of this section of the Order are not applicable to it. Please see redline.

2. **Section F.1.d.(4)(a)(iii):** Since the District, as a non-municipality, does not have land use codes, policies and ordinances, this provision, relating to the removal of "barriers to LID implementation," is not applicable to it. Please see redline.

3. **Section F.1.d.(9):** The only Priority Development Projects (PDP) relevant to the District would be the District's owned non-flood control channel projects, since it has no authority to permit private or non-District facilities and exercises jurisdiction over no private land areas within the watershed, and because the construction of flood control channels is subject to the jurisdiction of the U.S. Army Corps of Engineers through the Clean Water Act Section 404 permit program, not the NPDES permit program under Section 402 of the Clean Water Act. Thus, this directive, which requires the verification of compliance by third parties with Standard Stormwater Mitigation Plan (SSMP) requirements, is not applicable to the District. Please see redline.

4. **Section F.1.e:** As noted above, the only PDPs over which the District would have authority are its own projects. Thus, this directive, which requires inspection of BMPs at PDPs constructed by third parties, is not applicable to the District. Please see redline.

5. **Section F.1.g:** Since the District is not a municipality, and does not permit third parties to build development projects, this provision is not applicable to it. (It should be noted that this directive also has been objected to by the District on behalf of itself and the other Copermittees.)

6. **Sections F.2, F.2.a and F.2.f:** These directives require each Copermittee to comply with each of the requirements of the section, to review and update its grading and other ordinances, and implement an enforcement process for Construction sites. These requirements are not applicable to the District in the same manner as the other Copermittees, as the District is not a municipality and does not issue grading or other permits for private land use activities. Please see redline.

7. **Sections F.3.b-c:** These directives, which require the development of commercial/industrial and residential programs, are applicable to a municipality but not to the District, which does not have land area occupied by either commercial/industrial or residential developments. Such requirements may be applicable to the municipal Copermittees, but not to the District, which only operates MS4 within the

## Attachment 8: District-Specific Comments

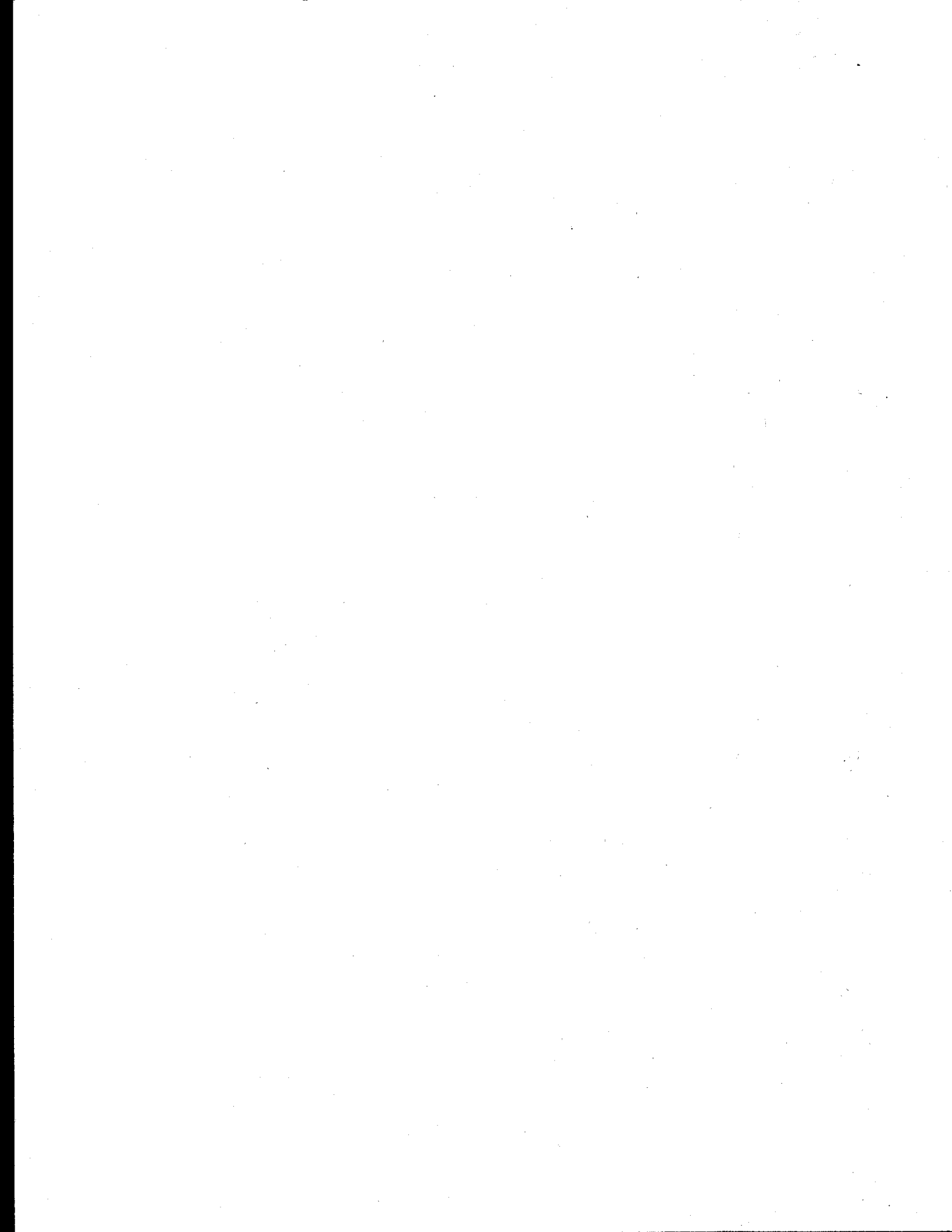
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Permit area. The District's rights-of-way are limited to that which is necessary to properly operate flood control infrastructure. Please see redline.

**8. Section F.3.d:** This directive requires development of a retrofitting program for "municipal, industrial, commercial and residential" areas of development. The District only maintains MS4 facilities within the Santa Margarita Region, and does not have jurisdiction over other areas of development. The Order should make clear that any retrofitting requirements (which are the subject of separate comments by the District on behalf of other Copermittees) apply only to development with the jurisdiction of the Copermittee. Clarifying changes are set forth in the redline.

**9. Section F.6:** This directive contains requirements for education of various target communities, including commercial and industrial owners and operators and residential communities, most of which are not within the jurisdiction of the District. The Order should make clear that such educational programs must be consistent with the jurisdiction of the Copermittees. Clarifying changes are set forth in the redline.





**Attachment 9: Santa Margarita Region MS4  
Copermittees Comments on  
Tentative Order R9-2010-0016 and Attachment E**

**California Regional Water Quality Control Board  
San Diego Region**

**Waste Discharge Requirements for  
Discharges from the  
Municipal Separate Storm Sewer Systems (MS4s)  
Draining the County of Riverside, the Incorporated  
Cities of Riverside County, and the Riverside  
County Flood Control and Water Conservation  
District within the San Diego Region**

**Tentative Order No. R9-2010-0016**  
**NPDES NO. CAS0108740**

*October 13, 2010*

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD**  
**SAN DIEGO REGION**  
9174 Sky Park Court, Suite 100, San Diego, California 92123-4340  
Phone • (858) 467-2952 • Fax (858) 571-8972  
<http://www.waterboards.ca.gov/sandiego>

To request copies of the Riverside County Municipal Storm Water Permit, please contact Ben Neill, Water Resources Control Engineer at (858) 467 – 2983, [bneill@waterboards.ca.gov](mailto:bneill@waterboards.ca.gov)

Documents also are available at: <http://www.waterboards.ca.gov/sandiego>

**Waste Discharge Requirements for  
Discharges from the  
Municipal Separate Storm Sewer Systems (MS4s)  
Draining the County of Riverside, the Incorporated Cities of  
Riverside County, and the Riverside County Flood Control  
and Water Conservation District within the San Diego Region**

Adopted by the  
California Regional Water Quality Control Board  
San Diego Region  
on October 13, 2010

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION  
9174 Sky Park Court, Suite 100  
San Diego, California 92123-4340  
Telephone (858) 467-2952**

**STATE OF CALIFORNIA**  
ARNOLD SCHWARZENEGGER, Governor  
LINDA S. ADAMS, Agency Secretary, California Environmental Protection Agency



**California Regional Water Quality Control Board  
San Diego Region**

David King <i>Chair</i>	Recreation / Wildlife
Grant Destache <i>Vice Chair</i>	Industrial Water Use
Eric Anderson	Irrigated Agriculture
Wayne Rayfield	Water Quality
George Loveland	Water Supply
Marc Luker	Undesignated (Public)

David W. Gibson, *Executive Officer*  
James Smith, *Assistant Executive Officer*

**This permit was prepared under the direction of**

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**by**

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Chad Lörtscher Loflen, *Environmental Scientist*  
Wayne Chiu P.E., *Water Resource Control Engineer*

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Attachment E – Receiving Waters And MS4 Discharge Monitoring And Reporting

Program No. R9-2010-0016

Attachment F – Data



**DRAFT**

The California Regional Water Quality Control Board, San Diego Region (hereinafter San Diego Water Board), finds that:

**A. BASIS FOR THE ORDER**

1. This Order is based on the federal Clean Water Act (CWA), the Porter-Cologne Water Quality Control Act (Division 7 of the Water Code, commencing with Section 13000), applicable State and federal regulations, all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the State Water Resources Control Board (State Water Board), the Water Quality Control Plan for the San Diego Basin adopted by the San Diego Water Board (Basin Plan), the California Toxics Rule, and the California Toxics Rule Implementation Plan.
2. This Order reissues National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108766, which was first adopted by the San Diego Water Board on July 16, 1990 (Order No. 90-38), and then reissued on May 13, 1998 (Order No. 98-02). On May 26, 1998, the United States Environmental Protection Agency (USEPA), Region IX, objected to Order No. 98-02 due to concerns regarding Receiving Water Limitations (RWL) language. The USEPA concluded that the RWL language in the permit did not comply with the CWA and its implementing regulations. On April 27, 1999, the USEPA reissued the MS4 permit, which the San Diego Water Board adopted as Addendum No. 1 to Order No. 98-02 on November 8, 2000. On July 14, 2004, the San Diego Water Board adopted the third term MS4 permit, Order No. R9-2004-001. On January 15, 2009, the Riverside County Flood Control and Water Conservation District (RCFCD), as the Principal Copermittee, submitted a Report of Waste Discharge (ROWD) for reissuance of the municipal separate storm sewer system (MS4) Permit.
3. This Order is consistent with the following precedential Orders adopted by the State Water Board addressing MS4 NPDES Permits: Order 99-05, Order WQ-2000-11, Order WQ 2001-15, Order WQO 2002-0014, and ~~Order WQ 2009-0008 (SWRCB/OCC FILE A-1780)~~.
4. The Fact Sheet / Technical Report for the Order No. R9-2010-0016, NPDES No. CAS0108766, Waste Discharge Requirements for Discharges from the MS4s Draining the County of Riverside, the Incorporated Cities of Riverside County, and the Riverside County Flood Control and Water Conservation District within the San Diego Region, includes cited regulatory and legal references and additional explanatory information and data in support of the requirements of this Order. ~~This information, including any supplements thereto, and any response to comments on the Tentative Order, is hereby incorporated by reference into these findings.~~

Comment [CP1]: This order has been vacated and can no longer be referenced.

Comment [CP2]: This is inappropriate. The information in the fact sheet is/are not findings, they are explanations. Further a finding cannot be created through a response to comments.

FINDINGS A: BASIS FOR THE ORDER

**DRAFT****B. REGULATED PARTIES**

1. Each of the persons in Table 1 below, hereinafter called Copermitees or dischargers, owns or operates an MS4, through which it discharges into waters of the United States (U.S.) within the San Diego Region. These MS4s fall into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) a small MS4 that is "interrelated" to a medium or large MS4; or (3) an MS4 that contributes to a violation of a water quality standard; or (4) an MS4 which is a significant contributor of pollutants to waters of the U.S.

Table 1. Municipal Copermitees

1. City of Murrieta	4. County of Riverside
2. City of Temecula	5. Riverside County Flood Control and Water Conservation District
3. City of Wildomar	
6. City of Menifee <sup>1</sup>	

The Cities of Murrieta, Menifee and Wildomar also discharge into the waters of the U.S. in the California Regional Water Quality Control Board, Santa Ana Region (Santa Ana Water Board), so are located partially within both the San Diego and Santa Ana Water Board boundaries. As allowed by California Water Code (CWC) §13228, these Cities submitted written requests to be regulated for MS4 purposes under a permit adopted by only one Water Board. As authorized by CWC §13228 and pursuant to a written agreement between the San Diego Water Board and the Santa Ana Water Board, the Cities of Murrieta and Wildomar are wholly regulated by the San Diego Water Board under this Order, including those portions of the Cities jurisdiction not within the San Diego Water Board's region. Similarly, the City of Menifee is wholly regulated by the Santa Ana Water Board under Order No. R8-2010-0033, including those portions of the City of Menifee within the San Diego Water Board's region.<sup>1</sup>

2. The Riverside County Flood Control and Water Conservation District (District) is not a municipality but rather operates various elements of the MS4 system within the San Diego Region in the form of flood control structures, including channels. Such channels and other flood control structures have been constructed and are operated by the District in accordance with its statutory obligations established by the Legislature in California Water Code App. § 48-9, to "control the flood and storm waters of said district" and to save and conserve in any manner all or any of such waters and protect from damage from such flood or storm waters the watercourses, watersheds, public highways, life and property in said district." Water Code App. § 48-9(8). As a creature of state law and not a municipal corporation, the District

<sup>1</sup> Until an agreement is finalized, the City of Menifee is included as a Copermitee in this Order.

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does not exercise jurisdiction over land areas within the San Diego Region and the activities carried out on those land areas.

**C. DISCHARGE CHARACTERISTICS**

1. Discharges from the MS4 may contain waste, as defined in the CWC, and pollutants that adversely affect the quality of the waters of the State. The discharge of pollutants from an MS4 is a "discharge of pollutants from a point source" into waters of the U.S. as defined in the CWA.
2. MS4 storm water and non-storm water discharges are likely to contain pollutants that cause or threaten to cause a violation of water quality standards, as outlined in the Basin Plan. Storm water and non-storm water discharges from the MS4 are subject to the conditions and requirements established in the Basin Plan for point source discharges.
3. The most common categories of pollutants in runoff include total suspended solids, sediment, pathogens (e.g., bacteria, viruses, protozoa), heavy metals (e.g., copper, lead, zinc and cadmium), petroleum products and polynuclear aromatic hydrocarbons, synthetic organics (e.g., pesticides, herbicides, and PCBs), nutrients (e.g., nitrogen and phosphorus fertilizers), oxygen-demanding substances (decaying vegetation, animal waste), detergents, and trash.
4. The discharge of pollutants and/or increased flows from MS4s may cause or threaten to cause the concentration of pollutants to exceed applicable receiving water quality objectives and/or impair or threaten to impair designated beneficial uses resulting in a condition of pollution (i.e., unreasonable impairment of water quality for designated beneficial uses), contamination, or nuisance.
5. Pollutants in runoff can threaten and adversely affect human health. Human illnesses have been clearly linked to ~~can be caused by recreating near storm drains flowing to receiving waters.~~ Also, runoff pollutants in receiving waters can bioaccumulate in the tissues of invertebrates and fish, which may be eventually consumed by humans.
6. Runoff discharges from MS4s often contain pollutants that cause toxicity to aquatic organisms (i.e., adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies). Toxic pollutants impact the overall quality of aquatic systems and beneficial uses of receiving waters.
7. The Copermittees' MS4 discharges runoff into lakes, drinking water reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within one of the eleven hydrologic units (Santa Margarita Hydrologic Unit) comprising the San Diego Region as shown in Table 2. Some of

**Comment [DB3]:** See legal comments in Attachment 8

**Comment [CP4]:** No link has been demonstrated within this watershed. (Partially due to lack of recreation in receiving waters)

The findings should be accurate for reflective of the specific area the permit is regulating.

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the receiving water bodies have been designated as impaired by the San Diego Water Board in 2009 pursuant to CWA section 303(d).

Table 2. Common Watersheds and CWA Section 303(d) Impaired Waters in the San Diego Region.

Hydrologic Area (HA) or Hydrologic Subarea (HSA) of the Santa Margarita Hydrologic Unit	Major Receiving Water Bodies	303(d) Pollutant(s)/stressor or Water Quality Effect <sup>2</sup>
DeLuz Creek HSA (902.21)	De Luz Creek	Iron, Manganese, Nitrogen, Sulfates
Murrieta HSA (902.32)	Long Canyon Creek (tributary to Murrieta Creek)	Chlorpyrifos, E. Coli, Fecal Coliform, Iron, Manganese
Wolf HSA (902.52)	Murrieta Creek	Chlorpyrifos, Copper, Iron, Manganese, Nitrogen, Toxicity
Pauba HSA (902.51)	Redhawk Channel	Chlorpyrifos, Copper, Diazinon, E. Coli, Fecal Coliform, Iron, Manganese, Nitrogen, Phosphorus, Total Dissolved Solids
Gavilan HSA (902.22)	Sandia Creek	Iron, Sulfates
Gertrudis HSA (902.42)	Santa Gertrudis Creek	Chlorpyrifos, Copper, E. Coli, Fecal Coliform, Iron, Phosphorus
Lower Ysidora HSA (902.11)	Santa Margarita Lagoon	Eutrophic
Lower Ysidora HSA (902.11)	Santa Margarita River (Lower)	Enterococcus, Fecal Coliform, Phosphorus, Total Nitrogen as N
Gavilan HSA	Santa Margarita River (Upper)	Toxicity

<sup>2</sup> The listed 303(d) pollutant(s) do not necessarily reflect impairment of the entire corresponding WMA or all corresponding major surface water bodies. The specific impaired portions of each WMA are listed in the State Water Resources Control Board's 2008 Section 303(d) List of Water Quality Limited Segments.

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Table 2. Common Watersheds and CWA Section 303(d) Impaired Waters in the San Diego Region.

Hydrologic Area (HA) or Hydrologic Subarea (HSA) of the Santa Margarita Hydrologic Unit	Major Receiving Water Bodies	303(d) Pollutant(s)/stressor or Water Quality Effect <sup>2</sup>
(902.22)		
Pauba HSA (902.51)	Temecula Creek	Chlorpyrifos, Copper, Phosphorus, Total Dissolved Solids, Toxicity
French HSA (902.33)	Warm Springs Creek (Riverside County)	Chlorpyrifos, E. Coli, Fecal Coliform, Iron, Manganese, Phosphorus, Total Nitrogen as N

- 8. Trash is a persistent pollutant that can enter receiving waters from the MS4, accumulate, and be transported downstream into receiving waters over time. Trash poses a serious threat to the beneficial uses of the receiving waters, including, but not limited to, human health, rare and endangered species, navigation and human recreation.
- 9. The Copermittees' water quality monitoring data submitted to date documents persistent violations ~~exceedances~~ of Basin Plan water quality objectives for various runoff-related pollutants (indicator bacteria, dissolved solids, turbidity, metals, pesticides, etc.) at various watershed monitoring stations. Persistent toxicity has also been observed at some watershed monitoring stations. In addition, bioassessment data indicate that the majority of the monitored receiving waters have Poor to Very Poor Index of Biotic Integrity ratings. In sum, the above findings indicate that runoff discharges are causing or contributing to water quality impairments, and are a leading cause of such impairments in Riverside County.
- 10. When natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops, and parking lots, the natural absorption and infiltration abilities of the land are lost. Therefore, runoff leaving a developed area ~~is can be~~ significantly greater in runoff volume, velocity, and peak flow rate than pre-development runoff from the same area. Runoff durations can also increase as a result of flood control and other efforts to control peak flow rates. Increased volume, velocity, rate, and duration of runoff, and decreased natural clean sediment loads, greatly accelerate the erosion of downstream natural channels. Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as a 3-5 percent conversion from

**Comment [CP5]:** It is only a violation if the pollutant has not been reduced to the MEP in accordance with a Permit.

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natural to impervious surfaces. The increased runoff characteristics from new development must be controlled to protect against increased erosion of channel beds and banks, sediment pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

11. Development creates new pollution sources as human population density increases and brings with it proportionately higher levels of car emissions, car maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, trash, etc. which can either be washed or directly dumped into the MS4. As a result, the runoff leaving the developed urban area is typically significantly greater in pollutant load than the pre-development runoff from the same area. These increased pollutant loads must be controlled to protect downstream receiving water quality.
12. Development and urbanization especially threaten environmentally sensitive areas (ESAs), such as water bodies designated as supporting a RARE beneficial use (supporting rare, threatened or endangered species) and CWA 303(d)-impaired water bodies. Such areas have a much lower capacity to withstand pollutant loads than other, more sensitive areas. In essence, development that is ordinarily insignificant in its impact on the environment may become significant in a particularly sensitive environment. Therefore, additional controls to reduce storm water pollutants from new and existing development may be necessary for areas adjacent to or discharging directly to an ESA.
13. Although dependent on several factors, the risks typically associated with properly managed infiltration of runoff (especially from residential land use areas) are not significant. The risks associated with infiltration can be managed by many techniques, including (1) designing landscape drainage features that promote infiltration of runoff, but do not "inject" runoff (injection bypasses the natural processes of filtering and transformation that occur in the soil); (2) taking reasonable steps to prevent the illegal disposal of wastes; (3) protecting footings and foundations; (4) ensuring that each drainage feature is adequately maintained in perpetuity; and (5) pretreatment.
14. ~~Non-storm water (dry weather) discharge from the MS4 is not considered a storm water (wet weather) discharge and therefore is not subject to regulation under the Maximum Extent Practicable (MEP) standard from CWA 402(p)(3)(B)(iii), which is explicitly for "Municipal ... Stormwater Discharges (emphasis added)" from the MS4. Rather, non-storm water discharges into the storm sewers, per CWA 402(p)(3)(B)(ii), are to be effectively prohibited. Such dry weather non-storm water discharges have been shown to contribute significant levels of pollutants and flow in arid, developed Southern California watersheds and are to be effectively prohibited under the CWA.~~
15. Non-storm water discharges to the MS4 granted an influent exception [i.e., which are exempt from the effective prohibition requirement set forth in CWA section 402(p)(3)(B)(ii)] under 40 CFR 122.26 are included within this Order. Any exempted

**Comment [DB6]:** See legal comments in Attachment 7. Discharges of pollutants from the MS4, of whatever source, are subject to the MEP standard. The MEP standard applies to municipal discharges, not to only municipal storm water discharges.

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discharges identified by Copermitees as a source of pollutants are subsequently required to be *addressed* (emphasis added) as illicit discharges through prohibition and incorporation into existing IC/ID programs. Furthermore, the USEPA contemplates that permitting agencies such as the San Diego Water Board may also identify exempted discharges as a source of pollutants required to be addressed as illicit discharges (See VOL. 55 Fed. Reg. 48037). ~~The San Diego Water Board and the Copermitees have identified landscape irrigation, irrigation water and lawn water, previously exempted discharges, as a source of pollutants and conveyance of pollutants to waters of the U.S.~~

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**Comment [CP7]:** This is a false statement - the Copermitees have not made this determination (or 'identification'). See also comments within the letter and attachments thereto

**D. RUNOFF MANAGEMENT PROGRAMS****1. General**

- a. This Order specifies requirements necessary for the Copermitees to reduce the discharge of pollutants in storm water to the MEP. However, since MEP is a dynamic performance standard, which evolves over time as runoff management knowledge increases, the Copermitees' runoff management programs *must continually* be assessed and modified to incorporate improved programs, control measures, best management practices (BMPs), etc. in order to achieve the evolving MEP standard. Absent evidence to the contrary, this continual assessment, revision, and improvement of runoff management program implementation is expected to ultimately achieve compliance with water quality standards in the Region. However, it is recognized that there are other sources of pollutants into the receiving waters other than the Copermitees' MS4, and there are certain activities and sources that generate pollutants present in MS4 discharges may be beyond the ability of Copermitees to prevent or eliminate. Examples of these activities and sources include, but are not limited to: emissions from internal combustion engines, brake pad wear and tear, atmospheric deposition, bacteria and wildlife and leaching of naturally occurring nutrients and minerals from local soils. This Order is not intended to address these background or naturally occurring pollutants or flows.
- b. The Copermitees have generally been implementing the jurisdictional runoff management programs (JRMPs) required pursuant to Order No. R9-2004-001 since July 14, 2005. Prior to that, the Copermitees were regulated by Order No. 98-02, since May 13, 1998. MS4 discharges, however, continue to cause or contribute to violations of water quality standards as evidenced by the Copermitees' monitoring results.
- c. This Order contains new or modified requirements that are necessary to improve Copermitees' efforts to reduce the discharge of pollutants in storm water runoff to the MEP and achieve water quality standards. Some of the new or modified requirements, such as the revised Watershed Water Quality Workplan (Watershed Workplan) section, are designed to specifically address high priority

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water quality problems. Other requirements, such as for unpaved roads, are a result of San Diego Water Board's identification of water quality problems through investigations and complaints during the previous permit period. Other new or modified requirements address program deficiencies that have been noted during audits, report reviews, and other San Diego Water Board compliance assessment activities. Additional changes in the monitoring program provide consistency with the Code of Federal Regulations, USEPA guidance, State Water Board guidance, and the Southern California Monitoring Coalition recommendations.

- d. Updated individual ~~Drainage Area~~ Storm Water Management Plans (DAMP Individual SWMP), and Watershed Stormwater Management Plans (watershed SWMPs), which, together with the DAMP describe the Copermittees' runoff management programs in their entirety, are needed to guide the Copermittees' runoff management efforts and aid the Copermittees in tracking runoff management program implementation. Hereinafter, the individual DAMP SWMP is referred to as the JRMPs and the Watershed SWMP is referred to as the Watershed Workplan. It is practicable for the Copermittees to update the JRMPs and Watershed Workplans within the timeframe specified in this Order, since significant efforts to develop these programs have already occurred.
- e. Pollutants can be effectively reduced in storm water runoff by the application of a combination of pollution prevention, source control, and treatment control BMPs. Pollution prevention is the reduction or elimination of pollutant generation at its source and is the best "first line of defense." Source control BMPs (both structural and non-structural) minimize the contact between pollutants and flows (e.g., rerouting run-on around pollutant sources or keeping pollutants on-site and out of receiving waters). Treatment control BMPs remove pollutants that have been mobilized by wet-weather or dry-weather flows.
- f. Runoff needs to be addressed during the three major phases of urban development (planning, construction, and use) in order to reduce the discharge of pollutants from storm water to the MEP, effectively prohibit non-storm water discharges and protect receiving waters. Development which is not guided by water quality planning policies and principles can unnecessarily result in increased pollutant load discharges, flow rates, and flow durations which can negatively impact receiving water beneficial uses. Construction sites without adequate BMP implementation can result in sediment runoff rates which greatly exceed natural erosion rates of undisturbed lands, causing siltation and impairment of receiving waters. Existing development can generate substantial pollutant loads which are can be discharged in runoff to receiving waters.
- g. Annual reporting requirements included in this Order are necessary to meet federal requirements and to evaluate the effectiveness and compliance of the Copermittees' programs.

Comment [CPS]: Terminology in this paragraph was not correct for the Santa Margarita Region



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- h. This Order establishes Storm Water Action Levels (SALs) for selected pollutants based on USEPA Rain Zone 6 (arid southwest) Phase I MS4 monitoring data for pollutants in storm water. The SALs were computed as the 90<sup>th</sup> percentile of the data set, utilizing the statistical based population approach, one of three approaches recommended by the State Water Board's Storm Water Panel in its report, 'The Feasibility of Numerical Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities (June 2006). SALs are identified in Section D of this Order. Copermitees must implement a timely, comprehensive, cost-effective storm water pollution control program to reduce the discharge of pollutants in storm water from the permitted areas so as not to exceed the SALs to the MEP. Exceedance of SALs may indicate inadequacy of programmatic measures and BMPs required in this Order.

**2. Development Planning**

- a. The Standard Storm Water Mitigation Plan (SSMP) requirements contained in this Order are consistent with Order WQ-2000-11 adopted by the State Water Board on October 5, 2000. In the precedential order, the State Water Board found that the design standards, which essentially require that runoff generated by 85 percent of storm events from specific development categories be infiltrated or treated, reflect the MEP standard. The order also found that the SSMP requirements are appropriately applied to the majority of the Priority Development Project categories that are also contained in Section F.1 of this Order. The State Water Board also gave California Regional Water Quality Control Boards (Regional Water Boards) the needed discretion to include additional categories and locations, such as retail gasoline outlets (RGOs), in SSMPs.
- b. Controlling runoff pollution by using a combination of onsite source control and site design BMPs augmented with treatment control BMPs before the runoff enters the MS4 is important for the following reasons: (1) Many end-of-pipe BMPs (such as diversion to the sanitary sewer) are typically ineffective during significant storm events. (2) Whereas, onsite source control BMPs can be applied during all runoff conditions end-of-pipe BMPs are often incapable of capturing and treating the wide range of pollutants which can be generated on a sub-watershed scale; (3) End-of-pipe BMPs are more effective when used as polishing BMPs, rather than the sole BMP to be implemented; (4) End-of-pipe BMPs do not protect the quality or beneficial uses of receiving waters between the pollutant source and the BMP; and (5) Offsite end-of-pipe BMPs do not aid in the effort to educate the public regarding sources of pollution and their prevention.
- c. Use of Low-Impact Development (LID) site design BMPs at new development, redevelopment and retrofit projects can be an effective means for minimizing the

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impact of storm water runoff discharges from the development projects on receiving waters. LID is a site design strategy with a goal of maintaining or replicating the pre-development hydrologic regime through the use of design techniques. LID site design BMPs help preserve and restore the natural hydrologic cycle of the site, allowing for filtration and infiltration which can greatly reduce the volume, peak flow rate, velocity, and pollutant loads of storm water runoff. Current runoff management, knowledge, practices and technology have resulted in the use of LID BMPs as an acceptable means of meeting the storm water MEP standard.

- d. RGOs ~~are~~ can be significant sources of pollutants in storm water runoff. RGOs are points of convergence for motor vehicles for automotive related services such as repair, refueling, tire inflation, and radiator fill-up and consequently produce significantly higher loadings of hydrocarbons and trace metals (including copper and zinc) than other developed areas.
- e. Industrial sites ~~are~~ can be significant sources of pollutants in runoff. Pollutant concentrations and loads in runoff from industrial sites are similar or exceed pollutant concentrations and loads in runoff from other land uses, such as commercial or residential land uses. As with other land uses, LID site design, source control, and treatment control BMPs are needed at industrial sites in order to meet the MEP standard. These BMPs are necessary where the industrial site is larger than 10,000 square feet. The 10,000 square feet threshold is appropriate, since it is consistent with requirements in other Phase I NPDES storm water regulations throughout California.
- f. If not properly designed or maintained, certain BMPs implemented or required by municipalities for runoff management may create a habitat for vectors (e.g. mosquitoes and rodents). Proper BMP design and maintenance to avoid standing water, however, can prevent the creation of vector habitat. Nuisances and public health impacts resulting from vector breeding can be prevented with close collaboration and cooperative effort between municipalities, local vector control agencies, and the California Department of Public Health during the development and implementation of runoff management programs.
- g. The increased volume, velocity, frequency and discharge duration of storm water runoff from developed areas has the potential to greatly accelerate downstream erosion, impair stream habitat in natural drainages, and negatively impact beneficial uses. Development and urbanization increase pollutant loads in storm water runoff and the volume of storm water runoff. Impervious surfaces can neither absorb water nor remove pollutants and thus lose the purification and infiltration provided by natural vegetated soil. Hydromodification measures for discharges to hardened channels ~~are~~ may be needed for these as to not prevent potential future restoration ~~rehabilitation~~ of the hardened channels to their natural state, thereby restoring the chemical, physical, and biological integrity and beneficial uses of local receiving waters. Any rehabilitation of hardened channels

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must take into account flood control considerations, which are within the jurisdiction of the Riverside County Flood Control and Water Conservation District, under Water Code App. Section 48.

Comment [DB9]: See legal comments in Attachment 7

### 3. Construction and Existing Development

- a. In accordance with federal NPDES regulations and to ensure the most effective oversight of industrial and construction site discharges, discharges of runoff from industrial and construction sites are subject to dual (State and local) storm water regulation. Under this dual system, each Copermitee, consistent with its jurisdiction, is responsible for enforcing its local permits, plans, and ordinances, and the San Diego Water Board is responsible for enforcing the General Construction Activities Storm Water Permit, State Water Board Order 2009-0009-DWQ, NPDES No. CAS000002 (General Construction Permit) and the General Industrial Activities Storm Water Permit, State Water Board Order 97-03 DWQ, NPDES No. CAS000001 (General Industrial Permit) and any reissuance of these permits. NPDES municipal regulations require that municipalities develop and implement measures to address runoff from industrial and construction activities. Those measures may include the implementation of other BMPs in addition to those BMPs that are required under the statewide general permits for activities subject to both State and local regulation.
- b. Identification of sources of pollutants in runoff (such as municipal areas and activities, industrial and commercial sites/sources, construction sites, and residential areas), development and implementation of BMPs to address those sources, and updating ordinances and approval processes are necessary for the Copermitees to ensure that discharges of pollutants from its MS4 in storm water are reduced to the MEP and that illegal non-storm water discharges are not occurring. Inspections and other compliance verification methods are needed to ensure minimum BMPs are implemented. Inspections are especially important at areas that are at high risk for pollutant discharges.
- c. Historic and current development sometimes may makes use of natural drainage patterns and features as conveyances for runoff. Urban streams owned or operated by the Copermitees that are used in this manner are part of the municipalities' MS4s regardless of whether they are natural, anthropogenic, or partially modified features. In these cases, the urban stream is both an MS4 and receiving water.
- d. As operators of the MS4s, the Copermitees cannot passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or otherwise control. These discharges may cause or contribute to a condition of

Comment [CP10]: Not all non-storm water discharges need to be prohibited.

Comment [DB11]: The MS4 can never be comprised of natural waterbodies. See definition in federal MS4 regulations and legal comments in Attachment 7.

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~~contamination or a violation of water quality standards.~~

e.d. Waste and pollutants which are deposited and accumulate in MS4 drainage structures will be discharged from these structures to waters of the U.S. unless they are removed. These discharges may cause or contribute to, or threaten to cause or contribute to, a condition of pollution in receiving waters. For this reason, pollutant discharges from storm water into MS4s must be reduced using a combination of management measures, including source control and an effective MS4 maintenance program implemented by each Copermittee.

f.e. Enforcement of local runoff related ordinances, permits, and plans is an essential component of every runoff management program and is specifically required in the federal storm water regulations and this Order. Each Copermittee is, to the extent of its legal authority, individually responsible for adoption and enforcement of ordinances and/or policies, implementation of identified control measures/BMPs needed to prevent or reduce pollutants in storm water runoff, and for the allocation of funds for the capital, operation and maintenance, administrative, and enforcement expenditures necessary to implement and enforce such control measures/BMPs under its jurisdiction. Education is an important aspect of every effective runoff management program and the basis for changes in behavior at a societal level. Education of municipal planning, inspection, and maintenance department staffs is especially critical to ensure that in-house staffs understand how their activities impact water quality, how to accomplish their jobs while protecting water quality, and understand their specific roles and responsibilities for compliance with this Order. Public education, designed to target various urban land users and other audiences, is also essential to inform the public of how individual actions affect receiving water quality and how adverse effects can be minimized.

g.f. Public participation during the development of runoff management programs is necessary to ensure that all stakeholder interests and a variety of creative solutions are considered.

g. Retrofitting existing development with storm water treatment controls, including LID, is may be necessary to address storm water discharges from existing development that may cause or contribute to a condition of pollution or a violation of water quality standards. Although SSMP BMPs are required for redevelopment, the current rate of redevelopment will not address water quality problems in a timely manner. Cooperation with private landowners is necessary to effectively identify, implement and maintain retrofit projects for the preservation, restoration, and enhancement of water quality.

h. Emergency Copermittee public works projects required to protect public health and safety are exempted from these requirements until the emergency ends, at which time they need to comply with the requirements.

**Comment [DB12]:** The MS4 operators are obligated to take storm water under state law, and therefore must "passively" receive such waters, whether or not they contain pollutants. Moreover, a number of separately permitted sources discharge into the MS4 through rights granted under the NPDES program. Control over such permitted sources is the responsibility of the owner of that permitted discharge in question.

**DRAFT****4. Watershed Runoff Management**

a. Since runoff within a watershed can flow from and through multiple land uses and political jurisdictions, watershed-based runoff management can greatly enhance the protection of receiving waters. Such management provides a means to focus on the most important water quality problems in each watershed. By focusing on the most important water quality problems, watershed efforts can maximize protection of beneficial use in an efficient manner. Effective watershed-based runoff management actively reduces pollutant discharges and abates pollutant sources causing or contributing to watershed water quality problems. Watershed-based runoff management that does not actively reduce pollutant discharges and abate pollutant sources causing or contributing to watershed water quality problems can necessitate implementation of the iterative process outlined in section A.3 of this Order. Watershed management of runoff does not require Copermitees to expend resources outside of their jurisdictions. In some cases, however, this added flexibility provides more, and possibly more effective, alternatives for minimizing waste discharges. Watershed management requires the Copermitees within a watershed to develop a watershed-based management strategy, which can then be implemented on a jurisdictional basis.

a.b. The Copermitees have jointly pursued several watershed based management programs including the Upper Santa Margarita River Integrated Regional Watershed Management Plan (USMR IRWM). The USMR IRWM management team, which includes the County of Riverside and the Riverside County Flood Control and Water Conservation District, has also formed cooperative agreements with the San Diego and Orange County IRWM programs to integrate watershed planning efforts of the three counties. These efforts have identified and prioritized key watershed management issues related to the protection and restoration of beneficial uses in the Permit Area. The Board encourages the Copermitees to use these forums to prioritize actions and support the allocation of resources to protect water quality.

b.c. Some runoff issues, such as general education, monitoring, and training, can be effectively addressed on a regional basis. Regional approaches to runoff management can improve program consistency and promote sharing of resources, which can result in implementation of more efficient programs.

e.d. It is important for the Copermitees to coordinate their water quality protection and land use planning activities to achieve the greatest protection of receiving water bodies. Copermitee coordination with other watershed stakeholders, especially the State of California Department of Transportation, the U.S. federal government, sovereign American Indian tribes, and water and sewer districts, is also important.

**DRAFT****E. STATUTE AND REGULATORY CONSIDERATIONS**

1. The RWL language specified in this Order is consistent with language recommended by the USEPA and established in State Water Board Order WQ-99-05, *Own Motion Review of the Petition of Environmental Health Coalition to Review Waste Discharge Requirements Order No. 96-03, NPDES Permit No. CAS0108740*, adopted by the State Water Board on June 17, 1999. The RWL language in this Order requires compliance with water quality standards, which for storm water MS4 discharges is to be achieved through an iterative approach requiring the implementation of improved and better-tailored BMPs over time. Compliance with receiving water limits based on applicable water quality standards is necessary to ensure that MS4 discharges will not cause or contribute to violations of water quality standards and the creation of conditions of pollution, contamination, or nuisance.
2. The Basin Plan, identifies the following existing and potential beneficial uses for surface waters in Riverside County: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Process Supply (PROC), Hydropower Generation (POW), Industrial Service Supply (IND), Ground Water Recharge (GWR), Contact Water Recreation (REC1), Non-contact Water Recreation (REC2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE), Spawning, Reproduction and/or Early Development (SPWN) and Preservation of Biological Habitats of Special Significance (BIOL).
3. This Order is in conformance with State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California*, and the federal Antidegradation Policy described in 40 CFR 131.12.
4. Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) requires coastal states with approved coastal zone management programs to address non-point pollution impacting or threatening coastal water quality. CZARA addresses five sources of non-point pollution: agriculture, silviculture, urban, marinas, and hydromodification. This NPDES permit addresses the management measures required for the urban category, with the exception of septic systems. The adoption and implementation of this NPDES permit relieves the Copermitttee from developing a non-point source plan, for the urban category, under CZARA. The San Diego Water Board addresses septic systems through the administration of other programs.
5. Section 303(d)(1)(A) of the CWA requires that "Each state shall identify those waters within its boundaries for which the effluent limitations...are not stringent enough to implement any water quality standard (WQS) applicable to such waters." The CWA also requires states to establish a priority ranking of impaired water bodies known as Water Quality Limited Segments and to establish Total Maximum Daily Loads

Comment [DB13]: See legal comments in Attachment 7

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(TMDLs) for such waters. This priority list of impaired water bodies is called the Section 303(d) List. The 2006 Section 303(d) List was approved by the State Water Board on October 25, 2006. On June 28, 2007, the 2006 303(d) list for California was given final approval by the USEPA. The 303(d) List was recently updated, and on December 16, 2009, the 2008 303(d) List was approved by the San Diego Water Board. The 2008 List is awaiting State Water Board and USEPA approval.

6. This Order does not constitute an unfunded local government mandate subject to subvention under Article XIII B, Section (6) of the California Constitution for several reasons, including, but not limited to, the following. First, this Order implements federally mandated requirements under CWA §402. (33 U.S.C. § 1342(p)(3)(B).) Second, the local agency Copermitees' obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental and new dischargers who are issued NPDES permits for storm water and non storm water discharges. Third, the local agency Copermitees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order. Fourth, the Copermitees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in CWA §301, subdivision (a) (33 U.S.C. § 1311(a)) and in lieu of numeric restrictions on their MS4 discharges (i.e. effluent limitations). Fifth, the local agencies' responsibility for preventing discharges of waste that can create conditions of pollution or nuisance from conveyances that are within their ownership or control under State law predates the enactment of Article XIII B, Section (6) of the California Constitution. Likewise, the provisions of this Order to implement TMDLs are federal mandates. The CWA requires TMDLs to be developed for water bodies that do not meet federal water quality standards. (33 U.S.C. sec. 1313(d).) Once the USEPA or a state develops a TMDL, federal law requires that permits must contain effluent limitations consistent with the assumptions of any applicable wasteload allocation. (40 C.F.R. sec. 122.44(d)(1)(vii)(B).)
7. Runoff treatment and/or mitigation must occur prior to the discharge of runoff into receiving waters. Treatment BMPs must not be constructed in waters of the U.S. of State unless the runoff flows are sufficiently pretreated to protect the values and functions of the water body. Federal regulations at 40 CFR 131.10(a) state that in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S. Authorizing the construction of an runoff treatment facility within a water of the U.S., or using the water body itself as a treatment system or for conveyance to a treatment system, would be tantamount to accepting waste assimilation as an appropriate use for that water body. Furthermore, the construction, operation, and maintenance of a pollution control facility in a water body can negatively impact the physical, chemical, and biological integrity, as well as the beneficial uses, of the water body. Without federal authorization (e.g., pursuant to CWA § 404), waters of the U.S. may not be converted into, or used as, waste treatment or conveyance facilities. Similarly, waste discharge requirements pursuant to CWC §13260 are required for the conversion or use of waters of the

**Comment [DB14]:** This finding is inaccurate and inappropriate, as the Commission on State Mandates, and not the Regional Board, has exclusive jurisdiction in determining whether a requirement is an unfunded state mandate. See legal comment write paper.

**Comment [CP15]:** The federal regulations (that do not allow waste assimilation), do not apply to waters of the state.

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State as waste treatment or conveyance facilities. Diversion from waters of the U.S./State to treatment facilities and subsequent return to waters of the U.S. is allowable, provided that the effluent complies with applicable NPDES requirements.

8. The issuance of waste discharge requirements and an NPDES permit for the discharge of runoff from MS4s to waters of the U.S. is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, section 21000 et seq.) in accordance with the CWC section 13389.
9. Storm water discharges from developed and developing areas in Riverside County are ~~significant potential~~ sources of certain pollutants that can cause, may be causing, threatening to cause or contributing to water quality impairment in the waters of Riverside County. Furthermore, as delineated in the CWA section 303(d) list in Table 2, the San Diego Water Board has found that there is a reasonable potential that municipal storm water and non-storm water discharges from MS4s cause or may cause or contribute to an excursion above water quality standards for the following pollutants: Indicator Bacteria, Copper, Manganese, Iron, Chlorpyrifos, Sulfates, Phosphorous, Nitrogen, Toxicity, and Turbidity. In accordance with CWA section 303(d), the San Diego Water Board is required to establish TMDLs for these pollutants to these waters to eliminate impairment and attain water quality standards. Therefore, certain early pollutant control actions and further pollutant impact assessments by the Copermittees are warranted and required pursuant to this Order.
10. This Order requires each Copermittee to effectively prohibit all types of unauthorized discharges of non-storm water into its MS4. However, historically pollutants have been identified as present in dry weather ~~non-storm water discharges from the MS4s~~ conditions within the receiving waters through 303(d) listings, monitoring conducted by the Copermittees under Order No. R9-2004-0001, and there are others expected to be present in dry weather non-storm water discharges because of the nature of these discharges. These pollutants in the receiving waters may be associated with activities that may or may not be under the authority of the Copermittees to address. This Order includes action levels for pollutants in non-storm water, dry weather discharges from the MS4. The non-storm water action levels are designed to ensure that the Order's requirement to effectively prohibit all types of unauthorized discharges of non-storm water into the MS4 from areas under the authority of the Copermittees is being complied with. Non-storm water action levels in the Order are based upon numeric or narrative water quality objectives and criteria as defined in the Basin Plan, the State Water Board's Water Quality Control Plan for Ocean Waters of California (Ocean Plan), and the State Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California

Comment [CP16]: This is not on the 303(d) list.



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(State Implementation Policy or SIP). An exceedance of an action level requires specified responsive action by the Copermitees. This Order describes what actions the Copermitees must take when an exceedance of an action level is observed. Exceedances of non-storm water action levels do not alone constitute a violation of this Order but could indicate non-compliance with the requirement to effectively prohibit all types of unauthorized non-storm water discharges into the MS4 or other prohibitions established in this Order. Failure to undertake required source investigation and elimination action following an exceedance of a non-storm water action level (NAL or action level) is a violation of this Order. The San Diego Water Board recognizes that use of action levels will not necessarily result in detection of all unauthorized sources of non-storm water discharges because there may be some discharges in which pollutants do not exceed established action levels. However, establishing NALs at levels appropriate to protect water quality standards is expected to lead to the identification of significant sources of pollutants in dry weather non-storm water discharges.

11. In addition to federal regulations cited in the Fact Sheet / Technical Report for the Order No. R9-2010-0016, monitoring and reporting required under Order No. R9-2010-0016 is required pursuant to authority under CWC section 13383.
12. With this Order, the San Diego Water Board has completed the re-issuance of the fourth iteration of the Phase I MS4 NPDES Permits for the Copermitees in the portions of San Diego County, Orange County, and Riverside County within the San Diego Region. The NPDES Permit requirements issued to the Copermitees in each county have substantially the same core requirements such as discharge prohibitions, receiving water limitations, jurisdictional components, and monitoring. In addition, the Copermitees cooperate regionally to develop monitoring with the Southern California Stormwater Monitoring Coalition and to develop program effectiveness with the California Stormwater Quality Association. Regional programs could improve the Copermitees' compliance with other permit components such as development of the Hydromodification Management Plans and Retrofitting Existing Development with more consistent implementation and cost sharing. Re-issuing the NPDES Permit requirements within five years for three counties under three different permits requires the San Diego Water Board to expend significant time and resources for issuance of the permits through three separate public proceedings, thereby greatly reducing the time and resources available to oversee compliance. Multiple permits also create confusion for determining compliance among regulated entities, especially the land development community. The San Diego Water Board recognizes that issuing a single MS4 permit for all Phase I entities in the San Diego Region will provide consistent implementation, improve communication among agencies within watersheds crossing multiple jurisdictions, and minimize staff resources spent with each permit renewal. The San Diego Water Board plans to develop a single regional MS4 permit prior to the expiration of this Order that will transfer the Copermitees' enrollment to the regional permit upon expiration of this Order.

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**F. PUBLIC PROCESS**

1. The San Diego Water Board has notified the Copermitees, all known interested parties, and the public of its intent to consider adoption of an Order prescribing waste discharge requirements that would serve to renew an NPDES permit for the existing MS4 discharges of pollutants in waters of the U.S.
2. The San Diego Water Board has held a public hearing on October 13, 2010 and heard and considered all comments pertaining to the terms and conditions of this Order.

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**IT IS HEREBY ORDERED** that the Copermittees, in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, and the provisions of the CWA and regulations adopted thereunder, must each comply with the following to the extent of their legal authorities established under the California Constitution and any their enabling acts:

**A. PROHIBITIONS AND RECEIVING WATER LIMITATIONS**

1. Discharges into and from MS4s in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance (as defined in CWC section 13050), in receiving waters of the state are prohibited.<sup>3</sup>
2. Storm water discharges from MS4s containing pollutants which have not been reduced to the MEP are prohibited.<sup>3</sup>
3. ~~Subject to the requirements of section A.3 a, d~~ Discharges from MS4s that cause or contribute to the violation of water quality standards (designated beneficial uses, water quality objectives developed to protect beneficial uses, and the State policy with respect to maintaining high quality waters) are prohibited.
  - a. Each Copermittee must comply with section A.3 and section A.4 as it applies to Prohibition 5 in Attachment A of this Order through timely implementation of control measures and other actions to reduce pollutants in storm water discharges in accordance with this Order, including any modifications. If exceedance(s) of water quality standards persist notwithstanding implementation of this Order, the Copermittee must assure compliance with section A.3 and section A.4 as it applies to Prohibition 5 in Attachment A of this Order by complying with the following procedure:
    - (1) Upon a determination by either the Copermittee or the San Diego Water Board that storm water MS4 discharges are causing or contributing to an exceedance of an applicable water quality standard, the Copermittee must notify the San Diego Water Board within 30 days and thereafter submit a report to the San Diego Water Board that describes best management practices (BMPs) that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. The report may be incorporated in the Annual Report unless the San Diego Water

**Comment [DB17]:** See legal comment white paper. The scope of this Order is the discharge from MS4s. Moreover, MS4s are not receiving waters.

**Comment [DB18]:** This change clarifies that the iterative process reflected in Part A.3 applies to the entire provision.

<sup>3</sup> This prohibition does not apply to MS4 discharges which receive subsequent treatment to reduce pollutants in storm water discharges to the MEP prior to entering receiving waters (e.g., low flow diversions to the sanitary sewer). Runoff treatment and/or mitigation must occur prior to the discharge of runoff into receiving waters per finding E.7.

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Board<sup>4</sup> directs an earlier submittal. The report must include an implementation schedule. The San Diego Water Board may require modifications to the report

- (2) Submit any modifications to the report required by the San Diego Water Board within 30 days of notification;
- (3) Within 30 days following acceptance of the report described above by the San Diego Water Board, the Copermitee must revise its JRMP and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required; and
- (4) Implement the revised JRMP and monitoring program in accordance with the approved schedule.

- b. The Copermitee must repeat the procedure set forth above to comply with the receiving water limitations for continuing or recurring exceedances of the same water quality standard(s) that occur following implementation-completion of scheduled actions unless directed to do otherwise by the San Diego Water Board's Executive Officer.
- c. Nothing in section A.3 prevents the San Diego Water Board from enforcing any provision of this Order while the Copermitee prepares and implements the above report but the Copermitees shall not be liable for violation of section A.3 provided that they are in compliance with the requirements of this section.

4. In addition to the above prohibitions, discharges from MS4s are subject to all Basin Plan prohibitions cited in Attachment A to this Order.

**B. NON-STORM WATER DISCHARGES**

- 1. Each Copermitee must effectively prohibit all types of non-storm water discharges into its MS4 unless such discharges are either authorized by a separate NPDES permit; or not prohibited in accordance with sections B.2, and B.3, and B.4 below.
- 2. The following categories of non-storm water discharges are not prohibited unless a Copermitee or the San Diego Water Board identifies the discharge category as a source of pollutants to waters of the U.S. Where the Copermitee(s) have identified a category as a source of pollutants, the category must be addressed as an illicit discharge and prohibited through ordinance, order or similar means. The San Diego

**Comment [DB19]:** This change reiterates that the iterative process is in effect so long as the Copermitees remain in compliance with the process set forth in section A.3.

**Comment [CP20]:** Change consistent with the addition of B.4. below, and the comments thereto.

<sup>4</sup> The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to CWC §13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this Order unless such delegation is unlawful under CWC §13223 or this Order explicitly states otherwise.

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Water Board may identify categories of discharge that either require prohibition, or other controls for non-anthropogenic sources. For a discharge category determined to be a source of pollutants, the Copermitee, under direction of the San Diego Water Board, must either prohibit the discharge category or develop and implement appropriate control measures for non-anthropogenic sources to prevent the discharge of pollutants to the MS4 and report to the San Diego Water Board pursuant to Section K.1 and K.3 of this Order. The discharge categories are:

- a. Diverted stream flows;
- b. Rising ground waters;
- c. Uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to MS4s;
- d. Uncontaminated pumped ground water<sup>5</sup>;
- e. Foundation drains<sup>5</sup>;
- f. Springs;
- g. Water from crawl space pumps<sup>5</sup>;
- h. Footing drains<sup>5</sup>;
- i. Air conditioning condensation;
- j. Flows from riparian habitats and wetlands;
- k. Water line flushing<sup>6,7</sup>;
- l. Landscape irrigation;
- m. Discharges from potable water sources not subject to NPDES Permit No. CAG679001, other than water main breaks;
- n. Irrigation water;
- o. Lawn watering;
- p. Individual residential car washing; and
- q. Dechlorinated swimming pool discharges<sup>8</sup>.

3. Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited.

- a. As part of the JRMP, each Copermitee must develop and implement a program to address pollutants from non-emergency fire fighting flows (i.e., flows from controlled or practice blazes and maintenance activities) identified as significant sources of pollutants to waters of the U.S.
- b. Building fire suppression system maintenance discharges (e.g. sprinkler line flushing) may contain waste. Therefore, such discharges are to be prohibited by the Copermitees as illicit discharges through ordinance, order, or similar means.

4. As part of the JRMP, the Copermitees must develop and implement a program to

<sup>5</sup> Requires enrollment under Order R9-2008-002. Discharges into the MS4 require authorization from the owner and operator of the MS4 system.

<sup>6</sup> This exemption does not include fire suppression sprinkler system maintenance and testing discharges. Those discharges may be regulated under Section B.3.

<sup>7</sup> Requires enrollment under Order R9-2002-0020.

<sup>8</sup> Excluding saline swimming pool discharges.

**Comment [DB21]:** See legal comments in Attachment 7

**Comment [DB22]:** See legal comments while paper.

**Comment [CP23]:** See discussion in the comment letter, and Attachment 6.

**Comment [CP24]:** As noted in the comment letter and Attachment 6, irrigation runoff has not been shown to be an actual source of pollutants to the receiving waters in this watershed.

As such the comment letter requests that THE CONDITIONAL EXEMPTION BE RESTORED as shown in the redlines above.

Should the Board decide to prohibit the discharge anyway, the Copermitees request that at a minimum that the category of discharges be managed through a JRMP program similar to non-emergency fire fighting flows, as shown in these redlines

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address pollutants from landscape irrigation, irrigation water and lawn watering identified as significant sources of pollutants to waters of the United States.

- 4.5. Each Copermitee must examine all dry weather effluent analytical monitoring results collected in accordance with section F.4 of this Order and Receiving Waters and MS4 Discharge Monitoring and Reporting Program No. R9-2010-0016 to identify water quality problems which may be the result of any non-prohibited discharge category(ies) identified above in section B.2. Follow-up investigations must be conducted to identify and control, pursuant to section B.2, any non-prohibited discharge category(ies) listed above.

**C. NON-STORM WATER DRY WEATHER ACTION LEVELS**

1. Each Copermitee, beginning no later than July 1, 2012, must implement the non-storm water dry weather action level (NAL) monitoring as described in Attachment E of this Order.
2. In response to an exceedance of an NAL, the Copermitee(s) having jurisdiction must investigate and ~~seek to~~ identify the source of the exceedance in a timely manner. However, if any Copermitee identifies a number of NAL exceedances that prevents it from adequately conducting source investigations at all sites in a timely manner, then that Copermitee may submit a prioritization plan and timeline that identifies the timeframe and planned actions to investigate and report its findings on all of the exceedances. Depending on the source of the pollutant exceedance, the Copermitee(s) having jurisdiction must take action as follows:
  - a. If the Copermitee identifies the source of the exceedance as natural (non-anthropogenically influenced) in origin and in conveyance into the MS4; then the Copermitee must report its findings and documentation of its source investigation to the San Diego Water Board in its Annual Report.
  - b. If the Copermitee identifies the source of the exceedance as an illicit discharge or connection, then the Copermitee must eliminate the discharge to its MS4 pursuant to Section F.4.f and report the findings, including any enforcement action(s) taken, and documentation of the source investigation to the San Diego Water Board in the Annual Report. If the Copermitee is unable to eliminate the source of discharge prior to the Annual Report submittal, then the Copermitee must submit, as part of its Annual Report, its plan and timeframe to eliminate the source of the exceedance. Those dischargers seeking to continue such a discharge must become subject to a separate NPDES permit prior to continuing any such discharge.
  - c. If the Copermitee identifies the source of the exceedance as an exempted category of non-storm water discharge, then the Copermitees must determine if this is an isolated circumstance or if the category of discharges must be

Comment [CP25]: Per discussions with Board staff on 8/18

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addressed through the prevention or prohibition of that category of discharge as an illicit discharge. The Copermitee must submit its findings including a description of the steps taken to address the discharge and the category of discharge, to the San Diego Water Board for review in its Annual Report. Such description must include relevant updates to or new ordinances, orders, or other legal means of addressing the category of discharge, and the anticipated schedule for doing so. The Copermitees must also submit a summary of its findings with the Report of Waste Discharge.

- d. If the Copermitee identifies the source of the exceedance as a non-storm water discharge in violation or potential violation of an existing separate NPDES permit (e.g. the groundwater dewatering permit), then the Copermitee must report, within three business days, the findings to the San Diego Water Board including all pertinent information regarding the discharger and discharge characteristics.
  - e. If the Copermitee is unable to identify the source of the exceedance after taking and documenting reasonable steps to do so, then the Copermitee must perform additional focused sampling. If the results of the additional sampling indicate a recurring exceedance of NALs with an unidentified source, then the Copermitee must update its programs within a year to address the common contributing sources that may be causing such an exceedance. The Copermitee's annual report must include these updates to its programs including, where applicable, updates to their watershed workplans (Section G.2), retrofitting consideration (Section F.3.d) and program effectiveness work plans (Section J.4).
  - f. The Copermitees or any interested party, may evaluate existing NALs and propose revised NALs for future Board consideration.
3. NALs can help provide an assessment of the effectiveness of the prohibition of non-storm water discharges and of the appropriateness of exempted non-storm water discharges. An exceedance of an NAL does not alone constitute a violation of the provisions of this Order. An exceedance of an NAL may indicate a ~~lack of compliance with the requirement that~~ need to enhance the Copermitees efforts to effectively prohibit all types of unauthorized non-storm water discharges into the MS4 or other prohibitions set forth in Sections A and B of this Order. Failure to timely implement required actions specified in this Order following an exceedance of an NAL constitutes a violation of this Order. Neither the absence of exceedances of NALs nor compliance with required actions following observed exceedances, excuses any non-compliance with the requirement to effectively prohibit all types of unauthorized non-storm water discharges into the MS4s or any non-compliance with the prohibitions in Sections A and B of this Order. During any annual reporting period in which one or more exceedances of NALs have been documented the Copermitee must report in response to Section C.2 above, a description of whether and how the observed exceedances did or did not result in a discharge from the MS4 that caused, or threatened to cause or contribute to a condition of pollution, contamination, or nuisance in the receiving waters.

**Comment [CP26]:** 'lack of compliance' is in contradiction with the second sentence. The proposed language is more appropriate.

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4. Monitoring of effluent will occur at the end-of-pipe prior to discharge into the receiving waters, with a focus on Major Outfalls, as defined in 40 CFR 122.26(B 5-6) and Attachment E of this Order. ~~The Copermittees must develop their monitoring plans to sample a representative percentage of major outfalls and identified stations within each hydrologic subarea. At a minimum, outfalls that exceed any NALs once during any year must be monitored in the subsequent year. Any station that does not exceed an NAL, or only has exceedances that are identified as natural in origin and conveyance into the MS4 pursuant to Section C.2.a, for 3 successive years may be replaced with a different station.~~
5. Each Copermittee must monitor for the non-storm water dry weather action levels, which are incorporated into this Order as follows:
  - a. Action levels for discharges to inland surface waters:

**Comment [CP27]:** The previous sentence requires outfalls to be selected consistent with Attachment E. This sentence is not needed and is duplicative of Attachment E.

At a minimum, this language will need to be modified to be consistent with changes being requested in the Attachment 4 to the Comment Letter, including any footnotes.

Table 3.a.1: General Constituents

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Fecal Coliform	MPN/100 ml	200 <sup>A</sup> 400 <sup>B</sup>	-		BPO
Enterococci	MPN/100 ml	33	-	64 <sup>A</sup> 151 <sup>B</sup>	BPO
Turbidity	NTU	-	20		BPO
pH	Units	Within limit of 6.5 to 8.5 at all times			BPO
Dissolved Oxygen	mg/L	Not less than 5.0 in WARM waters and not less than 6.0 in COLD waters			BPO
Total Nitrogen	mg/L	-	1.0	See MDAL	BPO
Total Phosphorus	mg/L	-	0.1	See MDAL	BPO
Methylene Blue Active Substances	mg/L	-	0.5	See MDAL	BPO
Iron	mg/L	-	0.3	See MDAL	BPO
Manganese	mg/L	-	0.05	See MDAL	BPO

**Comment [CP28]:** This value was incorrectly referencing the criteria for beach areas and needs to be updated to reflect the shown values for infrequently used areas.

A – Based on a minimum of not less than five samples for any 30-day period  
 B – No more than 10 percent of total samples may exceed 400 per 100 ml during any 30 day period  
 C – This Value has been set to Basin Plan Criteria for Designated Beach in Infrequently used Areas  
 BPO – Basin Plan Objective  
 MDAL – Maximum Daily Action Level                      AMAL – Average Monthly Action Level

Table 3.a.2: Priority Pollutants

Parameter	Units	Freshwater (CTR)	
		MDAL	AMAL
Cadmium	ug/L	**	**
Copper	ug/L	*	*
Chromium III	ug/L	**	**
Chromium VI (hexavalent)	ug/L	16	8.1
Lead	ug/L	*	*
Nickel	ug/L	**	**



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Silver	ug/L	*	*
Zinc	ug/L	*	*

CTR – California Toxic Rule

\* - Action Levels developed on a case-by-case basis (see below)

\*\* - Action Levels developed on a case-by-case basis (see below), but calculated criteria are not to exceed Maximum Contaminant Levels under the California Code of Regulations<sup>9</sup>

The NALs for Cadmium, Copper, Chromium (III), Lead, Nickel, Silver and Zinc will be developed on a case-by-case basis because the freshwater criteria are based on site-specific water quality data (receiving water hardness). For these priority pollutants, the following equations (40 CFR 131.38.b.2) will be required:

Cadmium (Total Recoverable)	= $\exp(0.7852[\ln(\text{hardness})] - 2.715)$
Chromium III (Total Recoverable)	= $\exp(0.8190[\ln(\text{hardness})] + .6848)$
Copper (Total Recoverable)	= $\exp(0.8545[\ln(\text{hardness})] - 1.702)$
Lead (Total Recoverable)	= $\exp(1.273[\ln(\text{hardness})] - 4.705)$
Nickel (Total Recoverable)	= $\exp(.8460[\ln(\text{hardness})] + 0.0584)$
Silver (Total Recoverable)	= $\exp(1.72[\ln(\text{hardness})] - 6.52)$
Zinc (Total Recoverable)	= $\exp(0.8473[\ln(\text{hardness})] + 0.884)$

**D. STORM WATER ACTION LEVELS**

1. The Copermitees must implement the Wet Weather MS4 Discharge Monitoring as described in Attachment E of this Order, and beginning three years after the Order adoption date, the Copermitees must annually evaluate their data compared to the Stormwater Action Levels (SALs). At each monitoring station, a running average of twenty percent or greater of exceedances of any discharge of storm water from the MS4 to waters of the U.S. that exceed the SALs for each of the pollutants listed in Table 4 (below) requires the Copermitee(s) having jurisdiction to affirmatively augment and implement all necessary storm water controls and measures to reduce the discharge of the associated class of pollutants(s) to the MEP. The Copermitees must utilize the exceedance information when adjusting and executing annual work plans, as required by this Order. Copermitees must take the magnitude, frequency, and number of constituents exceeding the SAL(s), in addition to receiving water quality data and other information, into consideration when prioritizing and reacting to SAL exceedances in an iterative manner. Failure to appropriately consider and react to SAL exceedances in an iterative manner creates a presumption that the Copermitee(s) have not reduced pollutants in storm water discharges to the MEP.

Table 4. Storm Water Action Levels

Pollutant	Action Level
Turbidity (NTU)	126
Nitrate & Nitrite total (mg/L)	2.6
P total (mg/L)	1.46

<sup>9</sup> California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64431.

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Cd total (µg/L)	3.0
Cu total (µg/L)	127
Pb total (µg/L)	250
Zn total (µg/L)	976

2. The end-of-pipe assessment points for the determination of SAL compliance are all major outfalls, as defined in 40 CFR 122.26(b)(5) and (b)(6) and Attachment E of this Order. ~~The Copermittees must develop their monitoring plans to sample a representative percentage of the major outfalls within each hydrologic subarea. At a minimum, outfalls that exceed SALs must be monitored in the subsequent year. Any station that does not exceed an SAL for 3 successive years may be replaced with a different station. SAL samples must be 24 hour time-weighted composites.~~
3. The absence of SAL exceedances does not relieve the Copermittees from implementing all other required elements of this Order.
4. This Order does not regulate natural sources and conveyances into the MS4 of constituents listed in Table 5. To be relieved of the requirements to take action as described in D.1 above, the Copermittee must demonstrate that the likely and expected cause of the SAL exceedance is not anthropogenic in nature. This demonstration does not need to be repeated for subsequent exceedances of the same SAL at the same monitoring station.
5. The SALs will be reviewed and updated at the end of every permit cycle. The data collected pursuant to D.2 above and Attachment E can be used to create SALs based upon local data. The purpose of establishing the SALs is that through the iterative and MEP process, outfall storm water discharges will meet all applicable water quality standards.

**E. LEGAL AUTHORITY**

1. Each Copermittee must, to the extent of their legal authority established under the California Constitution and any enabling acts, establish, maintain, and enforce adequate legal authority within their legal authority to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means. Nothing herein shall authorize a Copermittee or other discharger regulated under the terms of this order to divert, store or otherwise impound water if such action is reasonably anticipated to harm downstream water rights holders in the exercise of their water rights. This legal authority must, at a minimum, authorize the Copermittee to:
  - a. Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity to its MS4 and control the quality of runoff from industrial and construction sites. This requirement applies both to industrial and construction sites which have coverage under the statewide general industrial or

**Comment [CP29]:** Conflicts with attachment E, which states to select 'representative' outfalls.

**Comment [CP30]:** Consistent with NALS section

**Comment [CP31]:** The previous sentence requires outfalls to be selected consistent with Attachment E. This sentence is not needed and is duplicative of Attachment E.

At a minimum, this language will need to be modified to be consistent with changes being requested in the Attachment 4 to this comment letter, including any footnotes.

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construction storm water permits, as well as to those sites which do not. Grading ordinances must be updated and enforced as necessary to comply with this Order;

- b. Prohibit all identified illicit discharges not otherwise allowed pursuant to section B.2;
  - c. Prohibit and eliminate illicit connections to the MS4;
  - d. Control the discharge of spills, dumping, or disposal of materials other than storm water to its MS4;
  - e. Require compliance with conditions in Copermittee ordinances, permits, contracts or orders (i.e., hold dischargers to its MS4 accountable for their contributions of pollutants and flows);
  - f. Utilize enforcement mechanisms to require compliance with Copermittee storm water ordinances, permits, contracts, or orders;
  - g. Control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Copermittees.
  - h. Control of the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements with other owners of the MS4 such as the State of California Department of Transportation, the U.S. federal government, or sovereign Native American Tribes is encouraged;
  - i. Carry out all inspections, surveillance, and monitoring necessary to determine compliance and noncompliance with local ordinances and permits and with this Order, including the prohibition on illicit discharges to the MS4. This means the Copermittee must have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from industrial facilities discharging into its MS4, including construction sites;
  - j. Require the use of BMPs to prevent or reduce the discharge of pollutants into from MS4s from storm water to the MEP; and
  - k. Require documentation on the effectiveness of BMPs implemented to reduce the discharge of storm water pollutants from to the MS4 to the MEP.
2. Each Copermittee must submit on or before June 30, 2012, a statement certified by its chief legal counsel that the Copermittee has taken the necessary steps to obtain and maintain full legal authority within their jurisdiction to implement and enforce each of the requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and this Order. As applicable to each Copermittee, these statements must include:
- a. Citation of runoff related ordinances and the reasons they are enforceable;
  - b. Identification of the local administrative and legal procedures available to mandate compliance with runoff related ordinances and therefore with the conditions of this Order, and a statement as to whether enforcement actions can be completed administratively or whether they must be commenced and completed in the judicial system; and
  - c. A brief description of how runoff related ordinances are adopted and the process by which they may be challenged.

**Comment [DB32]:** See legal comments in Attachment 7. The Copermittees' responsibility under the Clean Water Act is to reduce the discharge of pollutants from the MS4 to the MEP. Therefore, the purpose of the BMP is to reduce pollutants in such discharges.

**Comment [CP33]:** To address limitations of the District

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**F. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM (JRMP)**

Each Copermittee must implement all requirements of section F of this Order no later than July 1, 2012, unless otherwise specified. Upon adoption of this Order and until an updated JRMP is developed and implemented or July 1, 2012, whichever occurs first,, each Copermittee must at a minimum implement its ~~JRMP Individual SWMP~~ document, as the document was developed and amended to comply with the requirements of Order No. R9-2004-001.

Each Copermittee must develop and implement an updated JRMP for its jurisdiction no later than July 1, 2012. Each updated JRMP must meet the requirements of section F of this Order, reduce the discharge of storm water pollutants from the MS4 to the MEP, effectively prohibit non-storm water discharges, and prevent runoff discharges from the MS4 from causing or contributing to a violation of water quality standards. In addition, each Copermittee's JRMP must identify all departments and positions within its jurisdiction that conduct runoff related activities, and their roles and responsibilities under this Order. This identification must include an up to date organizational chart specifying these departments and key personnel.

**1. DEVELOPMENT PLANNING COMPONENT**

Each Copermittee must implement a program which meets the requirements of this section ~~as applicable to their authority, that and is designed to~~ (1) reduces Development Project discharges of storm water pollutants from the MS4 to the MEP; (2) prevents Development Project discharges from the MS4 from causing or contributing to a violation of water quality standards; (3) prevents illicit discharges into the MS4; and (4) manages increases in runoff discharge rates and durations from Development Projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

**a. GENERAL PLAN**

Each Copermittee ~~(except the District)~~ must revise as needed its General Plan or equivalent plan (e.g., Comprehensive, Master, or Community Plan) to include water quality and watershed protection principles and policies that direct land-use decisions and require implementation of consistent water quality protection measures for all development, redevelopment, and retrofit projects. Examples of water quality and watershed protection principles and policies to be considered include the following:

- (1) Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible slow runoff and maximize on-site infiltration of runoff.

**Comment [DB34]:** See legal comments in Attachment 6

**Comment [DB35]:** See general comment 1 in Attachment 7

**Comment [CP36]:** See legal comments in Attachment 8

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- (2) Implement pollution prevention methods supplemented by pollutant source controls and treatment BMPs. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into an MS4.
- (3) Preserve, and where possible, create, or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. Encourage land acquisition of such areas.
- (4) Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.
- (5) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. Require incorporation of BMPs to mitigate the projected increases in pollutant loads and flows.
- (6) Avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.
- (7) Reduce pollutants associated with vehicles and increasing traffic resulting from development.
- (8) Post-development runoff from a site must not contain pollutant loads that cause or contribute to an exceedance of receiving water quality objectives and which have not been reduced to the MEP.

**b. ENVIRONMENTAL REVIEW PROCESS**

Each Copermitee must revise as needed its current environmental review processes to accurately evaluate water quality impacts and cumulative impacts and identify appropriate measures to avoid, minimize, and mitigate those impacts for all Development Projects.

**c. APPROVAL PROCESS CRITERIA AND REQUIREMENTS FOR ALL DEVELOPMENT PROJECTS**

For all proposed Development Projects, each Copermitee, during the planning process, and prior to project approval and issuance of local permits, must prescribe the necessary requirements so that Development Project discharges of storm water pollutants from the MS4 will be reduced to the MEP, will not cause or contribute to a violation of water quality standards, and will comply with the Copermitee's ordinances, permits, plans, and requirements, and with this Order.

**Comment [CP37]:** This is duplicative of section A and is not needed. Further, the end of this sentence specifically requires compliance with this order.

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Performance Criteria: Discharges from each approved development project must be subject to the following management measures:

- (1) Source control BMPs that reduce storm water pollutants of concern in runoff; prevent illicit discharges into the MS4; ~~prevent~~ minimize irrigation runoff; storm drain system stenciling or signage; properly design outdoor material storage areas; properly design outdoor work areas; and properly design trash storage areas.
- (2) The following LID BMPs listed below must be implemented at all Development Projects where applicable and feasible.
  - (a) Conserve natural areas, including existing trees, other vegetation, and soils,
  - (b) Construct streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided that public safety is not compromised,
  - (c) Minimize the impervious footprint of the project,
  - (d) Minimize soil compaction to landscaped areas,
  - (e) Minimize disturbances to natural drainages (e.g., natural swales, topographic depressions, etc.), and
  - (f) Disconnect impervious surfaces through distributed pervious areas.
- (3) Buffer zones for natural water bodies, where technically feasible. Where buffer zones are technically infeasible, require project proponent to implement other buffers such as trees, access restrictions, etc;
- (4) Other measures necessary so that grading or other construction activities meet the provisions specified in section F.2 of this Order.
- (5) Submittal of documentation of a mechanism under which ongoing long-term maintenance of all structural post-construction BMPs will be conducted.
- (6) Infiltration and Groundwater Protection

To protect groundwater quality, each Copermitee must apply restrictions to the use of treatment control BMPs that are designed to primarily function as large, centralized infiltration devices (such as large infiltration trenches and infiltration basins). Such restrictions must be designed so that the use of such infiltration treatment control BMPs does not cause or contribute to an exceedance of groundwater quality objectives. At a minimum, each treatment control BMP designed to primarily function as a centralized infiltration device must meet the restrictions below, unless the Development Project demonstrates to the Copermitee that a restriction is not necessary to protect groundwater quality. The Copermitees may collectively or individually develop alternative restrictions on the use of treatment control BMPs which

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are designed to primarily function as centralized infiltration devices. Alternative restrictions developed by the Copermittees can partially or wholly replace the restrictions listed below. The restrictions do not apply to small infiltration systems dispersed throughout a development project.

- (a) Runoff must undergo pretreatment such as sedimentation or filtration prior to infiltration;
  - (b) All dry weather flows containing significant pollutant loads must be diverted from infiltration devices and treated through other BMPs;
  - (c) Pollution prevention and source control BMPs must be implemented at a level appropriate to protect groundwater quality at sites where infiltration treatment control BMPs are to be used;
  - (d) Infiltration treatment control BMPs must be adequately maintained so that they remove storm water pollutants to the MEP;
  - (e) The vertical distance from the base of any infiltration treatment control BMP to the seasonal high groundwater mark must be at least 10 feet. Where groundwater basins do not support beneficial uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained;
  - (f) The soil through which infiltration is to occur must have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, and infiltration rate) which are adequate for proper infiltration durations and treatment of runoff for the protection of groundwater beneficial uses;
  - (g) Infiltration treatment control BMPs must not be used for areas of industrial or light industrial activity; and other high threat to water quality land uses and activities as designated by each Copermittee unless first treated or filtered to remove pollutants prior to infiltration; and
  - (h) Infiltration treatment control BMPs must be located a minimum of 100 feet horizontally from any water supply wells.
- (7) Where feasible, landscaping with native or low water species shall be preferred in areas that drain to the MS4 or to waters of the U.S.
- (8) Rain water harvesting, where feasible, ~~must be implemented~~ shall be encouraged as part of the site design and construction, and to supplement ~~offsite~~ beneficial uses.

**d. STANDARD STORM WATER MITIGATION PLANS (SSMPs) – APPROVAL PROCESS**

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**CRITERIA AND REQUIREMENTS FOR PRIORITY DEVELOPMENT PROJECTS**

On or before June 30, 2012, the Copermittees must submit an updated SSMP, to the San Diego Water Board's Executive Officer for a 30 day public review and comment period. The San Diego Water Board's Executive Officer has the discretion to determine whether to hold a public hearing or to limit public input to written comments. Within 180 days of determination that the SSMP is in compliance with this Order's provisions, each Copermittee must amend its local ordinances consistent with the updated SSMP, and begin implementing the updated SSMP. Any updated local ordinances must be submitted to the San Diego Water Board with the applicable Annual Report. The SSMP must meet the requirements of section F.1.d of this Order to (1) be designed to reduce Priority Development Project discharges of storm water pollutants from the MS4 to the MEP, and (2) be designed to prevent Priority Development Project runoff discharges from the MS4 from causing or contributing to a violation of water quality standards.<sup>10</sup>

Comment [CP38]: Per discussions with Board staff on 8/18

Comment [DB39]: See general comment 1 in Attachment 7.

Comment [DB40]: See general comment 1 in Attachment 7.

**(1) Definition of Priority Development Project:**

Priority Development Projects are:

- (a) All new Development Projects that fall under the project categories or locations listed in section F.1.d.(2), and
- (b) Those redevelopment projects that create, add, or replace at least 5,000 square feet of impervious surfaces on an already developed site and the existing development and/or the redevelopment project falls under the project categories or locations listed in section F.1.d.(2). Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SSMP requirements, the numeric sizing criteria discussed in section F.1.d.(6) applies only to the addition or replacement, and not to the entire development. Where redevelopment results in an increase of more than fifty percent of the impervious surfaces

<sup>10</sup> Updated SSMP and hydromodification requirements must apply to all priority projects or phases of priority projects which have not yet begun grading or construction activities at the time any updated SSMP or hydromodification requirement commences. If lawful prior approval of a project exists, whereby application of an updated SSMP or hydromodification requirement to the project is illegal, the updated SSMP or hydromodification requirement need not apply to the project. Updated Development Planning requirements set forth in Sections F.1. (a) through (h) of this Order must apply to all projects or phases of projects, unless, at the time any updated Development Planning requirement commences, the projects or project phases meet any one of the following conditions: (i) the project or phase has begun grading or construction activities; or (ii) a Copermittee determines that lawful prior approval rights for a project or project phase exist, whereby application of the Updated Development Planning requirement to the project is legally infeasible. Where feasible, the Permittees must utilize the SSMP and hydromodification update periods to ensure that projects undergoing approval processes include application of the updated SSMP and hydromodification requirements in its plans.



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of a previously existing development, the numeric sizing criteria applies to the entire development.

~~(c) Redevelopment also does not include projects that are implemented solely pursuant to section F.3.d of this order.~~

**Comment [CP41]:** Important not to penalize proactive efforts to retrofit existing development.

~~(b)(d) PDPs do not include Emergency projects required to protect public health and safety, consistent with CEQA § 15269.~~

~~(e) One acre threshold: In addition to the Priority Development Project Categories identified in section F.1.d.(2), Priority Development Projects must also include all other post-construction pollutant-generating new Development Projects that result in the disturbance of one acre or more of land by July 1, 2012.<sup>41</sup>~~

**Comment [amm42]:** Request deletion as disturbance threshold inappropriately captures non-development related activity (maintenance, agricultural, etc.) Further, the one acre threshold is not appropriately supported in the Fact Sheet.

## (2) Priority Development Project Categories

Where a new Development Project feature, such as a parking lot, falls into a Priority Development Project Category, the entire project footprint is subject to SSMP requirements.

- (a) New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site) including commercial, industrial, residential (excluding individual single family home projects not part of a larger common plan of development), mixed-use, and public projects. This category includes development projects on public or private land which fall under the planning and building authority of the Copermitees.
- (b) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.
- (c) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet must meet all SSMP requirements except for

<sup>41</sup> Pollutant-generating Development Projects are those projects that generate pollutants at levels greater than natural background levels.

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LID and structural treatment BMP and numeric sizing criteria requirement F.1.d.(4) and F.1.d.(6) and hydromodification requirement F.1.h.

- (d) All hillside development greater than 5,000 square feet. This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
- (e) Environmentally Sensitive Areas (ESAs). All development located within, or directly adjacent to, or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.
- (f) Impervious parking lots 5,000 square feet or more and potentially exposed to runoff. Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.
- (g) Street, roads, highways, and freeways. This category includes any paved impervious surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. To the extent that the Copermittees develop revised standard roadway design and post-construction BMP guidance that comply with the provisions of Section F.1 of the Order, then public works projects that implement the ~~revised standard roadway sections designs/guidance~~ do not have to develop a project specific SSMP. The standard roadway design and post-construction BMP guidance must be submitted with the Copermittee's updated SSMP.
- (h) Retail Gasoline Outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

(3) Pollutants of Concern

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As part of its local SSMP, each Copermittee must implement an updated procedure for identifying pollutants of concern for each Priority Development Project. The procedure must address, at a minimum: (1) Receiving water quality (including pollutants for which receiving waters are listed as impaired under CWA section 303(d)); (2) Land-use type of the Development Project and pollutants associated with that land use type; and (3) Pollutants expected to be present on site.

**(4) Low Impact Development BMP Requirements**

Each Copermittee must require each Priority Development Project to implement LID BMPs which will collectively minimize directly connected impervious areas, limit loss of existing infiltration capacity, and protect areas that provide important water quality benefits necessary to maintain riparian and aquatic biota, and/or are particularly susceptible to erosion and sediment loss.

(a) The Copermittees must take the following measures to ensure that LID BMPs are implemented at Priority Development Projects:

- (i) Each Copermittee must require LID BMPs or make a finding of technical infeasibility for each Priority Development Project in accordance with the LID waiver program in Section F.1.d.(7);
- (ii) Each Copermittee must incorporate formalized consideration, such as thorough checklists, ordinances, and/or other means, of LID BMPs into the plan review process for Priority Development Projects;
- (iii) On or before July 1, 2012, each Copermittee to the extent of its jurisdiction must review its local codes, policies, and ordinances and identify barriers therein to implementation of LID BMPs. Following the identification of these barriers to LID implementation, where feasible, the Copermittee must take, by the end of the permit cycle, appropriate actions to remove such barriers. The Copermittees must include this review with the updated JRMP.

Comment [DB43]: See legal comments in Attachment 8.

(b) The following LID BMPs must be implemented at each Priority Development Project:

- (i) Maintain or restore natural storage reservoirs and drainage corridors (including depressions, areas of permeable soils, swales, and ephemeral and intermittent streams) to the extent feasible<sup>12</sup>;
- (ii) Projects with landscaped or other pervious areas must, where feasible, properly design and construct the pervious areas to

Comment [CP44]: Footnote edits per discussions with Board staff on 8/18

<sup>12</sup> Priority Development Projects proposing to dredge or fill materials in waters of the U.S. must obtain a CWA §401 Water Quality Certification. Discharges of dredge or fill materials in and/or waters of the State must obtain a CWA §401 Water Quality Certification and/or Waste Discharge Requirements.

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effectively receive and infiltrate, retain and/or treat runoff from impervious areas, prior to discharge to the MS4. Soil compaction for these areas must be minimized. The amount of the impervious areas that are to drain to pervious areas must be based upon the total size, soil conditions, slope, and other pertinent factors.

- (iii) Projects with low traffic areas and appropriate soil conditions must construct walkways, trails, overflow parking lots, alleys, or other low traffic areas with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials.

(c) LID BMPs sizing criteria:

- (i) LID BMPs must be sized and designed to ensure onsite retention without runoff, of the volume of runoff produced from a 24-hour 85<sup>th</sup> percentile storm event<sup>13</sup> ("design capture volume");
- (ii) If onsite infiltration LID BMPs are technically infeasible per section F.1.d.(7)(b), other LID BMPs may treat any volume that is not retained onsite provided that the other LID BMPs are sized to hold the design storm volume that is not infiltrated. The LID BMPs must be designed for an appropriate surface loading rate to prevent erosion, scour and channeling within the BMP.
- (d) If it is shown to be technically infeasible per Section F.1.d.(7)(b) to retain and/or treat the remaining volume up to and including the design capture volume using LID BMPs, then the project must implement conventional treatment control BMPs in accordance with Section F.1.d.(6) below and must participate in the LID waiver program in Section F.1.d.(7).
- (e) All LID BMPs must be designed and implemented with measures to avoid the creation of nuisance or pollution associated with vectors, such as mosquitoes, rodents, and flies.

(5) Source Control BMP Requirements

Each Copermitee must require each Priority Development Project to implement applicable source control BMPs. The source control BMPs to be required must be designed to:

<sup>13</sup> This volume is not a single volume to be applied to all of Riverside County. The size of the 85<sup>th</sup> percentile storm event is different for various parts of the County. The Copermitees are encouraged to calculate the 85<sup>th</sup> percentile storm event for each of its jurisdictions using local rain data pertinent to its particular jurisdiction (0.6 inch standard is a rough average for the County and should only be used where appropriate rain data is not available). In addition, isopluvial maps may be used to extrapolate rainfall data to areas where insufficient data exists in order to determine the volume of the local 85<sup>th</sup> percentile storm event in such areas. Where the Copermitees will use isopluvial maps to determine the 85<sup>th</sup> percentile storm event in areas lacking rain data, the Copermitees must describe their method for using isopluvial maps in its SSMPs.

**Comment [CP45]:** This requirement is clearly specifying the method of compliance in contradiction with state law (CVC 13380).

**Comment [DB46]:** See general comment 1 in Attachment 7.

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- (a) Prevent illicit discharges into the MS4;
- (b) Minimize storm water pollutants of concern in runoff;
- (c) ~~Eliminate~~ Minimize irrigation runoff;
- (d) Include storm drain system stenciling or signage;
- (e) Include properly designed outdoor material storage areas;
- (f) Include properly designed outdoor work areas;
- (g) Include properly designed trash storage areas;
- (h) Include water quality protection requirements applicable to individual priority project categories.

**(6) Treatment Control BMP Requirements**

Each Copermittee must require each Priority Development Project that meets the Copermittee's technical infeasibility criteria in Section F.1.d(7) below, to implement conventional treatment control BMPs to treat the portion of the "design capture volume" that was not treated by LID BMPs per Section F.1.d(4) above. Conventional treatment control BMPs must meet the following requirements:

- (a) All treatment control BMPs for a single Priority Development Project must collectively be sized to comply with the following numeric sizing criteria:
  - (i) Volume-based treatment control BMPs must be designed to mitigate (infiltrate, filter, or treat) the remaining portion of the design capture volume that was not retained and/or treated with LID BMPs; or
  - (ii) Flow-based treatment control BMPs must be designed to mitigate (filter, or treat) either: a) the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event; or b) the maximum flow rate of runoff produced by the 85<sup>th</sup> percentile hourly rainfall intensity (for each hour of a storm event), as determined from the local historical rainfall record, multiplied by a factor of two.
- (b) All treatment control BMPs for Priority Development Projects must, at a minimum:
  - (i) Be ranked with high or medium pollutant removal efficiency for the project's most significant pollutants of concern, as the pollutant removal efficiencies are identified in the Copermittees' SSMP. Treatment control BMPs with a low removal efficiency ranking must only be approved by a Copermittee when a feasibility analysis has been conducted which exhibits that implementation of treatment control BMPs with high or medium removal efficiency rankings are infeasible for a Priority Development Project or portion of a Priority

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- (ii) Development Project.  
Be correctly sized and designed so as to remove storm water pollutants to the MEP.
- (c) Target removal of pollutants of concern from runoff.
- (d) Be implemented close to pollutant sources, and prior to discharging into waters of the U.S.
- (e) Include proof of a mechanism under which ongoing long-term maintenance will be conducted to ensure proper maintenance for the life of the project. The mechanisms may be provided by the project proponent or Copermittee.
- (f) Be designed and implemented with measures to avoid the creation of nuisance or pollution associated with vectors, such as mosquitoes, rodents, and flies.

**(7) Low Impact Development (LID) BMP Waiver Program**

The Copermittees must develop, collectively or individually, a LID waiver program for incorporation into the SSMP, which would allow a Priority Development Project to substitute implementation of all or a portion of required LID BMPs in Section F.1.d(4) with implementation of treatment control BMPs and either 1) on-site mitigation, 2) an off-site mitigation project, and/or 3) other mitigation developed by the Copermittees. The Copermittees must submit the LID waiver program as part of their updated SSMP. At a minimum, the program must meet the requirements below:

- (a) Prior to implementation, the LID waiver program must clearly exhibit that it will not allow Priority Development Projects to result in a net impact (after consideration of any mitigation) from pollutant loadings over and above the impact caused by projects meeting LID requirements;
- (b) For each Priority Development Project participating, the Copermittee must find that it is technically infeasible to implement LID BMPs that comply with the requirements of Section F.1.(d)(4). The Copermittee(s) must develop criteria to determine the technical feasibility of implementing LID BMPs. Each Priority Development Project participating must demonstrate that LID BMPs were implemented as much as feasible given the site's unique conditions. Technical infeasibility may result from conditions including, but not limited to:
  - (i) Locations that cannot meet the infiltration and groundwater protection requirements in section F.1.c.(6) for large, centralized infiltration BMPs. Where infiltration is technically infeasible, the

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- project must still examine the feasibility of other onsite LID BMPs;
- (ii) Insufficient demand for storm water reuse;
  - (iii) Smart growth and infill or redevelopment locations where the density and/or nature of the project would create significant difficulty for compliance with the LID BMP requirements;
  - ~~(iii)~~(iv) Results of a Cost-Benefit Analysis; and
  - ~~(iv)~~(v) Other site, geologic, soil, or implementation constraints identified in the Copermittees updated SSMP document.

**Comment [CP47]:** This had been agreed to in discussions with RB staff, but was omitted from the draft.

- (c) Each Priority Development Project that participates in the LID waiver program must mitigate for the pollutant loads expected to be discharged due to not implementing the LID retention BMPs in section F.1.d.(4). The pollutant loading must be estimated for each project participating in the LID waiver program. The estimated impacts from not implementing the required LID retention BMPs in section F.1.d.(4) must be fully mitigated. Mitigation projects must be implemented within the same hydrologic unit as the Priority Development Project. Mitigation projects outside of the hydrologic subarea but within the same hydrologic unit may be approved provided that the project proponent demonstrates that mitigation projects within the same hydrologic subarea are infeasible and that the mitigation project will address similar beneficial use impacts as expected from the Priority Development Projects pollutant load. Onsite mitigation may include increasing the conventional treatment sizing factors to achieve pollutant load removal equal to or greater than the pollutant load removal expected from implementing onsite retention of the design capture volume. Offsite mitigation projects may include green streets projects, existing development retrofit projects, retrofit incentive programs, regional BMPs and/or riparian restoration projects. Project applicants seeking to utilize these alternative compliance provisions may propose other offsite mitigation projects, which the Copermittees may approve if they meet the requirements of this subpart.
- (d) A Copermittee may choose to implement additional mitigation programs (e.g., pollutant credit system, mitigation fund) as part of the LID waiver program provided that the mitigation program clearly exhibits that it will not allow Priority Development Projects to result in a net impact from pollutant loadings over and above the impact caused by projects meeting LID requirements. Any additional mitigation programs that a Copermittee chooses to implement must be submitted to the San Diego Water Board Executive Officer for review and acceptance prior to implementation.

(8) LID and Treatment Control BMP Standards

- (a) As part of the SSMP, each Copermittee must develop and require Priority Development Projects to implement siting, design, and maintenance criteria for each LID and treatment control BMP listed in the SSMP to

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determine feasibility and applicability and so that implemented LID and treatment control BMPs are constructed correctly and are effective at pollutant removal, runoff control, and vector minimization. Development of BMP \_\_design worksheets which can be used by project proponents is encouraged.

- (b) LID and treatment control BMPs implemented at any Priority Development Projects must mitigate (treat through infiltration, settling, filtration or other unit processes) the required volume or flow of runoff from all developed portions of the project, including landscaped areas.
- (c) All LID and treatment control BMPs must be located so as to remove pollutants from runoff prior to its discharge to any receiving waters. Multiple Priority Development Projects may use shared post-construction BMPs as long as construction of any shared BMP is completed prior to the use or occupation of any Priority Development Project from which the BMP will receive runoff. Post construction BMPs must not be constructed within a waters of the U.S. or waters of the State.

**(9) Implementation Process**

- (a) As part of its local SSMP, each Copermittee to the extent of its jurisdiction, must implement a process to verify compliance with SSMP requirements. The process must identify at what point in the planning process Priority Development Projects will be required to meet SSMP requirements and at a minimum, the Priority Development Project must implement the required post-construction BMPs prior to occupancy and/or the intended use of any portion of that project. The process must also include identification of the roles and responsibilities of various municipal departments in implementing the SSMP requirements, as well as any other measures necessary for the implementation of SSMP requirements.
- (b) Each Copermittee to the extent of its jurisdiction, must establish a mechanism not only to track post-construction BMPs, but also to ensure that appropriate easements and ownerships are properly recorded in public records and the information is conveyed to all appropriate parties when there is a change in project or site ownership.

Comment [D848]:

Comment [D849]:

**(10) Post-construction BMP Review**

- (a) The Copermittees must review and update the BMPs that are listed in their SSMP as options for treatment control. At a minimum, the update must include removal of obsolete or ineffective BMPs and addition of LID BMPs that can be used for treatment, such as bioretention cells, bioretention swales, etc. The update must also add appropriate LID BMPs to any tables or discussions in the local SSMPs addressing pollutant



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removal efficiencies of treatment control BMPs. In addition, the update must include review and revision where necessary of treatment control BMP pollutant removal efficiencies.

- (b) The update must incorporate findings from BMP effectiveness studies conducted by the Copermitees for projects funded wholly or in part by the State Water Board or Regional Water Boards.
- (c) Each Copermitee must implement a mechanism for annually incorporating findings from local treatment BMP effectiveness studies (e.g., ones conducted by, or on-behalf of, public agencies in Riverside County) into SSMP project reviews and permitting

**e. BMP CONSTRUCTION VERIFICATION**

Prior to occupancy and/or intended use of any portion of the Priority Development Project subject to SSMP requirements, each Copermitee to the extent of its jurisdiction, must inspect the constructed site design, source control, and treatment control BMPs applicable to the constructed portion of the project to verify that they have been constructed and are operating in compliance with all specifications, plans, permits, ordinances, and this Order.

**Comment [DB50]:** See District-specific comments in Attachment 8.

**f. BMP MAINTENANCE TRACKING**

(1) Inventory of SSMP projects: Each Copermitee must develop and maintain a watershed-based database to track and inventory all projects constructed within their jurisdiction, that have a final approved SSMP (SSMP projects), and its structural post-construction BMPs, within its jurisdiction since July, 2005. LID BMPs implemented on a lot by lot basis in low density residential areas at single family residential homes, such as rain barrels, are not required to be tracked or inventoried. At a minimum, the database must include information on BMP type(s), location, watershed, date of construction, party responsible for maintenance, dates and findings of maintenance verifications, and corrective actions, including whether the site was referred to the local vector control agency or department.

**Comment [CP51]:** Per discussions with Board staff on 8/18

**Comment [CP52]:** Logistical issue for populating a database with BMPs that have as-of-yet not been individually tracked, and a potential legal issues for verifications of those BMPs that were built without requirements for such verifications.

**Comment [CP53]:** Per discussions with Board staff on 8/18

(2) Each Copermitee must verify that approved post-construction BMPs are operating effectively and have been adequately maintained by implementing the following measures:

- (a) The designation of high priority SSMP Projects must consider the following:
  - (i) BMP size,
  - (ii) Recommended maintenance frequency,
  - (iii) Likelihood of operational and maintenance issues,

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- (iv) Location,
- (v) Receiving water quality,
- (vi) Compliance record,
- (vii) Land use,
- (viii) and other pertinent factors;

~~At a minimum, high priority projects include those projects that generate pollutants (prior to treatment) within the tributary area of a 303(d) listed waterbody impaired for that pollutant, or those projects generating pollutants within the tributary area for have been determined to be the source of an observed action level exceedance of that pollutant.~~

**Comment [CP54]:** See discussion in comment letter

- (b) Beginning on July 1, 2012, each Copermitttee must implement a program to verify that the required structural post-construction BMPs on the inventoried SSMP projects have been implemented, are maintained, and operating effectively through inspections, self-certifications, surveys, or other equally effective approaches with the following conditions:
- (i) The implementation, operation, and maintenance of all (100 percent) approved and inventoried final project public and private SSMPs (a.k.a. WQMPs) must be verified every five years;
  - (ii) All (100 percent) projects with BMPs that are high priority must be inspected by the Copermitttee annually prior to each rainy season;
  - (iii) All (100 percent) Copermitttee projects with BMPs must be inspected by the Copermitttee annually;
  - ~~(iv) At least 20 percent of all approved and inventoried SSMP projects must be inspected by the Copermitttee annually;~~
  - ~~(v)(iv)~~ (iv) At the discretion of the Copermitttee, its inspections may be coordinated with the facility inspections implemented pursuant to section F.3. of this Order;
  - ~~(vi)(v)~~ (v) For verifications performed through a means other than direct Copermitttee inspection, adequate documentation must be submitted to the Copermitttee to provide assurance that the required maintenance has been completed;
  - ~~(vii)(vi)~~ (vi) Appropriate follow-up measures (including re-inspections, enforcement, maintenance, etc.) must be conducted to ensure the treatment BMPs continue to reduce storm water pollutants as originally designed; and
  - ~~(viii)(vii)~~ (vii) Inspections must note observations of vector conditions, such as mosquitoes. Where conditions are identified as contributing to mosquito production, the Copermitttee must notify its local vector control agency.

**Comment [CP55]:** Per discussions with Board staff on 8/18

**g. ENFORCEMENT OF DEVELOPMENT SITES**

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Each Copermitttee must, ~~to the extent of its jurisdiction,~~ enforce its storm water ordinance for all development projects as necessary to maintain compliance with this Order. Copermitttee ordinances or other regulatory mechanisms must include appropriate sanctions to achieve compliance. Sanctions must include the following tools or their equivalent: Non-monetary penalties, fines, bonding requirements, liens, and/or permit or occupancy denials for non-compliance.

**Comment [CP56]:** See District-specific comments in Attachment 8

**h. HYDROMODIFICATION – LIMITATIONS ON INCREASES OF RUNOFF DISCHARGE RATES AND DURATIONS<sup>14</sup>**

Each Copermitttee shall collaborate with the other Copermitttees to develop and implement a Hydromodification Management Plan (HMP) to manage increases in runoff discharge rates and durations from all Priority Development Projects. The HMP must be incorporated into the SSMP and implemented by each Copermitttee so that estimated post-project runoff discharge rates and durations must not exceed pre-development discharge rates and durations. Where the proposed project is located on an already developed site, the pre-project discharge rate and duration must be that of the ~~pre-developed, naturally occurring project~~ condition. The draft HMP must be submitted to the San Diego Water Board on or before June 30, 2013~~2014~~. The HMP will be made available for public review and comment and the San Diego Water Board Executive Officer will determine whether to hold a public hearing before the full San Diego Water Board or whether public input will be through written comments to the Executive Officer only.

**Comment [CP57]:** It is not appropriate to require a single property owner to mitigate the effects caused by previous owners of that land. The current property owners can only be held responsible for their own actions.

(1) The HMP must:

- (a) Identify a method for assessing susceptibility and geomorphic stability of channel segments which receive runoff discharges from Priority Development Projects. A performance standard must be established that ensures that the geomorphic stability within the channel will not be compromised as a result of receiving runoff discharges from Priority Development Projects.
- (b) Identify a range of runoff flows<sup>15</sup> based on continuous simulation of the entire rainfall record (or other analytical method proposed by the

<sup>14</sup> Updated SSMP and hydromodification requirements must apply to all Priority Development Projects or phases of Priority Development Projects which have not yet begun grading or construction activities at the time any updated SSMP or hydromodification requirement commences. If a Copermitttee determines that lawful prior approval of a project exists, whereby application of an updated SSMP or hydromodification requirement to the project is legally infeasible, the updated SSMP or hydromodification requirement need not apply to the project. The Copermitttees must utilize the SSMP and hydromodification update periods to ensure that projects undergoing approval processes include application of the updated SSMP and hydromodification requirements in its plans.

<sup>15</sup> The identified range of run off flows to be controlled should be expressed in terms of peak flow rates of rainfall events, such as "10% of the pre-development 2-year runoff event up to the pre-development 10-year runoff event."

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Copermittees and deemed acceptable by the San Diego Water Board) for which Priority Development Project post-project runoff flow rates and durations must not exceed pre-development (~~naturally occurring~~) runoff flow rates and durations by more than 10 percent, where the increased flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses. The lower boundary of the range of runoff flows identified must correspond with the critical channel flow that produces the critical shear stress that initiates channel bed movement or that erodes the toe of channel banks. The identified range of runoff flows may be different for specific watersheds, channels, or channel reaches. In the case of an artificially hardened (concrete lined, rip rap, etc.) channel, the lower boundary of the range of runoff flows identified must correspond with the critical channel flow that produces the critical shear stress that initiates channel bed movement or that erodes the toe of channel banks of a comparable natural channel (i.e. non-hardened, pre-development).

- (c) Identify a method to assess and compensate for the loss of sediment supply to streams due to development. A performance and/or design standard must be created and required to be met by Priority Development Projects to ensure that the loss of sediment supply due to development does not cause or contribute to increased erosion within channel segments downstream of Priority Development Project discharge points.
- (d) Designate and require Priority Development Projects to implement control measures so that (1) post-project runoff flow rates and durations do not exceed pre-development (~~naturally occurring~~) runoff flow rates and durations by more than 10 percent for the range of runoff flows identified under section F.1.h.(1)(b), where the increased flow rates and durations will result in increased potential for erosion or other significant adverse impacts to beneficial uses; (2) post-project runoff flow rates and durations do not result in channel conditions which do not meet the channel standard developed under section F.1.h.(1)(a) for channel segments downstream of Priority Development Project discharge points; and (3) the design of the project and/or control measures ~~compensate for~~ minimize the loss of sediment supply due to development.
- (e) Include a protocol to evaluate potential hydrograph change impacts to downstream watercourses from Priority Development Projects to meet the range of runoff flows identified under Section F.1.h.(1)(b).
- (f) Include other performance criteria (numeric or otherwise) for Priority Development Projects as necessary to prevent runoff from the projects from increasing and/or continuing unnatural rates of erosion of channel beds and banks, silt pollutants generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

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(g) Include a review of pertinent literature.

~~(h) Identify areas within the Santa Margarita Hydrologic Unit for potential opportunities to restore or rehabilitate stream channels with historic hydromodification of receiving waters that are tributary to documented low or very low Index of Biotic Integrity (IBI) scores.~~

**Comment [CP58]:** This is not a necessary component of the HMP and unnecessarily increases costs.

~~(i)(h)~~ Include a description of how the Copermitees will incorporate the HMP requirements into their local approval processes.

~~(j)(i)~~ Include criteria on selection and design of management practices and measures (such as detention, retention, and infiltration) to control flow rates and durations and address potential hydromodification impacts.

~~(k)(j)~~ Include technical information, including references, supporting any standards and criteria proposed.

~~(l)(k)~~ Include a description of inspections and maintenance to be conducted for management practices and measures to control flow rates and durations and address potential hydromodification impacts.

~~(m)(l)~~ Include a description of monitoring and other program evaluations to be conducted to assess the effectiveness of implementation of the HMP. Monitoring and other program evaluations must include an evaluation of changes to physical (e.g., cross-section, slope, discharge rate, vegetation, pervious/impervious area) and biological (e.g., habitat quality, benthic flora and fauna, IBI scores) conditions of receiving water channels as areas with Priority Development Projects are constructed (i.e. pre- and post-project), as appropriate.

~~(n)(m)~~ Include mechanisms for assessing and addressing cumulative impacts of Priority Development Projects within a watershed on channel morphology.

(2) In addition to the control measures that must be implemented by Priority Development Projects per section F.1.h.(1)(d), the HMP must include a suite of management measures ~~to that can be~~ used on Priority Development Projects to mitigate hydromodification impacts, protect and restore downstream beneficial uses and prevent or further prevent adverse physical changes to downstream channels. The measures must be based on a prioritized consideration of the following elements in this order:

**Comment [CP59]:** Per discussions with Board staff on 8/18

- (a) Site design control measures;
- (b) On-site management measures;
- (c) Regional control measures located upstream of receiving waters; and

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## (d) In-stream management and control measures.

Where stream channels are adjacent to, or are to be modified as part of a Priority Development Project, management measures must include buffer zones and setbacks. The suite of management measures must also include stream restoration as a viable option to achieve the channel standard in section F.1.h.(1)(a). Whenever feasible, in-stream controls that are implemented by a PDP to mitigate that project's impact on hydromodification used as management measures to protect and restore downstream beneficial uses and for preventing or minimizing further adverse physical changes must not include the use of non-naturally occurring hardscape materials such as concrete, riprap, gabions, etc. to reinforce stream channels.

- (3) As part of the HMP, the Copermittees may develop a waiver program that allows a redevelopment Priority Development Project, as defined in Section F.1.d.(1)(b), to implement offsite mitigation measures. A waiver may be granted if onsite management and control measures are technically infeasible to fully achieve post-project runoff flow rates and durations that do not exceed the pre-development (naturally occurring) runoff flow rates and durations. Redevelopment projects that are granted a waiver under the program must not have post-project runoff flow rates and durations that exceed the pre-project runoff flow rates and durations. The estimated incremental hydromodification impacts from not achieving the pre-development (naturally occurring) runoff flow rates and durations for the project site must be fully mitigated. The offsite mitigation must be within the same stream channel system to which the project discharges. Mitigation projects not within the same stream channel system but within the same hydrologic unit may be approved provided that the project proponent demonstrates that mitigation within the same stream channel is infeasible and that the mitigation project will address similar impacts as expected from the project.

- (4) Each individual Copermittee has the discretion to not require Section F.1.h. at Priority Development Projects where the project:

- (a) Discharges storm water runoff into underground storm drains discharging directly to water storage reservoirs and lakes;
- (b) Discharges storm water runoff into conveyance channels whose bed and bank are concrete lined all the way from the point of discharge to water storage reservoirs and lakes; or
- (c) Discharges storm water runoff into other areas identified in the HMP as acceptable to not need to meet the requirements of Section F.1.h by the San Diego Water Board Executive Officer.

(5) HMP Reporting and Implementation

**Comment [CP60]:** Per discussions with Board staff on 8/18

Additionally, "wherever feasible" is an appropriate addition to this language for three reasons:

1) Based on the prioritization already identified in this section, instream controls will be a 'last resort'

2) If a project were to need to mitigate in-stream, preventing any man made materials would unnecessarily eliminate potentially viable solutions, even to the extent of eliminating options that would rehabilitate stream functions and uses.

3) The Water Board will still have oversight of the final in-stream plans through the 401 certifications, which will allow the Board to additionally ensure that such instream controls do not adversely affect the stream.

**Comment [CP61]:** Per discussions with Board staff on 8/18

**Comment [CP62]:** This is not needed and makes the language confusing. The HMP must be approved by the board anyway. See legal comment white paper.

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- (a) On or before June 30 , 2013, the Copermitees must submit to the San Diego Water Board a draft HMP that has been reviewed by the public, including the identification of the appropriate limiting range of flow rates per section F.1.h.(1)(b).
- (b) Within 180 days of receiving San Diego Water Board comments on the draft HMP, the Copermitees must submit a final HMP that addressed the San Diego Water Board's comments.
- (c) Within 90 days of receiving a determination of adequacy from the San Diego Water Board issued at a noticed public hearing, each Copermitee must incorporate and implement the HMP for all Priority Development Projects.
- (d) ~~Prior to acceptance of the HMP by the San Diego Water Board, the early implementation measures likely to be included in the HMP must be encouraged by the Copermitees.~~

**(6) Interim Hydromodification Criteria**

Immediately following adoption of this Order and until the final HMP required by this Order has been determined by the San Diego Water Board to be adequate, each Copermitee must ensure that all Priority Development Projects are implementing the hydromodification (aka Hydrologic Condition of Concern) requirements found in Section 4.4 of the 2006 Riverside County WQMP (updated in 2009) unless one of the following conditions in lieu of those specified in the WQMP are met:

- (a) Runoff from the Priority Development Project discharges (1) directly to a conveyance channel or storm drain that is concrete lined all the way from the point of discharge to the ocean, bay, lagoon, water storage reservoir or ~~lake Murrieta or Temecula creeks~~, and (2) the discharge is in full compliance with Copermitee requirements for connections and discharges to the MS4 (including both quality and quantity requirements); and (3) the discharge will not cause increased upstream or downstream erosion or adversely impact downstream habitat; and (4) the discharge is authorized by the Copermitee.
- (b) The Priority Development Project disturbs less than one acre. The Copermitee has the discretion to require a project specific WQMP to address hydrologic condition concerns on projects less than one acre on a case by case basis. The disturbed area calculation should include all disturbances associated with larger common plans of development.
- (c) The runoff flow rate, volume, velocity, and duration for the post-

**Comment [CP63]:** As seen in the San Diego HMP process, things can change after submitting it to the Board for approval. This requirement will create problems where a project implements the early measures, and such early measures may conflict with the final requirements, thereby forcing the project to re-design.

**Comment [CP64]:** All the way to the ocean is unreasonable and unnecessary. In the interim, very few projects are expected within the watershed, and the cumulative effects of such few projects is negligible.

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development condition of the Priority Development Project do not exceed the pre-development (i.e. naturally occurring) condition for the 2-year, 24-hour and 10-year, 24-hour rainfall events. This condition must be substantiated by hydrologic modeling acceptable to the Copermitee.

Once a final HMP is determined to be adequate and is required to be implemented, compliance with the final HMP is required by this Order and compliance with the 2004 WQMP (updated in 2009) or the in-lieu interim hydromodification criteria set forth above no longer satisfies the requirements of this Order.

- (7) No part of section F.1.h eliminates the Copermitees' responsibilities for implementing the Low Impact Development requirements under section F.1.d.(4).

**i. UNPAVED ROADS DEVELOPMENT**

The Copermitees must develop, where they do not already exist, and implement or require implementation of erosion and sediment control BMPs after construction of new unpaved roads that are within their legal authority to regulate. At a minimum, the BMPs must include:

- (1) Practices to minimize road related erosion and sediment transport;
- (2) ~~Grading of unpaved roads to slope outward where consistent with road engineering safety standards;~~
- (3) ~~Installation of water bars as appropriate;~~
- (4) ~~(2) Unpaved roads and culvert designs that do not minimize impacts to creek functions and where applicable, that maintain migratory fish passage;~~

**Comment [CP65]:** Pursuant to the comment letter:

THE COPERMITTEES REQUEST THIS SECTION BE DELETED IN ITS ENTIRETY.

See the comment letter, attachment 5, for further discussion of the issues and justification for this request.

Should the board decide to include such requirements despite the request and justifications provided in the comment letter, the edits shown below are the minimum changes that should be made.

**Comment [CP66]:** These are specifying the method of compliance.

**2. CONSTRUCTION COMPONENT**

Each Copermitee must implement a construction program as applicable to its jurisdiction, which meets the requirements of this section, and is designed to prevents illicit discharges into the MS4, implements and maintains structural and non-structural BMPs to reduce pollutants in storm water runoff from construction sites to the MS4, reduces construction site discharges of storm water pollutants from the MS4 to the MEP, and prevents construction site discharges from the MS4 from causing or contributing to a violation of water quality standards.

**Comment [DB67]:** See general comment 1 in Attachment 7

**a. ORDINANCE UPDATE**

By July 1, 2012, each Copermitee (except the District) must review and update its grading ordinances and other ordinances as necessary to comply with the

**Comment [CP68]:** See District Legal Comments in Attachment 8



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requirements of achieve full compliance with this Order, including requirements for the implementation of all designated BMPs and other measures.

**Comment [DB69]:** See legal comments in Attachment 7

**b. SOURCE IDENTIFICATION**

Each Copermittee must maintain an updated watershed-based inventory of all construction sites within its jurisdiction. The use of an automated database system, such as Geographical Information Systems (GIS) is strongly encouraged.

**c. SITE PLANNING AND PROJECT APPROVAL PROCESS**

Each Copermittee must incorporate consideration of potential water quality impacts prior to approval and issuance of construction and grading permits.

- (1) Each construction and grading permit must require proposed construction sites to implement designated BMPs and other measures so that illicit discharges into the MS4 are prevented, storm water pollutants discharged from the site will be reduced to the MEP, and construction discharges from the MS4 are prevented from causing or contributing to a violation of water quality standards.
- (2) Prior to permit issuance, the project proponent's runoff management plan (or equivalent construction BMP plan) must be required to comply, and reviewed to verify compliance with the local grading ordinance, other applicable local ordinances, and this Order.
- (3) Prior to permit issuance, each Copermittee must verify that project proponents subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities, (hereinafter General Construction Permit), have existing coverage under the General Construction Permit.

**Comment [CP70]:** Specifying method of compliance

**d. BMP IMPLEMENTATION**

- (1) Designate BMPs: Each Copermittee must designate a minimum set of BMPs and other measures to be implemented at all construction sites within their jurisdiction. The designated minimum set of BMPs must include:
  - (a) Management Measures:
    - (i) Pollution prevention, where appropriate;

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- (ii) Development and implementation of a runoff management plan;
- (iii) Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction;
- (iv) Minimization of exposure time of disturbed soil areas;
- (v) Minimization of grading during the rainy season and correlation of grading with seasonal dry weather periods to the extent feasible;
- (vi) Limitation of grading to a maximum disturbed area as determined by each Copermitttee before either temporary or permanent erosion controls are implemented to prevent storm water pollution. The Copermitttee has the option of temporarily increasing the size of disturbed soil areas by a set amount beyond the maximum, if the individual site is in compliance with applicable storm water regulations and the site has adequate control practices implemented to prevent storm water pollution;
- (vii) Temporary stabilization and reseeding of disturbed soil areas as rapidly as feasible;
- (viii) Wind erosion controls;
- (ix) Tracking controls;
- (x) Non-stormwater management measures to prevent illicit discharges and control storm water pollution sources;
- (xi) Waste management measures;
- (xii) Preservation of natural hydrologic features where feasible;
- (xiii) Preservation of riparian buffers and corridors where feasible;
- (xiv) Evaluation and maintenance of all BMPs, until removed; and
- (xv) Retention, reduction, and proper management of all storm water pollutant discharges on site to the MEP standard.

**Comment [CP71]:** Conflicts with the off-the-shelf approach that may be appropriate for some sites. This issue was discussed with staff.

## (b) Erosion and Sediment Controls:

- (i) Erosion prevention. Erosion prevention is to be used as the most important measure for keeping sediment on site during construction;
- (ii) Sediment controls. Sediment controls are to be used as a supplement to erosion prevention for keeping sediment on-site during construction;
- (iii) Slope stabilization must be used on all active slopes during rain events regardless of the season and on all inactive slopes during the rainy season and during rain events in the dry season;
- (iv) Permanent revegetation or landscaping as early as feasible; and
- (v) Erosion and sediment controls must be required during the construction of unpaved roads.

(2) Each Copermitttee must implement, or require implementation of,

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enhanced<sup>16</sup> measures to address the threat to water quality posed by all construction sites tributary to CWA section 303(d) water body segments impaired for sediment or turbidity. Each Copermittee must also implement, or require implementation of, enhanced, measures for construction sites within, or adjacent to, or discharging directly to receiving waters within environmentally sensitive areas (as defined in Attachment C of this Order).

~~(3) Active/Passive Sediment Treatment (AST): Each Copermittee must require implementation of AST for sediment at construction sites (or portions thereof) that are determined by the Copermittee to be an exceptional threat to water quality. In evaluating the threat to water quality, the following factors must be considered by the Copermittee:~~

**Comment [CP72]:** Specifying method of compliance, in violation of CWC 13360.

- ~~(a) Soil erosion potential or soil type;~~
- ~~(b) The site's slopes;~~
- ~~(c) Project size and type;~~
- ~~(d) Sensitivity of receiving water bodies;~~
- ~~(e) Proximity to receiving water bodies;~~
- ~~(f) Non-storm water discharges;~~
- ~~(g) Ineffectiveness of other BMPs;~~
- ~~(h) Proximity and sensitivity of aquatic threatened and endangered species of concern;~~
- ~~(i) Known effects of AST chemicals; and~~
- ~~(j) Any other relevant factors.~~

~~(4)(3) Implement BMPs: Each Copermittee must implement, or require the implementation of, the designated minimum BMPs and any additional measures necessary to comply with this Order at each construction site within its jurisdiction year round. BMP implementation requirements, however, can vary based on wet and dry seasons. Dry season BMP implementation must plan for and address unseasonal rain events that may occur during the dry season (May 1 through September 30).~~

#### **e. INSPECTION OF CONSTRUCTION SITES**

Each Copermittee must conduct construction site inspections for compliance with its ordinances (grading, storm water, etc.), permits (construction, grading, etc.), and this Order. Priorities for inspecting sites must consider the nature and size of the construction activity, topography, and the characteristics of soils and receiving water quality.

<sup>16</sup> Enhanced BMPs are control actions specifically targeted to the pollutant or condition of concern and should be of higher quality and effectiveness than the minimum control measures otherwise required. Enhanced in this Order means better, not simply more, BMPs.

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(1) During the rainy season, each Copermittee must inspect at least every two weeks ~~monthly~~, all construction sites within its jurisdiction meeting any of the following criteria:

- (a) All sites ~~30~~ 50 acres or more in size with rough grading or with active, unstabilized slopes occurring during the rainy season;
- (b) All sites one acre or more, and within the same hydrologic subarea and tributary to a CWA section 303(d) water body segment impaired for sediment; or within, directly adjacent to, or discharging directly to a receiving water within an ESA; and
- (c) Other sites determined by the Copermittees or the San Diego Water Board as a significant threat to water quality. In evaluating threat to water quality, the following factors must be considered: (1) soil erosion potential; (2) site slope; (3) project size and type; (4) sensitivity of receiving water bodies; (5) proximity to receiving water bodies; (6) non-storm water discharges; (7) known past record of non-compliance by the operators of the construction site; and (8) any other relevant factors.

(2) During the rainy season, each Copermittee must inspect at least ~~monthly~~ twice during the wet season, all construction sites with one acre or more of soil disturbance not meeting the criteria specified above in section F.2.e.(1).

- (3) During the rainy season, each Copermittee must inspect construction sites less than one acre in size as needed to ensure compliance with its ordinances and this Order.
- (4) Each Copermittee must inspect all construction sites as needed during the dry season. Sites meeting the criteria in section F.2.e.(1) must be inspected at least once in August or September each year.

(5) Re-inspections: Based upon site inspection findings, each Copermittee must implement all follow-up actions (i.e., re-inspection, enforcement) necessary to comply with this Order. Reinspection frequencies must be determined by each Copermittee based upon the severity of deficiencies, the nature of the construction activity, and the characteristics of soils and receiving water quality.

(6) Inspections of construction sites must include, but not be limited to:

- (a) Check for coverage under the General Construction Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.) during initial

**Comment [CP73]:** This section is setting the minimum frequencies, and as such should provide flexibility to inspect more frequently those sites that warrant additional focus / follow-up. The changes shown to F.2.e.(1) and (2) are to provide such flexibility. Additionally these frequencies are consistent with Riverside County's Santa Ana MS4 permit - which promotes consistency within the areas serviced by the County.

**Comment [CP74]:** See comment above

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- inspections;
- (b) Assessment of compliance with Copermittee ordinances and permits related to runoff, including the implementation and maintenance of designated minimum BMPs;
  - (c) Assessment of BMP effectiveness;
  - (d) Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff;
  - (e) ~~Review of site monitoring data results, if the site monitors its runoff~~
  - (f) Education and outreach on storm water pollution prevention, as needed; and
  - (g) Creation of a written or electronic inspection report.
- (7) The Copermittees must track the number of inspections for each inventoried construction site throughout the reporting period to verify that each site is inspected at the minimum frequencies required.

**Comment [CP75]:** This is a new and inappropriate requirement. Monitoring data is only required under the Statewide General Construction Permit, which is the Regional Board's responsibility to inspect and review.

Copermittee review of data which falls under the regional board's responsibility should be optional.

**f. ENFORCEMENT OF CONSTRUCTION SITES**

- (1) Each Copermittee must develop and implement an escalating enforcement process that achieves prompt corrective actions at construction sites within their jurisdiction, for violations of the Copermittee's water quality protection permits, requirements, and ordinances. This enforcement process must include authorizing the Copermittee's construction site inspectors to take immediate enforcement actions when appropriate and necessary. The enforcement process must include appropriate sanctions such as stop work orders, non-monetary penalties, fines, bonding requirements, and/or permit denials for non-compliance.
- (2) Each Copermittee must be able to respond to construction complaints received from third-parties and to ensure the San Diego Water Board that corrective actions have been implemented, if warranted.

**g. REPORTING OF NON-COMPLIANT SITES**

- (1) In addition to the notification requirements in Attachment B, each Copermittee must notify the San Diego Water Board when the Copermittee issues high level enforcement (as defined in the Copermittee's JRMP) to a construction site that poses a significant threat to water quality in its jurisdiction as a result of violations of its storm water ordinances.
- (2) Each Copermittee must annually notify the San Diego Water Board, prior to the commencement of the rainy season, of all construction sites with alleged

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violations that pose a significant threat to water quality. Information may be provided as part of the JRMP annual report if submitted prior to the rainy season. Information provided must include, but not be limited to, the following:

- (a) WDID number if enrolled under the General Construction Permit
- (b) Site Location, including address
- (c) Current violations or suspected violations

**3. EXISTING DEVELOPMENT COMPONENT**

**a. MUNICIPAL**

Each Copermittee must implement a municipal program for the Copermittee's areas and activities that meets the requirements of this section, and is designed to prevent illicit discharges into the MS4, reduces municipal discharges of storm water pollutants from the MS4 to the MEP, and prevents municipal discharges from the MS4 from causing or contributing to a violation of water quality standards.

**Comment [DB76]:** See general comment 1 in Attachment 7

**(1) Source Identification / Inventory**

Each Copermittee must maintain an updated watershed-based inventory of all its municipal areas and those activities that have the potential to generate and discharge pollutants. The inventory must include the name, address (if applicable), and a description of the area/activity; which pollutants are potentially generated by the area/activity; whether the area/activity is adjacent to an ESA; and identification of whether the area/activity is tributary to and within the same hydrologic sub area as a CWA section 303(d) water body segment and generates pollutants for which the water body segment is impaired. Linear facilities, such as roads, streets, and highways, do not need to be individually inventoried. The use of an automated database system, such as Geographical Information Systems (GIS) is highly recommended.

**Comment [CP77]:** Sites that do not have the potential to discharge pollutants, cannot affect discharges from the MS4.

**Comment [CP78]:** Per discussions with Board staff on 8/18

**(2) General BMP Implementation**

- (a) **Pollution Prevention:** Each Copermittee must implement pollution prevention methods in its municipal program and must require their use by appropriate departments, personnel, and contractors.
- (b) **Designate Minimum BMPs:** Each Copermittee must designate a minimum set of BMPs for all municipal areas and those activities that have the potential to generate and discharge pollutants. The designated minimum

**Comment [CP79]:** See comment above

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BMPs for municipal areas and activities must be area or activity specific as appropriate.

- (c) Each Copermitttee must designate BMPs for special events that are expected to generate significant trash and litter. Controls to consider must include:
- (i) Temporary screens on catch basins and storm drain inlets;
  - (ii) Temporary fencing to prevent windblown trash from entering adjacent water bodies and MS4 channels;
  - (iii) Proper management of trash and litter;
  - (iv) Catch basin cleaning following the special event and prior to an anticipated rain event;
  - (v) Street sweeping of roads, streets, highways and parking facilities following the special event; and
  - (vi) Other equivalent controls.
- (d) Designate BMPs for ESAs and 303(d) Impairments: Each Copermitttee must designate enhanced measures for its municipal areas and activities tributary to ~~and within the same hydrologic sub area as a~~ CWA section 303(d) impaired water body segments when an area or those activities have the potential to generate pollutants for which the water body segment is impaired. Each Copermitttee must also designate additional controls for its municipal areas and activities within or directly adjacent to or discharging directly to receiving waters within environmentally sensitive areas (as defined in Attachment C of this Order).
- (e) Implement BMPs: Each Copermitttee must implement, or require the implementation of, the designated minimum and enhanced BMPs and any additional measures necessary based on its inventory to comply with this Order for each of its municipal area and those activities that have the potential to discharge pollution.

**Comment [CP80]:** Per discussions with Board staff on 8/18

(3) **BMP Implementation for Management of Pesticides, Herbicides, and Fertilizers**

Each Copermitttee must implement BMPs to reduce the contribution of storm water pollutants to the MEP associated with the application, storage, and disposal of pesticides, herbicides and fertilizers from its municipal areas and activities ~~from its MS4 to MS4s and receiving waters~~. Such BMPs must include, at a minimum:

- (a) Educational activities, permits, certifications and other measures for municipal applicators and distributors;
- (b) Integrated Pest Management (IPM) measures that ~~rely on~~ emphasize non-chemical solutions;

**Comment [DB81]:** The Copermitttees are required to reduce pollutants in discharges from the MS4. See legal comments in Attachment 7

**Comment [CP82]:** There are cases where pesticides may be necessary due to health concerns (rodent infestations, etc) The concept of IPM does not preclude the use of chemical solutions where such solutions are needed or appropriate.

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- (c) ~~The use of native vegetation;~~
- (d) Schedules for irrigation and chemical application; and
- (e) The collection and proper disposal of unused pesticides, herbicides, and fertilizers.

**Comment [CP83]:** This is clearly overly specifying method of compliance, and is illegal pursuant to CWC 13360.

**(4) BMP implementation for Flood Control Structures**

- (a) Each Copermitttee must implement procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies.
- (b) Each Copermitttee must include water quality protection measures, where feasible, when retrofitting existing flood control structural devices.
- (c) Each Copermitttee must evaluate its existing flood control structures as part of ongoing routine maintenance, identify structures causing or contributing to a condition of pollution, ~~implement~~ identify measures to reduce or eliminate the structure's effect on pollution, and evaluate the feasibility of retrofitting the structural flood control device. The inventory and evaluation must be completed by and submitted to the San Diego Water Board in each the 2<sup>nd</sup> year (i.e. FY 2012/2013) JRMP Annual Report.

**Comment [CP84]:** This is not required by the federal regulations as an ongoing permit requirement.

Accordingly, the Copermitttees, request deletion of the section.

Should the board decide not to remove the section, at a minimum, the language should be restored to not require anything more than the O.C. Permit.

**(5) BMP implementation for Sweeping of Municipal Areas**

~~Where municipal area sweeping is implemented as an MS4 BMP for municipal roads, streets, highways, and parking facilities, each Copermitttee must design and implement the program based on the following criteria:~~

- ~~(a) Roads, streets, highways, and parking facilities identified as consistently generating the highest volumes of trash and/or debris must be swept at least two times per month.~~
- ~~(b) Roads, streets, highways, and parking facilities identified as consistently generating moderate volumes of trash and/or debris must be swept at least monthly.~~
- ~~(c) Roads, streets, highways, and parking facilities identified as generating low volumes of trash and/or debris must be swept as necessary, but no less than once per year.~~

**Comment [CP85]:** These are new requirements that are not necessary, and were not included in the draft OC Permit.

Further it is overly specific in forcing the Copermitttees to identify high/moderate/ and low (trash) volume streets. Such specificity is not necessary.

**(6) Operation and Maintenance of Municipal Separate Storm Sewer System (MS4) and Treatment Controls**

- (a) Treatment Controls: Each Copermitttee must implement a schedule of inspection and maintenance activities to verify proper operation of all its municipal structural treatment controls designed to reduce storm water pollutant discharges to or from its MS4s and related drainage structures.



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(b) ~~MS4 and Facilities~~: Each Copermittee must implement a schedule of maintenance activities for its MS4 and facilities (including but not limited to catch basins, storm drain inlets, detention basins, etc). The maintenance activities must, at a minimum, include:

- (i) Inspection and removal of accumulated waste at least once a year between May 1 and September 30 of each year for all MS4 facilities ~~catch basins and storm drain inlets, with;~~ Additional facilities cleaning as necessary between October 1 and April 30 of each year;
- (ii) Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year;
- (iii) Open channels and basins must be cleaned of observed anthropogenic litter in a timely manner;
- (iv) Maintenance activities within open channels must not adversely impact beneficial uses within those channels;
- (v) Record keeping of the maintenance and cleaning activities including the overall quantity of waste removed;
- (vi) Proper disposal of waste removed pursuant to applicable laws; and
- (vii) Measures to eliminate waste discharges during MS4 maintenance and cleaning activities.

(7) Infiltration From Sanitary Sewer to MS4/ Provide Preventive Maintenance

(8) Each Copermittee must implement controls and measures to prevent and eliminate infiltration of seepage from sanitary sewers to MS4s ~~through thorough, routine preventive maintenance of the MS4.~~ Each Copermittee that operates both a municipal sanitary sewer system and a MS4 must implement controls and measures to prevent and eliminate infiltration of seepage from the sanitary sewers to the MS4s that must include overall sanitary sewer and MS4 surveys and thorough, routine preventive maintenance of both.

(a) Each Copermittee must implement controls to limit infiltration of seepage from sanitary sewers to municipal separate storm sewer systems where necessary. Such controls must include:

- (i) Adequate plan checking for construction and new development;
- (ii) Incident response training for its municipal employees that identify sanitary sewer spills;
- (iii) Code enforcement inspections;
- (iv) MS4 maintenance and inspections;
- (v) Interagency coordination with sewer agencies; and

**Comment [CP86]:** The term 'facilities' is confusing and unnecessary.

Request use of the language from the 2004 MS4 permit as shown in these redlines (though (b)(ii)). This is much clearer and simple to comply with.

**Comment [CP87]:** Although the shown redlines will be much clearer, should board staff reject such changes, at a minimum the word 'detention basins' should be removed as it would otherwise conflict with subpart (iii) below.

**Comment [CP88]:** The MS4 Copermittees that do not own nor operate a sewer system cannot prevent seepage by maintaining their MS4.

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- (vi) Proper education of its municipal staff and contractors conducting field operations on the MS4 or its municipal sanitary sewer (if applicable).

**(9) Inspection of Municipal Areas and Activities**

- (a) At a minimum, each Copermittee must inspect their following high priority municipal areas and activities annually:

- (i) Roads, Streets, Highways, and Parking Facilities;
- (ii) Flood Management Projects and Flood Control Devices not otherwise inspected per Section F.3.a.(6)(b);
- (iii) Areas and activities tributary to and within the same hydrologic sub area as a CWA section 303(d) impaired water body segment, where an area or activity generates has the potential to discharge pollutants<sup>17</sup> for which the water body segment is impaired.
- (iv) Areas and activities within or adjacent to or discharging directly to receiving waters within environmentally sensitive areas (as defined in Attachment C of this Order);
- (v) Municipal Facilities:
  - [a] Active or closed municipal landfills;
  - [b] Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems;
  - [c] Solid waste transfer facilities;
  - [d] Land application sites;
  - [e] Corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles; and
  - [f] Household hazardous waste collection facilities.
- (vi) Municipal airfields;
- (vii) Parks and recreation facilities;
- (viii) Special event venues following special events (festivals, sporting events, etc.);
- (ix) Power washing activities; and
- (x) Other municipal areas and activities that the Copermittee determines may contribute a significant pollutant load to the MS4.

- (b) Other municipal areas and activities must be inspected as needed and in response to water quality data, valid public complaints, and findings from municipal or contract staff.

- (c) Based upon site inspection findings, each Copermittee must implement all follow-up actions necessary to comply with this Order.

**Comment [CP89]:** Per discussions with Board staff on 8/16

**Comment [CP90]:** See footnote explaining this change. The idea is that if a project has LID or Treatment Control BMPs in place – it should no longer be a mandatory high-priority site for municipal inspection purposes. It would then be subject to the requirements of Section F.1.f.

<sup>17</sup> A project is considered to have the potential to discharge a pollutant if it does not have LID or treatment controls BMPs in place that treat the design capture volume for the areas of the site generating that pollutant.

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(10) Enforcement of Municipal Areas and Activities

Each Copermittee must enforce its storm water ordinance for all its municipal areas and activities as necessary to maintain compliance with this Order.

(11) Copermittee Maintained Unpaved Roads Maintenance

- (a) The Copermittees must develop, where they do not already exist, and implement or require implementation of BMPs for erosion and sediment control measures during their maintenance activities on unpaved roads, particularly in or adjacent to receiving waters.
- (b) The Copermittees must develop and implement or require implementation of appropriate BMPs to minimize impacts on streams and wetlands during their unpaved road maintenance activities.
- (c) The Copermittees must regularly maintain their unpaved roads adjacent to streams and riparian habitat to reduce erosion and sediment transport;
- (d) Re-grading of unpaved roads during maintenance must be sloped outward where consistent with road engineering safety standards;
- (e) Through their regular maintenance of unpaved roads, the Copermittees must examine the feasibility of replacing existing culverts or design of new culverts or bridge crossings to reduce erosion and maintain natural stream geomorphology.

**Comment [CP91]:** Pursuant to the comment letter:  
 THE COPERMITTEES REQUEST THIS SECTION BE DELETED IN ITS ENTIRETY.  
 See the comment letter, attachment 5, for further discussion of the issues and justification for this request.  
 Should the board decide to include such requirements despite the request and justifications provided in the comment letter, the edits shown below are the minimum changes that should be made.

**Comment [CP92]:** Regular maintenance of unpaved roads may have unintended negative effects by virtue of further loosening soil to maintain the roads. This requirement should be removed, or revised to only be required where necessary to resolve significant problems impacting streams and riparian habitat.

**Comment [CP93]:** Specifying method of compliance

**b. COMMERCIAL / INDUSTRIAL**

Each Copermittee (except the District) must implement a commercial / industrial program that meets the requirements of this section for facilities whose operation is under its jurisdiction, and is designed to prevent illicit discharges into the MS4, reduces commercial / industrial discharges of storm water pollutants from the MS4 to the MEP, and prevents commercial / industrial discharges from the MS4 from causing or contributing to a violation of water quality standards.

**Comment [CP94]:** See District-specific Legal comments

**Comment [DB95]:** See general comment 1 in Attachment 7

(1) Source Identification

- (a) Each Copermittee must maintain an updated watershed-based inventory of all industrial and commercial sites/sources within its jurisdiction (regardless of ownership) that could contribute a significant pollutant load to the MS4. The inventory must include the following minimum information for each industrial and commercial site/source: name; address; pollutants potentially generated by the site/source; and

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identification of whether the site/source is tributary to a CWA §303(d) water body segment and generates pollutants for which the water body segment is impaired; and a narrative description including SIC codes which best reflects the principal products or services provided by each facility.

At a minimum, the following sites/sources must be included in the inventory:

(i) Commercial Sites/Sources:

- [a] Automobile repair, maintenance, fueling, or cleaning;
- [b] Airplane repair, maintenance, fueling, or cleaning;
- [c] Boat repair, maintenance, fueling, or cleaning;
- [d] Equipment repair, maintenance, fueling, or cleaning;
- [e] Automobile and other vehicle body repair or painting;
- [f] Mobile automobile or other vehicle washing;
- [g] Automobile (or other vehicle) parking lots and storage facilities;
- [h] Retail or wholesale fueling;
- [i] Pest control services;
- [j] Eating or drinking establishments, including such retail establishments with food markets;
- [k] Mobile carpet, drape or furniture cleaning;
- [l] Cement mixing or cutting;
- [m] Masonry;
- [n] Painting and coating;
- [o] Botanical or zoological gardens and exhibits;
- [p] Landscaping;
- [q] Nurseries and greenhouses;
- [r] Golf courses, parks and other recreational areas/facilities;
- [s] Cemeteries;
- [t] Pool and fountain cleaning;
- [u] ~~Marinas;~~
- [v] Portable sanitary services;
- [w] Building material retailers and storage;
- [x] Animal boarding facilities and kennels;
- [y] Mobile pet services;
- [z] Power washing services;
- [aa] Plumbing services; and
- [bb] Other sites and sources with a history of un-authorized discharges to the MS4.

Comment [CP96]: Clearly not applicable within this permit area.

(ii) Industrial Sites/Sources:

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- [a] Industrial Facilities, as defined at 40 CFR § 122.26(b)(14), including those subject to the General Industrial Permit or other individual NPDES permit;
- [b] Operating and closed landfills;
- [c] Facilities subject to SARA Title III; and
- [d] Hazardous waste treatment, disposal, storage and recovery facilities.

(iii) ~~ESAs and 303(d) Listed Waterbodies: All other commercial or industrial sites/sources tributary to and within the same hydrologic sub area as a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired. All other commercial or industrial sites/sources within or directly adjacent to or discharging directly to receiving waters within environmentally sensitive areas (as defined in Attachment C of this Order) or that generate pollutants tributary to~~ determined to be the source of an observed exceedance of an action level.

(iv) All other commercial or industrial sites/sources that the Copermitttee determines may contribute a significant pollutant load to the MS4.

**(2) General BMP Implementation**

(a) Pollution Prevention: Each Copermitttee must require the use of pollution prevention methods by the inventoried industrial and commercial sites/sources, where appropriate.

(b) Designate / Update Minimum BMPs: Each Copermitttee must designate a minimum set of BMPs for all inventoried industrial and commercial sites/sources. Where BMPs have already been designated, each Copermitttee must review and update its existing BMPs for adequacy within one year of permit adoption by no later than the submittal of the JRMP. Copermitttees may continue to regularly review and update their designated BMPs for adequacy and subsequently submit any updates in their Annual Report. The designated minimum BMPs must be specific to facility types and pollutant-generating activities, as appropriate.

(c) Designate Enhanced BMPs for ESAs and 303(d) Impairments: Each Copermitttee must designate enhanced measures for inventoried industrial and commercial sites/sources tributary to and within the same hydrologic subarea as a CWA section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired). Each Copermitttee must also designate additional controls for industrial and commercial sites/sources within or directly adjacent to or discharging directly to coastal lagoons, the ocean, or other receiving

**Comment [CP97]:** See discussion in the comment letter.

**Comment [CP98]:** Per discussions with Board staff on 8/18

**Comment [CP99]:** See discussion in the comment letter.

**Comment [c100]:** From 2004 permit

**Comment [CP101]:** Per discussions with Board staff on 8/18

**Comment [CP102]:** Per discussions with Board staff on 8/18

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waters within environmentally sensitive areas (as defined in Attachment C of this Order). Copermittees may continue to regularly review and update their designated enhanced BMPs for adequacy and subsequently submit any updates in their next Annual Report.

- (d) Implement BMPs: Each Copermittee must implement, or require the implementation of, the designated minimum and enhanced BMPs and any additional measures necessary based on inspections, incident responses, and water quality data to comply with this Order at each industrial and commercial site/source within its jurisdiction.

**(3) Mobile Businesses Program**

- (a) Each Copermittee must develop and implement a program designed to reduce the discharge of storm water pollutants from the MS4 attributable to from mobile businesses to the MEP and to prohibit non-storm water discharges pursuant to Section B of this Order. Each Copermittee must keep as part of its commercial source inventory a listing of mobile businesses known to operate have bases of operation within its jurisdiction that conduct services listed above in section F.3.b.(1)(a). The program must include:

- (i) Development and implementation of minimum standards and BMPs to be required for each of the various types of mobile businesses;
- (ii) Development and implementation of an enforcement strategy which specifically addresses the unique characteristics of mobile businesses;
- (iii) Notification of those mobile businesses known to operate have bases of operation within the Copermittee's jurisdiction of the minimum standards and BMP requirements;
- (iv) Development and implementation of an outreach and education strategy; and
- (v) Inspection of mobile businesses as needed to implement the program.

- (b) If they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education.

**(4) Inspection of Industrial and Commercial Sites/Sources**

Each Copermittee must conduct industrial and commercial site inspections for compliance with its ordinances, permits, and this Order. Mobile businesses must be inspected as needed pursuant to section F.3.b.(3).

- (a) Inspection Procedures: Inspections must include but not be limited to:

**Comment [DB103]:** See general comment 1 Attachment 7 to the comment letter

**Comment [DB104]:** This change reflects the purpose of the Order, which is to reduce pollutants discharged from the MS4.

**Comment [CP105]:** This is an appropriate change, as it sets clear responsibility among the Copermittees.

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- (i) ~~Review of BMP implementation plans, if the site uses or is required to use such a plan;~~
  - (ii) ~~Review of facility monitoring data, if the site monitors its runoff;~~
  - (iii) Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification Number), if applicable;
  - (iv) Assessment of compliance with Copermittee ordinances and Copermittee issued permits related to runoff;
  - (v) Assessment of the implementation, maintenance and effectiveness of the designated minimum and/or enhanced BMPs;
  - (vi) Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
  - (vii) Education and training on storm water pollution prevention, as conditions warrant.
- (b) ~~Each Copermittee must annually notify the San Diego Water Board, prior to the commencement of the rainy season, of all Industrial Sites and Industrial Facilities subject to the General Industrial Permit or other individual NPDES permit with alleged violations of the Copermittees ordinances, that pose a significant threat to water quality.~~
- (e)(b) Frequencies: At a minimum all sites determined to pose a high threat to water quality must be inspected each year. All inventoried sites must be inspected at least once during a five year period. In evaluating threat to water quality, each Copermittee must consider, at a minimum, the following:
- (i) Type of activity (SIC code);
  - (ii) Materials used at the facility;
  - (iii) Wastes generated;
  - (iv) Pollutant discharge potential, including whether the facility generates a pollutant that exceeds an action level;
  - (v) Non-storm water discharges;
  - (vi) Size of facility;
  - (vii) Proximity to receiving water bodies;
  - (viii) Sensitivity of receiving water bodies;
  - (ix) Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
  - (x) Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
  - (xi) Facility design;
  - (xii) Total area of the site, portion of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
  - (xiii) The facility's compliance history; and

**Comment [CP106]:** See discussion in comment letter.

**Comment [CP107]:** Per discussions with Board staff on 8/18, comparable language added to F.3.b.(5)(b).

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(xiv) Any other relevant factors.

(c) Third-Party Certifications: Each Copermitee may propose to develop and implement a third party certification program subject to San Diego Water Board Executive Officer acceptance. This program would verify industrial and commercial site/source compliance with the Copermitees' ordinances, permits, and this Order. To the extent that third party certifications are conducted to fulfill the requirements of Section F.3.b.(4) above, the Copermitee retains responsibility for compliance with this Order and will be responsible for conducting and documenting quality assurance and quality control of the third-party certifications.

- (i) The Copermitee's proposed third party certification program must include the following:
- [a] A description of the procedures and measures for quality assurance and quality control;
  - [b] A listing of sites/sources that may and may not participate in the program;
  - [c] The representative percentage of certifications that would qualify to satisfy the inspection requirements in section F.3.b(4)(c) above;
  - [d] Photo documentation of potential storm water violations identified during the third party inspection;
  - [e] Reporting to the Copermitee of identified significant potential violations, including imminent or observed illegal discharges, within 24 hours of the third party inspection;
  - [f] Reporting to the Copermitee of all findings within one week of the inspection being conducted; and
  - [g] Copermitee follow-up and/or enforcement actions for identified potential storm water violations within two business days of the potential violation report receipt.

(d) Based upon site inspection findings, each Copermitee must implement all follow-up actions and enforcement necessary to comply with this Order.

(e) To the extent that the San Diego Water Board has conducted an inspection of an industrial site during a particular year, the requirement for the responsible Copermitee to inspect this facility during the same year is deemed satisfied.

(f) The Copermitees must track the number of inspections for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that the sites/sources are inspected at the minimum frequencies listed in this Order.



**DRAFT****(5) Enforcement of Industrial and Commercial Sites/Sources**

—Each Copermitttee must enforce its storm water ordinance for all industrial and commercial sites/sources as necessary to maintain compliance with this Order. Copermitttee ordinances or other regulatory mechanisms must include appropriate sanctions to achieve compliance. Sanctions must include the following tools or their equivalent: Non-monetary penalties, fines, bonding requirements, liens and/or permit denials for non-compliance.

- (a) Each Copermitttee shall annually notify the San Diego Water Board, prior to the commencement of the wet season, of any unresolved high level enforcement action (as defined in the Copermitttee's JRMP) that poses a significant threat to water quality in its jurisdiction as a result of violations of their storm water ordinances.

**Comment [DB108]:** See legal comments in Attachment 7

**Comment [CP109]:** Per discussions with Board staff on 8/18, language such as this would serve as an alternative to F.3.b.(4)(b) above. This proposed language is more consistent with the requirements in the Construction section.

**c. RESIDENTIAL**

Each Copermitttee ~~(except the District)~~ must implement a residential program that meets the requirements of this section, ~~and is designed to prevent~~ illicit discharges into the MS4, reduces residential discharges of storm water pollutants from the MS4 to the MEP, and prevents residential discharges from the MS4 from causing or contributing to a violation of water quality standards.

**Comment [DB110]:** See legal comments in Attachment 8

**Comment [DB111]:** See general comment 1 in Attachment 7

**(1) Threat to Water Quality Prioritization**

Each Copermitttee ~~must, within its jurisdiction,~~ identify residential areas and activities that pose a high threat to water quality. At a minimum, these must include:

- (a) Automobile repair, maintenance, washing, and parking;
- (b) Home and garden care activities and product use (pesticides, herbicides, and fertilizers);
- (c) Disposal of trash, pet waste, green waste, and household hazardous waste (e.g., paints, cleaning products);
- (d) Any other residential source that the Copermitttee determines may contribute a significant pollutant load to the MS4;
- (e) Any residential areas tributary to ~~and within the same hydrologic sub area~~ as a CWA section 303(d) impaired water body, where the residential area ~~ee-generates discharges~~ pollutants for which the water body is impaired; and
- (f) ~~Any residential areas within or directly adjacent to or discharging directly to receiving waters within an environmentally sensitive area (as defined in~~

**Comment [CP112]:** Per discussions with Board staff on 8/18

**Comment [CP113]:** These requirements should be focused on discharges of pollutants

**Comment [CP114]:** This inappropriately separates the risk (pollutant discharge potential) from the action (regulation, minimum BMPs, etc), and should not be a mandated component of this permit.

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Attachment C of this Order).

(2) BMP Implementation

- (a) Pollution Prevention: Each Copermitttee must actively encourage the use of pollution prevention methods by residents.
- (b) Designate BMPs: Each Copermitttee must designate minimum BMPs for high-threat-to-water quality residential areas and activities. The designated minimum BMPs for high-threat-to-water quality residential areas and activities must be area or activity specific.
- (c) Hazardous Waste BMPs: Each Copermitttee must facilitate the proper management and disposal of used oil, toxic materials, and other household hazardous wastes. Such facilitation must include educational activities, public information activities, and establishment of collection sites operated individually and/or jointly by the Copermitttee(s) or a private entity. Curbside collection of household hazardous wastes is encouraged.
- (d) Implement BMPs: Each Copermitttee must implement, or require implementation of, the designated minimum BMPs and any additional measures necessary to comply with Sections A and B of this Order.
- (e) Each Copermitttee must implement, or require implementation of, BMPs for residential areas and activities that have not been designated a high threat to water quality, as necessary.

(3) Enforcement of Residential Areas and Activities

Each Copermitttee must enforce its storm water ordinance for all residential areas and activities as necessary to maintain compliance with this Order.

(4) Common Interest Areas (CIA) / Home Owner Association (HOA) Areas, and Mobile Home Parks

Each Copermitttee must ensure that effective measures exist and are implemented or required to be implemented to ensure that runoff within and from common interest developments, including areas managed by associations and mobile home parks, and meets the objectives of this section and Order.

- (a) BMP Implementation: Each Copermitttee must implement or require implementation of management measures based on a review of pertinent factors, including:
  - (i) Maintenance duties and procedures typically used by CIA/HOA

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- (ii) maintenance associations within its jurisdiction;
- (ii) Whether streets and storm drains are publicly or privately owned within the CIA/HOA or mobile home park;
- (iii) Whether the CIA/HOA area or mobile home park has been identified as a high priority residential area based on an evaluation of the site potential to generate pollutants contributing to a 303(d) listed waterbody or an observed action level exceedance;
- (iv) Other activities conducted or authorized by the HOA that may pose a significant risk to inland receiving waters.

(b) Legal Authority and Enforcement: By July 1, 2012, each Copermitee must review, and if necessary update, its Municipal Code to verify that they have the legal authority to implement and enforce its ordinances within CIA/HOA areas and mobile home parks.

(5) Privately Owned Unpaved Roads Maintenance

- (a) ~~The Copermitees must require implementation of BMPs for erosion and sediment control during maintenance activities on privately owned unpaved roads, particularly in or adjacent to stream channels or wetlands.~~
- (b) ~~The Copermitees must enforce their ordinances against illegal construction and maintenance grading activities on privately owned unpaved roads, so as to prevent impacts to water quality.~~

**Comment [CP115]:** Pursuant to the comment letter:  
THE COPERMITTEES REQUEST THIS SECTION BE DELETED IN ITS ENTIRETY.  
See further discussion on this issue in Attachment 5 to this comment letter

**d. RETROFITTING EXISTING DEVELOPMENT**

Each Copermitee must develop and implement a retrofitting program that meets the requirements of this section upon submittal of the ROWD. The goals of the existing development retrofitting program are to provide an means to the Copermitees to address the impacts of existing development through retrofit projects that reduce impacts from hydromodification, promote LID, support riparian and aquatic habitat restoration, reduce the discharges of storm water pollutants from the MS4 to the MEP, and prevent discharges from the MS4 from causing or contributing to a violation of water quality standards. Where feasible, at the discretion of the Copermitee, the existing development retrofitting program may be coordinated with flood control projects and other infrastructure improvement programs.

**Comment [CP116]:** Clarifying edit Per discussions with Board staff on 8/18

- (1) The Copermitee(s) must identify and inventory existing areas of development (i.e. municipal, industrial, commercial, residential) within their jurisdiction as candidates for retrofitting. Potential retrofitting candidates must include but are not limited to:

**Comment [CP117]:** See District-specific comment white paper. (Attachment 8)

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- (a) Areas of development that generate pollutants of concern to a TMDL or an ESA;
  - (b) Receiving waters that are channelized or otherwise hardened;
  - (c) Areas of development tributary to receiving waters that are channelized or otherwise hardened;
  - (d) Areas of development tributary to receiving waters that are significantly eroded;
  - (e) Areas of development tributary to an ASBS or SWQPA; and
- (2) Each Copermittee must evaluate and rank their inventoried areas of existing developments to prioritize retrofitting. Criteria for evaluation must include but is not limited to:
- (a) Feasibility;
  - (b) Cost effectiveness;
  - (c) Pollutant removal effectiveness, including reducing pollutants exceeding action level;
  - (d) Tributary area potentially treated;
  - (e) Maintenance requirements;
  - (f) Landowner cooperation;
  - (g) Neighborhood acceptance;
  - (h) Aesthetic qualities;
  - (h)(i) Environmental Constraints (such as regulatory permits);
  - (i)(j) Efficacy at addressing concern; and
  - (i)(k) Potential improvements effects on public health and safety
- (3) Each Copermittee must consider the results of the evaluation in prioritizing work plans for the following year in accordance with Sections G.1 and J. Highly feasible projects expected to benefit water quality should be given a high priority to implement source control and treatment control BMPs. Where feasible, the retrofit projects may be designed in accordance with the SSMP requirements within sections F.1.d.(3) through F.1.d.(8) and the Hydromodification requirements in Section F.1.h.
- (4) The Copermittees (except the District) must cooperate with private landowners to encourage site specific retrofitting projects. The Copermittee must consider the following practices in cooperating and encouraging private landowners to retrofit their existing development:
- (a) Demonstration retrofit projects;
  - (b) Retrofits on public land and easements that treat runoff from private developments;
  - (c) Education and outreach;
  - (d) Subsidies for retrofit projects;
  - (e) Requiring retrofit projects as enforcement, mitigation or ordinance compliance;

**Comment [CP118]:** See District-specific comment white paper, Attachment 8.

**Comment [CP119]:** There may be external constraints by other regulatory agencies that may affect the ranking of a particular candidate.

**Comment [CP120]:** A particular retrofit opportunity may have both positive and/or negative effects on public health and safety, and both should be considered.

**Comment [CP121]:** See District-specific comment white paper, Attachment 8.

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- (f) Public and private partnerships; and
- (g) Fees for existing discharges to the MS4 and reduction of fees for retrofit implementation.

(5) The ~~known~~ completed retrofit BMPs must be tracked in accordance with Section F.1.f. Retrofit BMPs on publicly owned properties must be inspected per section F.1.f. Privately owned retrofit BMPs must be inspected as needed to ensure proper operation and maintenance.

**Comment [CP122]:** Per discussions with Board staff on 8/18

**Comment [CP123]:** Per discussions with Board staff on 8/18

(6) Where constraints on retrofitting preclude effective BMP deployment on existing developments at locations critical to protect receiving waters (as identified in section F.3.d.(1)), a Copermittee may propose a regional mitigation project to improve water quality. Such regional projects may include but are not limited to:

- (a) Regional water quality treatment BMPs;
- (b) Urban creek or wetlands restoration and preservation;
- (c) Daylighting and restoring underground creeks;
- (d) Localized rainfall storage and reuse to the extent such projects are fully protective of downstream water rights;
- (e) Hydromodification project; and
- (f) Removal of invasive plant species.

(7) A retrofit project or regional mitigation project may qualify as a Watershed Water Quality Activity provided it meets the requirements in section G. Watershed Workplan.

**4. ILLICIT DISCHARGE DETECTION AND ELIMINATION**

Each Copermittee must implement a program that meets the requirements of this section ~~and is designed~~ to actively detect and eliminate illicit discharges and disposal into the MS4. The program must address all types of illicit discharges and connections excluding those non-storm water discharges not prohibited by the Copermittee in accordance with section B of this Order.

**Comment [DB124]:** See general comment 1 in Attachment 7

**a. PREVENT AND DETECT ILLICIT DISCHARGES AND CONNECTIONS**

Each Copermittee must implement measures to prevent and detect illicit discharges to the MS4.

~~(1) Legal Authority: Each Copermittee must retain legal authority to prevent and eliminate illicit discharges and connections to the MS4.~~

**Comment [DB125]:** This measure is already covered in Part E of the Order.

~~(2)~~(1) Inspections: Each Copermittee must include use of appropriate

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Copermittee personnel and contractors to assist in identifying illicit discharges and connections during their daily activities.

- (a) Visual inspections for illegal discharges and connections must be conducted during routine maintenance of all MS4 facilities.
- (b) Copermittee staff and contractors conducting non-MS4 field operations must be trained to report suspected illegal discharges and connections to proper Copermittee staff.

**b. MAINTAIN MS4 MAP**

Each Copermittee must maintain an updated map of its entire MS4 and the corresponding drainage areas within its jurisdiction. The use of GIS is strongly encouraged. The MS4 map must include all segments of the storm sewer system owned, operated, and maintained by the Copermittee, as well as all known locations of inlets that discharge and/or collect runoff into the Copermittee's MS4, all known locations of access points (i.e. manholes) to the Copermittee's MS4, all known locations of connections with other MS4s (e.g. Caltrans), and all known locations of all the outfalls that discharge runoff from the Copermittee's MS4. The accuracy of the MS4 map must be confirmed during dry weather field screening and analytical monitoring and must be updated at least annually. The MS4 map including any GIS layers must be submitted with the updated JRMP.

**Comment [CP126]:** These are not required under the federal regulations, and are not necessary for the Copermittees' programs.

**c. FACILITATE PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS - PUBLIC HOTLINE**

Each Copermittee must promote, publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s. Each Copermittee must facilitate public reporting through development and operation of a public hotline. Public hotlines can be Copermittee-specific or shared by Copermittees. All storm water hotlines must be capable of receiving reports in both English and Spanish 24 hours per day and seven days per week. All reported incidents, and how each was resolved, must be summarized in each Copermittee's Annual Report.

**d. DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING**

Each Copermittee must conduct dry weather field screening and analytical monitoring of MS4 outfalls and other portions of its MS4 within its jurisdiction to detect illicit discharges and connections in accordance with Receiving Waters and MS4 Discharge Monitoring and Reporting Program No. R9-2010-0016 in Attachment E of this Order.

**e. INVESTIGATION / INSPECTION AND FOLLOW-UP**

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Each Copermitttee must implement procedures to investigate and inspect portions of its MS4 that, based on the results of field screening, analytical monitoring, or other appropriate information, indicate a reasonable potential of containing illicit discharges, illicit connections, or other sources of pollutants in non-storm water.

- (1) Develop response criteria for data: Each Copermitttee must develop, update, and use numeric criteria action levels (or other actions level criteria where appropriate) to determine when follow-up investigations will be performed in response to water quality monitoring. The criteria must include required non-storm water action levels (see Section C) and a consideration of 303(d)-listed waterbodies and environmentally sensitive areas (ESAs) as defined in Attachment C.
- (2) Respond to data: Each Copermitttee must investigate portions of the MS4 for which water quality data or conditions indicates a potential illegal discharge or connection.
  - (a) Obvious illicit discharges (i.e. color, odor, or significant exceedances of action levels) must be investigated immediately.
  - (b) Field screen data: Within two business days of receiving dry weather field screening results that exceed action levels, the Copermitttee(s) having jurisdiction must either initiate an investigation to identify the source of the discharge or document the rationale for why the discharge does not pose a threat to water quality and does not need further investigation. This documentation must be included in the Annual Report.
  - (c) Analytical data: Within five business days of receiving analytical laboratory results that exceed action levels, the Copermitttee(s) having jurisdiction must either initiate an investigation to identify the source of the discharge or document the rationale for why the discharge does not pose a threat to water quality and does not need further investigation. This documentation must be included in the Annual Report.
- (3) Respond to notifications: Each Copermitttee must respond to and resolve each reported incident (e.g., public hotline, staff notification, etc.) made to the Copermitttee in a timely manner. Criteria may be developed to assess the validity of, and prioritize the response to, each report.

**f. ELIMINATION OF ILLICIT DISCHARGES AND CONNECTIONS**

Each Copermitttee must take immediate action to initiate steps necessary to eliminate all detected illicit discharges, illicit discharge sources, and illicit connections after detection within its jurisdiction. Elimination measures may include an escalating series of enforcement actions for those illicit discharges

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that are not a serious threat to public health or the environment. Illicit discharges that pose a serious threat to the public's health or the environment must be eliminated immediately.

**g. ENFORCE ORDINANCES**

Each Copermittee must implement and enforce its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4 and to eliminate detected illicit discharges and connections to its MS4.

**Comment [DB127]:** This requirement is already covered in Part E.1 of the Order.

**h.g. PREVENT AND RESPOND TO SEWAGE SPILLS (INCLUDING FROM PRIVATE LATERALS AND FAILING SEPTIC SYSTEMS) AND OTHER SPILLS**

Each Copermittee must implement management measures and procedures (including a notification mechanism) to prevent, respond to, contain and clean up all sewage (see below) and other spills that may discharge into its MS4 from any source (including private laterals and failing septic systems). Copermittees must coordinate with spill response teams to prevent entry of spills into the MS4 and contamination of surface water, ground water and soil. Each Copermittee must coordinate spill prevention, containment and response activities throughout all appropriate Copermittee departments, programs and agencies so that maximum water quality protection is available at all times.

**Comment [CP128]:** The Copermittees do not own nor operate such systems, and as such cannot 'prevent' such spills from occurring.

**Comment [CP129]:** Per discussions with Board staff on 8/18

**5. PUBLIC PARTICIPATION COMPONENT**

Each Copermittee must incorporate a mechanism for public participation in the updating, development, and implementation of the JRMP.

**6. EDUCATION COMPONENT**

Each Copermittee must implement education programs designed to (1) measurably increase the knowledge regarding MS4s, impacts of runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutants in storm water discharges from MS4s to the MEP and eliminate prohibited non-storm water discharges to MS4s and the environment. At a minimum, the education programs must meet the requirements of this section and address the following target communities within their jurisdiction:

**Comment [DB130]:** See general comment 1 in Attachment 7 to the comment letter.

**Comment [DB131]:** See legal comments white paper in Attachment 8 to the comment letter.

**Comment [DB132]:** See District-specific comment white paper in Attachment 8 to the comment letter.

- Copermittee Departments and Personnel



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- New Development / Redevelopment Project Applicants, Developers, Contractors, Property Owners, and other Responsible Parties
- Construction Site Owners and Operators
- Commercial Facility Owners and Operators
- Industrial Facility Owners and Operators
- Residential Community and General Public
- ~~Quasi-Governmental Agencies / Districts (i.e., educational institutions, water districts, sanitation districts, etc.)~~

**Comment [CP133]:** These entities are subject to individual NPDES regulations, and the Copermittees should not be required to educate them on the general requirements below.

**a. General Requirements**

(1) At a minimum, the Copermittee education programs must implement educational programs for educate each target community on the following topics as appropriate to the community's activities and their impact discharges from the MS4 :

**Comment [CP134]:** The language should be clear that the minimum topics should be tailored as appropriate to the target audience.

- (a) Applicable water quality laws, regulations, permits, and/or other requirements;
- (b) Best management practices;
- (c) General runoff concepts;
- (d) Existing water quality, including local water quality conditions, impaired waterbodies and environmentally sensitive areas; and
- (e) Other topics as determined by the Copermittee, such as public reporting mechanisms, water conservation, low-impact development techniques, and public health and vector issues associated with runoff.

(2) Each Copermittee must implement educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials.

**b. Specific Requirements**

(1) Copermittee Departments and Personnel

- (a) Each Copermittee must implement an education program so its staff and contractors (and Planning Boards and Elected Officials, if applicable) responsible for implementing the requirements of this Order have an understanding of the following topics, as applicable to their responsibilities:
  - (i) Applicable water quality laws and regulations;
  - (ii) The potential effects and impacts that Copermittee departments and personnel activities related to their job duties can have on water quality;

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- (iii) Plan review policies and procedures to verify consistent application;
- (iv) Methods of minimizing impacts to receiving water quality resulting from development, construction, and other potential pollutant generating activities;
- (v) Proper implementation of erosion and sediment control, source control, treatment control, and other BMPs to minimize the impacts to receiving water quality resulting from development, construction, and other potential pollutant generating activities;
- (vi) Applicable recordkeeping and tracking mechanisms;
- (vii) Inspection and enforcement procedures and, BMP implementation, and review of monitoring data.

(b) Each Copermittee must train its staff responsible for oversight and conducting storm water compliance inspections and enforcement of construction activities (e.g. construction, building, code enforcement, grading review staffs, inspectors, and other responsible construction staff) annually prior to the rainy season.

(c) Each Copermittee must train its staff responsible for conducting storm water compliance inspections and enforcement of industrial and commercial facilities at least once a year.

**(2) New Development / Redevelopment and Construction Sites**

As early in the planning and development process as possible and all through the permitting and construction process, each Copermittee must notify parties responsible for the project about the importance of educating all construction workers in the field about storm water issues and BMPs, in addition to the topics under Section F.6.a.(1).

**(3) Commercial and Industrial Sites / Sources**

At least once during the five-year period of this Order, each Copermittee must notify the owner/operator of each of its inventoried commercial and industrial site/source of the BMP requirements applicable to the site/source.

**(4) Residential and General Public**

Each Copermittee shall collaboratively conduct or participate in development and implementation of a program to educate residential and general public target communities. The Copermittee residential and general public education programs must address potential pollutant generating activities (e.g., car washing, mobile operations, yard maintenance) and pollutant generating products (e.g., pesticides, fertilizers, household chemicals). The target audiences of the residential and general public education programs must include underserved target audiences (e.g., disadvantaged

**Comment [CP135]:** As discussed in the comment letter, this is a requirement for other NPDES permits, and it is inappropriate to mandate upon the Copermittees.

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communities), residents and managers of CIA/HOA areas, and owners and residents of mobile home parks.

**Comment [DB136]:** The requirement to educate the residential and general public communities will necessarily include these underserved audiences.

**G. WATERSHED WATER QUALITY WORKPLAN**

Each Copermitee must collaborate with other Copermitees to develop and implement a Watershed Water Quality Workplan (Watershed Workplan) designed to identify, prioritize, address, and mitigate the highest priority water quality issues/pollutants in the Upper Santa Margarita Watershed relating to discharges from the MS4.

**Comment [DB137]:** See general comment 1 in Attachment 7 to the comment letter.

**1. Watershed Workplan Components:**

The work plan must, at a minimum:

- a. Characterize the receiving water quality in the watershed. Characterization must include assessment and analysis of regularly collected water quality data, reports, monitoring and analysis generated in accordance with the requirements of the Receiving Waters Monitoring and Reporting Program, as well as applicable information available from other public and private organizations. This characterization must include an updated watershed map.
- b. Identify and prioritize water quality problem(s) in terms of constituents by location, in the watershed's receiving waters. In identifying water quality problem(s), the Copermitees must, at a minimum, give consideration to TMDLs, receiving waters listed on the CWA section 303(d) list, waters with persistent violations of water quality standards, toxicity, or other impacts to beneficial uses, and other pertinent conditions.
- c. Identify the likely sources, pollutant discharges and/or other factors causing the highest water quality problem(s) within the watershed resulting from discharges from the MS4. Efforts to determine such sources must include, but not be limited to: use of information from the construction, industrial/commercial, municipal, and residential source identification programs required within the JRMP of this Order; water quality monitoring data collected as part of the Receiving Water Monitoring and Reporting Program required by this Order, and additional focused water quality monitoring to identify specific sources within the watershed.
- d. Develop a watershed BMP implementation strategy to attain receiving water quality objectives in the identified highest priority water quality problem(s) and locations. The BMP implementation strategy must include a schedule for implementation of the BMP projects to abate specific receiving water quality problems and a list of criteria to be used to evaluate BMP effectiveness. Identified watershed water quality problems may be the result of jurisdictional discharges that will need to be addressed with BMPs applied in a specific jurisdiction in order to generate a benefit to the watershed. This implementation

**Comment [CP138]:** Changes in this section are requested pursuant to discussions with Board staff on 8/18.

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strategy must include a map of any implemented and/or proposed structural BMPs.

- e. Develop a strategy to monitor improvements in receiving water quality directly resulting from implementation of the BMPs described in the Watershed Workplan. The monitoring strategy must review the necessary data to report on the measured pollutant reduction that results from proper BMP implementation. Monitoring must, at a minimum, be conducted in the receiving water to demonstrate reduction in pollutant concentrations and progression towards attainment of receiving water quality objectives.
  - f. Establish a schedule for development and implementation of the Watershed strategy outlined in the Workplan. The schedule must, at a minimum, include forecasted dates of planned actions to address Provisions E.2(a) through E.2(e) and dates for watershed review meetings through the remaining portion of this Permit cycle. Annual watershed workplan review meetings must be open to the public and appropriately publically noticed such that interested parties may come and provide comments on the watershed program.
2. **Watershed Workplan Implementation** – Watershed Copermittee's must implement the Watershed Workplan within 90 days of submittal unless otherwise directed by the San Diego Water Board.
  3. **Copermittee Collaboration** – Watershed Copermittees must collaborate to develop and implement the accepted Watershed Workplan. Watershed Copermittee collaboration must include frequent regularly scheduled meetings. The Copermittees must pursue ~~efforts to obtain any~~ interagency agreements, or other coordination efforts, with non-Copermittee owners of the MS4 (such as Caltrans, Native American tribes, and school districts) where determined by the Copermittee as necessary to control the contribution of pollutants from one portion of the shared MS4 to another portion of the shared MS4. The Copermittees must, as appropriate, participate in watershed management efforts to address water quality issues within the entire Santa Margarita Watershed (such as the County of San Diego and U.S. Marine Corps Camp Pendleton).
  4. **Public Participation** – Watershed Copermittees must implement a watershed-specific public participation mechanism within each watershed. A required component of the watershed-specific public participation mechanism must be a minimum 30-day public review of and opportunity to comment on the Watershed Workplan prior to submittal to the San Diego Water Board. The Workplan must include a description of the public participation mechanisms to be used and identification of the persons or entities anticipated to be involved during the development and implementation of the Watershed Workplan.
  5. **Watershed Workplan Review and Updates** – Watershed Copermittees must review and update the Watershed Workplan annually to identify needed changes to

**Comment [CP139]:** Goal is to pursue these agreements where we determine it is needed. Otherwise the requirement is diverting our time and resources from other more important efforts.

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the prioritized water quality problem(s) listed in the workplan. All updates to the Watershed Workplan must be presented during an Annual Watershed Review Meeting. Annual Watershed Review Meetings must occur once every calendar year and be conducted by the Watershed Copermittees. Annual Watershed Review Meetings must be open to the public and adequately noticed. Individual Watershed Copermittees must also review and modify their jurisdictional programs and JRMP Annual Reports, as necessary, so that they are consistent with the updated Watershed Workplan.

- 6. Pyrethroid Toxicity Reduction Evaluation** – The Watershed Copermittees must incorporate the pyrethroid pollutant reduction program<sup>18</sup> into the Watershed Workplan. The pyrethroid pollutant reduction program must include the following elements:
- a. Pursue state and federal regulatory change.
  - b. Implement a set of source controls targeted specifically at urban pyrethroid use,
  - c. Through the annual reporting process, monitor the implementation of those controls, assess effectiveness, and identify sources or areas where additional effort is needed,
  - d. Implement additional controls as needed,
  - e. Continue to monitor implementation, as well as conditions within the target receiving waters, assess effectiveness, and re-evaluate control programs.

**H. FISCAL ANALYSIS**

1. **Secure Resources:** Each Copermittee must exercise its full authority to secure the resources necessary to meet all requirements of this Order. If the Copermittees are unable to secure the funding necessary to implement the requirements of this order, the Copermittees may request modification of the Order consistent with the MEP standard.
2. **Annual Analysis:** Each Copermittee must conduct an annual fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs required by this Order. The analysis must include estimated expenditures for the current reporting period, the preceding period, and the next reporting period.
  - a. Each analysis must include a description of the source of funds that are proposed to meet the necessary expenditures.
  - b. Each analysis must include a narrative description of circumstances resulting in a 25 percent or greater annual change for any budget line items.

**Comment [CP140]:** This clarifies that the Copermittees have the option to request modification of the order for reasons such as inability to obtain the requisite funding for the programs.

<sup>18</sup> The pyrethroid pollutant reduction program is described in the "Riverside County – Santa Margarita Region Pyrethroid Source Identification Toxicity Reduction Evaluation, Final Phase II Report", January 2009 by MACTEC.

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3. Annual Reporting: Each Copermitee must submit its annual fiscal analysis with the annual JRMP report.

**I. TOTAL MAXIMUM DAILY LOADS**

1. The waste load allocations (WLAs) of fully approved and adopted TMDLs are incorporated as Water Quality Based Effluent Limitations on a pollutant by pollutant, watershed by watershed basis. Early TMDL requirements, including monitoring, may be required and inserted into this Order pursuant to Finding E.10.
2. The Cities of Wildomar and Murrieta must comply with the requirements and WLAs assigned to the discharges from their MS4s contributing to the Lake Elsinore/Canyon Lake (San Jacinto Watershed) Nutrient TMDLs as specified in Section VI.D.2 of the Santa Ana Water Board's Order R8-2010-0033, including the relevant sections of the fact sheet and findings, and subsequent revisions thereto.

**J. PROGRAM EFFECTIVENESS ASSESSMENT AND REPORTING**

Beginning with the Annual Report due in 2013, each Copermitee must annually assess and report upon the effectiveness of its JRMP and Watershed Workplan implementation to (1) reduce the discharge of storm water pollutants from its MS4 to the MEP; (2) prohibit non-stormwater discharges; and (3) prevent runoff discharges from the MS4 from causing or contributing to a violation of water quality standards.

**1. Program Effectiveness Assessments**

**a. IDENTIFY EFFECTIVENESS ASSESSMENTS**

With the JRMP and Watershed Workplan submittal, each Copermitee must establish assessment measures or methods for each of the six outcome levels described by CASQA<sup>19</sup>, using data from each JRMP program component as appropriate, the MRP, and the Watershed Workplan.

- (1) Assessment interval: For each established assessment measure or method, an assessment interval must be established as appropriate to the measure or method.
- (2) Projected Timeframe: For each established assessment measure or method, each Copermitee must identify the projected timeframe within which the associated outcome level can adequately assess change.

<sup>19</sup> Effectiveness assessment outcome levels as defined by CASQA are defined in Attachment C of this Order. See "Municipal Stormwater Program Effectiveness Assessment Guidance" (CASQA, May 2007) for guidance for assessing program activities at the various outcome levels.

**DRAFT****b. PERFORM ASSESSMENTS**

- (1) Annually: Each year, the Copermitttee must perform each applicable assessment based on the associated assessment interval, and determine whether the desired outcome has been met;
- (2) With the submittal of the Report of Waste Discharge, the Copermitttees must determine whether their program implementation is resulting in the protection and/or improvement of water quality through an Integrated Assessment;

**2. Respond to Assessments**

- a. Where the assessments indicate that the desired outcome level has not been achieved at the end of the projected timeframe, the Copermitttee must review its applicable activities and BMPs to identify any modifications and improvements needed to maximize effectiveness, as necessary to comply with this Order. If the Copermitttee determines that the existing activities/BMPs are adequate, or that the projected timeframe should be extended, justification and an updated timeframe for attainment of the outcome level must be provided in the Annual Report.
- b. Each Copermitttee must develop and implement a work plan and schedule to address any program modifications and improvements in response to the findings of its assessment. The work plan and schedule must be provided and updated with the applicable Annual Report. The work plan must include, at a minimum, the following:

- (1) A description of the program modifications / improvements that will be implemented to achieve the intended outcome level.
- (2) A schedule for development and implementation of the program modifications / improvements, including any significant milestones.
- (3) Establishment of appropriate assessment measure(s) or method(s), assessment interval(s), and projected timeframe(s) in accordance with Section J.1.a. for the program modifications / improvements.
- (4) ~~The problems and priorities identified during the assessment;~~
- (2) ~~A list of priority pollutants and known or suspected sources;~~
- (3) ~~A brief description of the strategy employed to reduce, eliminate or mitigate the negative impacts;~~
- (4) ~~A description and schedule for new and/or modified BMPs. The schedule is to include dates for significant milestones;~~
- (5) ~~A description of how the selected activities will address an identified high priority problem. This will include a description of the expected effectiveness and benefits of the new and/or modified BMPs;~~
- (6) ~~A description of implementation effectiveness metrics;~~
- (7) ~~A description of how efficacy results will be used to modify priorities and~~

**Comment [CP141]:** Although the Copermitttees prefer to not be required to develop another compliance document, the edits below are intended to focus such a document on information that is relevant to the Copermitttees' response.

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implementation; and  
(8) A review of past activities implemented, progress in meeting water quality standards, and planned program adjustments.

**3. Assessment and Response Reporting**

Each Copermitttee must include a summary of its effectiveness assessments within each Annual Report. Beginning with the FY 2012-2013 Annual Report, the Program Effectiveness reporting must include:

- a. The results of each of the effectiveness assessments performed pursuant to J.1.b, including the demonstrated CASQA effectiveness level(s);
- b. Responses to effectiveness assessments; A description of any program modifications planned in accordance with section J.2, including the work plan and identified schedule for implementation. The description must include the basis for determining that each modified activity and/or BMP represents an improvement expected to result in improved water quality;
- c. A description of any steps to be implemented to improve the Copermitttee's ability to assess program effectiveness.

**K. REPORTING**

The Copermitttees may propose alternate reporting criteria and schedules, as part of their updated JRMP, for the Executive Officer's acceptance.

**1. Runoff Management Plans**

**a. JURISDICTIONAL RUNOFF MANAGEMENT PLANS**

- (1) The written account of the overall program to be conducted by each Copermitttee to meet the jurisdictional requirements of section F of this Order is referred to as the Jurisdictional Runoff Management Plan (JRMP). Each Copermitttee must revise and update its existing JRMP so that it describes all activities the Copermitttee will undertake to implement the requirements of this Order. Each Copermitttee must submit its updated and revised JRMP to the San Diego Water Board no later than June 30, 2012.
- (2) At a minimum, each Copermitttee's JRMP must be updated and revised to



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demonstrate compliance with each applicable section of this Order.

**b. WATERSHED WORKPLANS**

Copermittees must update and revise the Watershed Workplan to describe any changes in water quality problems or priorities, and any necessary change to actions Copermittees will take to implement jurisdictional or watershed BMPs to address those identified. The Copermittees must assemble and submit the Watershed Workplan to the San Diego Water Board no later than June 30, 2012, and must implement the Workplan within 90 days unless otherwise directed by the San Diego Water Board.

**2. Other Required Reports and Plans****a. SSMP UPDATES**

- (1) Copermittees must submit their updated SSMP in accordance with the applicable requirements of section F.1 with the JRMP by June 30, 2012.
- (2) Within 180 days of determination that the SSMP is in compliance with this Order's provisions, each Copermittee must amend its ordinances consistent with the SSMP and implement the updated SSMP. Any amended or new ordinances must be submitted to the San Diego Water Board within 30 days of adoption of the applicable annual report.

**Comment [CP142]:** Per discussions with Board staff on 8/18

**b. HMP**

- (1) By June 30, 2013, the Copermittees must submit to the San Diego Water Board Executive Officer a draft HMP that has been reviewed by the public, including identification of the appropriate limiting range of flow rates in accordance with the applicable requirements of section F.1.h.
- (2) Within 180 of receiving San Diego Water Board comments on the draft HMP, the Copermittees must submit a final HMP that addressed the San Diego Water Board's comments.
- (3) Within 90 days of receiving a finding of adequacy from the Executive Officer each Copermittee must incorporate and implement the HMP for all Priority Development Projects.
- (4) Prior to acceptance of the HMP by the San Diego Water Board, the early implementation measures likely to be included in the HMP shall be

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encouraged by the Copermitees.

**c. REPORT OF WASTE DISCHARGE**

The Copermitees must submit to the San Diego Water Board, no later than 180 days in advance of the expiration date of this Order, a Report of Waste Discharge (ROWD) as an application for issuance of new waste discharge requirements. The fourth annual report for this Order ~~may supplement~~ serve as the ROWD, provided the ROWD it contains the minimum information below.

At a minimum, the ROWD must include the following: (1) Proposed changes to the Copermitees' runoff management programs; (2) Proposed changes to monitoring programs; (3) Justification for proposed changes; (4) Name and mailing addresses of the Copermitees; (5) Names and titles of primary contacts of the Copermitees; (6) Any other information necessary for the reissuance of this Order and (7) Any other information required by federal regulations for permit reapplications.

**3. Annual Reports**

**a. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM (JRMP) ANNUAL REPORTS**

- (1) Each Copermitee must generate individual JRMP Annual Reports that cover implementation of its jurisdictional activities during the past annual reporting period. Each Annual Report must verify and document compliance with this Order as directed in this section. Each Copermitee must retain records in accordance with the Standard Provisions in Attachment B of this Order, available for review, that document compliance with each requirement of this Order. The reporting period for these annual reports must be the previous fiscal year.
- (2) Each Copermitee must submit its JRMP Annual Reports to the San Diego Water Board by October 31 of each year, beginning on October 31, 2013.
- (3) Each JRMP Annual Report must contain, at a minimum, the following information, as applicable to the Copermitee:
  - (a) Information required to be reported annually in Section H (Fiscal Analysis) of this Order;
  - (b) Information required to be reported annually in Section J (Program Effectiveness) of this Order;
  - (c) The completed Reporting Checklist found in Attachment D, and
  - (d) Information for each program component as described in the following Table 9:

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Table 9. Annual Reporting Requirements

Program Component	Reporting Requirement
New Development	1. All updated relevant sections of the General Plan and environmental review process and a description of any planned updates within the next annual reporting period, if applicable
	2. All revisions to the SSMP, including where applicable: (a) Identification and summary of where the SSMP fails to meet the requirements of this Order; (b) Updated procedures for identifying pollutants of concern for each Priority Development Project; (c) Updated treatment BMP ranking matrix; and (d) Updated site design and treatment control BMP design standards;
	3. Number of Priority Development Projects reviewed and approved during the reporting period. Brief description of BMPs required at approved Priority Development Projects. Verification that site design, source control, and treatment BMPs were required on all applicable Priority Development Projects;
	4. Name (or other identifier) and location of all Priority Development Projects that were granted a waiver from implementing LID BMPs pursuant to section F.1.d.(4) during the reporting period;
	5. Updated watershed-based BMP maintenance tracking database of approved treatment control BMPs and treatment control BMP maintenance within its jurisdiction, including updates to the list of high-priority Priority Development Projects; and verification that the requirements of this Order were met during the reporting period.
New Development	6. Name and brief description of all approved Priority Development Projects <del>required to</del> <del>exempted from</del> implementing hydrologic control measures in compliance with section F.1.h including a brief description of the management measures planned to protect downstream beneficial uses and prevent adverse physical changes to downstream stream channels;
	7. Number and description of all enforcement activities applicable to the new development and redevelopment component and a summary of the effectiveness of those activities;
Construction	1. All updated relevant ordinances and description of planned ordinance updates within the next annual reporting period, if applicable;
	2. A description of any changes to procedures used for identifying priorities for inspecting sites and enforcing control measures that consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality;
	3. Any changes to the designated minimum and enhanced BMPs;

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Program Component	Reporting Requirement
	<p>4. Summary of the inspection program, including the following information:</p> <ul style="list-style-type: none"> <li>(a) Total number and date of inspections conducted at each facility;</li> <li>(b) Number, date, and types of enforcement actions by facility;</li> <li>(c) Brief description of each high-level enforcement actions at construction sites including the <del>effectiveness</del> <u>outcome</u> of the enforcement. Supporting paper (or electronic) files must be maintained by the Copermittees and made available upon San Diego Water Board request. Supporting files must include a record of inspection dates, the results of each inspection, photographs (if any), and a summary of any enforcement actions taken.</li> </ul>
Municipal	<p>1. Updated source inventory;</p> <p>2. All changes to the designated municipal BMPs;</p> <p>3. Descriptions of any changes to procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies;</p> <p>4. Summary and assessment of BMPs retrofits implemented at flood control structures, including:</p> <ul style="list-style-type: none"> <li>(a) List of projects retrofitted; and</li> <li>(b) List and description of structures evaluated for retrofitting;</li> <li>(c) List of structures still needing to be evaluated and the schedule for evaluation.;</li> </ul> <p>5. Summary of the municipal structural treatment control operations and maintenance activities, including:</p> <ul style="list-style-type: none"> <li>(a) Number of inspections and types of facilities; and</li> <li>(b) Summary of findings;</li> </ul>
Municipal	<p>6. Summary of the MS4 and MS4 facilities operations and maintenance activities, including:</p> <ul style="list-style-type: none"> <li>(a) Number and types of facilities maintained;</li> <li>(b) Amount of material removed; and</li> <li>(c) <u>Updates to the List of facilities planned for bi-annual inspections and the justification;</u></li> </ul> <p>7. Summary of the municipal areas/programs inspection activities, including:</p> <ul style="list-style-type: none"> <li>(a) Number and date of inspections conducted at each facility;</li> <li>(c) <del>The BMP violations identified during the inspection by facility;</del></li> <li>(d) Number, date and types of enforcement actions by facility;</li> <li>(e) Summary of inspection findings and follow-up activities for each facility;</li> </ul> <p>8. Description of activities implemented to address sewage infiltration into the MS4;</p> <p>9. Description of BMPs and their implementation for unpaved roads construction and maintenance.</p>

**Comment [CP143]:** As drafted (without the changes shown) the requirements will be a significant and lengthy reporting exercise. Request keeping this as a "summary" report on compliance with the inspection frequencies, and identifying any follow-up actions (as shown via the markup).

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Program Component	Reporting Requirement
Commercial / Industrial	1. Updated inventory of commercial / industrial sources; 2. Summary of the inspection program, including the following information: (a) Number and date of inspections conducted at each facility or mobile business;; <del>(c) The BMP violations identified during the inspection by facility;</del> (d) Number, date, and types of high-level enforcement actions by facility or mobile business, and the outcome of each; <del>(e) Brief description of each high-level enforcement actions at commercial/industrial sites including the effectiveness of the enforcement and follow up activities for each facility.;</del> 3. All changes to designated minimum and enhanced BMPs; 4. A list of industrial sites, including each name, address, and SIC code, that the Copermittee suspects may require coverage under the General Industrial Permit, but has not submitted an NOI;
Residential	1. All updated minimum BMPs required for residential areas and activities; 2. Quantification and summary of applicable runoff and storm water enforcement actions within residential areas and activities; 3. Description of efforts to manage runoff and storm water pollution in common interest areas and mobile home parks;
Retrofitting Existing Development	1. Updated inventory and prioritization of existing developments identified as candidates for retrofitting. 2. Description of efforts to retrofit existing developments during the reporting year.
Retrofitting Existing Development	3. Description of efforts taken to encourage private landowners to retrofit existing development. 4. A list of all <u>known</u> retrofit projects that have been implemented within the reporting period, including site location, a description of the retrofit project, pollutants expected to be treated, and the tributary acreage of runoff that will be treated. 5. Any proposed retrofit or regional mitigation projects and timelines for future implementation. 6. Any proposed changes to the Copermittee's overall retrofitting program.
Illicit Discharge Detection and Elimination	1. Any changes to the legal authority to implement Illicit Discharge Detection and Elimination activities; 2. Any Changes to the established investigation procedures; 3. Any changes to public reporting mechanisms, including phone numbers and web pages; 4. Summaries of illicit discharges (including spills and water quality data events) and how each significant case was resolved; 5. A description of instances when field screening and analytical data exceeded action levels, including those instances for which no investigation was conducted;

**Comment (CP144):** As drafted (without the changes shown) the requirements will be a significant and lengthy reporting exercise. Request keeping this as a summary report on compliance with the inspection frequencies, and identifying the high-level enforcement actions (as shown via the markup).

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Program Component	Reporting Requirement
	6. A description of follow-up and enforcement actions taken in response to investigations of illicit discharges and a description of the outcome of the investigation/enforcement actions;
Workplans	Updated workplans including priorities, strategy, implementation schedule and effectiveness evaluation;

(4) Each JRMP Annual Report must also include the following information regarding non-storm water discharges (see Section B.2. of this Order):

- (a) Identification of non-storm water discharge categories identified as a source of pollutants to waters of the U.S;
- (b) A description of any updates to ordinances, orders, or similar means to prohibit non-storm water discharge categories identified under section B.2 above ;
- (c) Identification of any control measures to be required and implemented for non-storm water discharge categories identified as needing controls by the San Diego Water Board; and
- (d) A description of a program to address pollutants from non-emergency fire fighting flows identified by the Copermittee to be significant sources of pollutants.

**4. Interim Reporting Requirements**

For the reporting periods, prior to submittal of the JRMP, Each JRMP Annual Report must be submitted in accordance with the requirements and deadlines described in Order No. 2004-001.

**5. Universal Reporting Requirements**

All submittals must include an executive summary, ~~introduction, conclusion, recommendations,~~ and signed certified statement. Each Copermittee must submit a signed certified statement covering its responsibilities for each applicable submittal. The Principal Copermittee must submit a signed certified statement covering its responsibilities for each applicable submittal and the sections of the submittals for which it is responsible.

**Comment [CP145]:** Per discussions with Board staff on 8/18

**L. MODIFICATION OF PROGRAMS**

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Modifications of JRMPs and/or Watershed Workplan may be initiated by the Executive Officer of the San Diego Water Board or by the Copermittees. Requests by Copermittees must be made to the Executive Officer, and must be submitted during the annual review process. Requests for modifications should be incorporated, as appropriate, into the Annual Reports or other deliverables required or allowed under this Order.

1. Minor modifications to JRMPs, and/or Watershed Workplan, may be accepted by the Executive Officer where the Executive Officer finds the proposed modification complies with all discharge prohibitions, receiving water limitations, and other requirements of this Order.
2. Proposed modifications that are not minor require amendment of this Order in accordance with this Order's rules, policies, and procedures.

**M. PRINCIPAL COPERMITTEE RESPONSIBILITIES**

Within 180 days of adoption of this Order, the Copermittees must designate the Principal Copermittee and notify the San Diego Water Board of the name of the Principal Copermittee. The Principal Copermittee must, at a minimum:

1. Serve as liaison between the Copermittees and the San Diego Water Board on general permit issues, and when necessary and appropriate, represent the Copermittees before the San Diego Water Board.
2. Coordinate permit activities among the Copermittees and facilitate collaboration on the development and implementation of programs required under this Order.
3. ~~Produce and submit~~ Coordinate the submittal of the documents and reports as required by section K of this Order and Receiving Waters and MS4 Discharge Monitoring and Reporting Program No. R9-2010-0016 in Attachment E of this Order.

Comment [CP146]: Per discussions with Board staff on 8/18

**N. RECEIVING WATERS AND MS4 DISCHARGE MONITORING AND REPORTING PROGRAM**

Pursuant to CWC section 13267, the Copermittees must comply with all the requirements contained in Receiving Waters and MS4 Discharge Monitoring and Reporting Program No. R9-2010-0016 in Attachment E of this Order.

**O. STANDARD PROVISIONS, REPORTING REQUIREMENTS, AND NOTIFICATIONS**

1. Each Copermittee must comply with Standard Provisions, Reporting Requirements,

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and Notifications contained in Attachment B of this Order. This includes 24 hour/5 day reporting requirements for any instance of non-compliance with this Order as described in section 5.e of Attachment B.

2. All plans, reports and subsequent amendments submitted in compliance with this Order must be implemented immediately (or as otherwise specified). All submittals by Copermitees must be adequate to implement the requirements of this Order.

I, David W. Gibson, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on October 13, 2010.

~~\\TENTATIVE\\~~

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David W. Gibson  
Executive Officer



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**I. PURPOSE**

- A. This Receiving Waters and MS4 Discharge Monitoring and Reporting Program (MRP) is intended to meet the following goals as they relate to discharges from the Copermittees' MS4:
1. Assess compliance with Order No. R9-2010-0016;
  2. Measure and improve the effectiveness of the Copermittees' runoff management programs;
  3. Assess the chemical, physical, and biological impacts to receiving waters resulting from MS4 discharges;
  4. Characterize storm water discharges;
  5. Identify sources of specific pollutants;
  6. Prioritize drainage and sub-drainage areas that need management actions;
  7. Detect and eliminate illicit discharges and illicit connections to the MS4;
  8. Assess the overall health of receiving waters; and
  9. Provide information to implement required BMP improvements.
- B. This Receiving Waters and MS4 Discharges Monitoring and Reporting Program is designed to answer the following core management questions<sup>1</sup>:
1. Are conditions in receiving waters protective, or likely to be protective, of beneficial uses?
  2. What is the extent and magnitude of the current or potential receiving water problems?
  3. What is the relative MS4 discharge contribution to the receiving water problem(s)?
  4. What are the sources of pollutants in MS4 discharges that contribute to receiving water problem(s)?
  5. Are conditions in receiving waters getting better or worse?

**II. MONITORING PROGRAM**

The Monitoring Program is designed to assess the condition of receiving waters, monitor pollutants in storm and non-storm water effluent from the MS4, and conduct Special Studies to address conditions of concern. Where feasible, the Monitoring Program is designed to allow the Copermittees to

<sup>1</sup> Core management questions from "Model Monitoring Program for Municipal Separate Storm Sewer Systems in Southern California: A report from the Stormwater Monitoring Coalition's Model Monitoring Technical Committee." Technical Report No. 419. August 2004.

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combine required monitoring elements or efforts that are not mutually exclusive while still meeting the requirements of the Order.

**A. Receiving Waters Monitoring Program**

Each Copermittee must collaborate with the other Copermittees to develop, conduct, and report on a year-round watershed based Receiving Waters Monitoring Program. The monitoring program design, implementation, analysis, assessment, and reporting must be conducted on a watershed basis for the Santa Margarita Hydrologic Unit (HU) and must be designed to meet the goals and answer the questions listed in section I above. The monitoring program must include the following components:

**1. MASS LOADING STATION (MLS) MONITORING**

- a. Locations: The following existing mass loading stations must continue to be monitored: Lower Temecula Creek, Lower Murrieta Creek at the USGS Weir, and a permanent reference station.<sup>2</sup> Copermittees may propose, for San Diego Water Board review and approval, changing the location of a mass loading station.
- b. Frequency: Each mass loading station must be monitored each year ~~three~~ two times during wet weather events and twice during dry weather flow conditions.
- c. Timing: Each mass loading station must be monitored for the first wet weather event of the season which meets USEPA's criteria described in 40 CFR 122.21(g)(7). Monitoring of the ~~third~~ second wet weather event must be conducted after February 1. Dry weather mass loading monitoring events must be sampled at least three months apart between May and October. If flows are not evident for the second event, then sampling must be conducted during non-rain events in the following wet weather season.
- d. Protocols: Protocols for mass loading sampling and analysis including analytical methods, target reporting limits, and data reporting formats must be compatible with the State Water Resources Control Board's (State Water Board's) State Surface Water Ambient Monitoring Program (SWAMP). If the mass loading sampling and analysis are determined to be impracticable with the SWAMP standards, the Copermittees must provide a written explanation and discussion in the submittal of the Planned

**Comment [CP1]:** See discussion in Attachment 4 to the Comment Letter

**Comment [CP2]:** Consistent with above

<sup>2</sup> A map depicting mass loading stations can be found in the Fact Sheet for Order R9-2010-0016.

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Monitoring Program. Wet weather samples must be time-weighted composites, collected for the duration of the entire runoff event. Where such monitoring is not practical, such as for large watersheds with significant groundwater recharge flows, composites must be collected at a minimum during the first 3 hours of flow or for the duration of the entire runoff event if it is less than three hours. Grab samples are acceptable for Dry weather event sampling must be time-weighted composites composed of 24 discrete hourly samples, whereby the mass loads of pollutants are calculated as the product of the composite sample concentration and the total volume of water discharged past the monitoring point during the time of sample collection.

- (1) Automatic samplers must be used to collect wet weather samples from mass loading stations.
  - (2) Grab samples must be analyzed for temperature, pH, specific conductance, biochemical oxygen demand, oil and grease, total coliform, fecal coliform, enterococcus and for total petroleum hydrocarbons whenever a sheen is observed.
- e. Copermittees must measure or estimate flow rates and volumes for each mass loading station sampling event to determine mass loadings of pollutants. Data from nearby USGS gauging stations may be utilized, or flow rates may be estimated in accordance with the USEPA Storm Water Sampling Guidance Document (EPA-833-B-92-001), Section 3.2.1.
- f. In the event that the required number of sampling events are not conducted during one monitoring year at any given station, the Copermittees must provide a written explanation for the reduced number of sampling events in the subsequent Receiving Waters Monitoring Annual Report. The explanation must include, at a minimum, streamflow data from the nearest USGS gauging station, a full description of any equipment failures and subsequent remedies, efforts made to resample a future event, and any quality assurance or quality control issues encountered. The explanation must also include a description of steps taken to prevent further sampling failures.
- g. The following constituents must be analyzed for each monitoring event at each station:

**Comment [CP3]:** As discussed in our meeting, this is a large watershed with significant GW recharge flows

**Comment [CP4]:** See discussion in Attachment 4 to the Comment Letter

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**Table 1. Analytical Testing for Mass Loading (A.1) and Bioassessment (A.2)**

**Comment [CP5]:** See discussion in Attachment 4 to the Comment Letter

<b>Conventional, Nutrients, Hydrocarbons</b>	<b>Pesticides</b>	<b>Metals (Total and Dissolved)</b>	<b>Bacteriological (mass loading)</b>
<ul style="list-style-type: none"> <li>• Total Dissolved Solids</li> <li>• Total Suspended Solids</li> <li>• Turbidity</li> <li>• Total Hardness</li> <li>• pH</li> <li>• Specific Conductance</li> <li>• Temperature</li> <li>• Dissolved Oxygen</li> <li>• Total Phosphorus</li> <li>• Dissolved Phosphorus</li> <li>• Nitrite ◊</li> <li>• Nitrate ◊</li> <li>• Total Kjeldahl Nitrogen</li> <li>• Ammonia</li> <li>• Biological Oxygen Demand, 5-day</li> <li>• Chemical Oxygen Demand</li> <li>• Total Organic Carbon</li> <li>• Dissolved Organic Carbon</li> <li>• Methylene Blue Active Substances</li> <li>• Oil and Grease</li> <li>• Sulfate</li> </ul>	<ul style="list-style-type: none"> <li>• Diazinon</li> <li>• Chlorpyrifos</li> <li>• Malathion</li> <li>• Carbamates</li> <li>• Pyrethroids</li> </ul>	<ul style="list-style-type: none"> <li>• Arsenic</li> <li>• Cadmium</li> <li>• Total Chromium</li> <li>• Hexavalent Chromium</li> <li>• Copper</li> <li>• Lead</li> <li>• Iron</li> <li>• Manganese</li> <li>• Nickel</li> <li>• Selenium</li> <li>• Zinc</li> <li>• Mercury</li> <li>• Silver</li> <li>• Thallium</li> </ul>	<ul style="list-style-type: none"> <li>• Total Coliform</li> <li>• Fecal Coliform</li> <li>• Enterococcus</li> </ul>

◊ Nitrate and nitrite may be combined and reported as nitrate + nitrite.

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- h. Toxicity testing must be conducted for each monitoring event at each station according to the following Table 2:

**Table 2. Toxicity Testing for Mass Loading (A.1) and Bioassessment (A.2)**

Program Component	Dry Weather Flows	Storm Water Flows
	Freshwater Organisms	Freshwater Organisms
Mass Loading	3-2 chronic* 3-2 acute*	3-2 acute*
Bioassessment**	3-2 chronic* 3-2 acute*	n/a
Sediment Toxicity Special Study	1 chronic 1 acute	n/a
<p>Table Notes                      * Toxicity testing must include use of <i>Pimephales promelas</i> (fathead minnow), <i>Hyaella azteca</i> and <i>Pseudokirchneriella subcapitata</i> (formerly <i>Solenastrum capricornutum</i>, unicellular algae).                      ** Duplicative toxicity testing is not required for bioassessment stations located at mass loading stations as bioassessment must be conducted in conjunction with dry weather mass loading</p> <p>Species Notes:                      1. Acute toxicity may be determined during the course of chronic toxicity monitoring per U.S. EPA protocols.</p>		

**Comment [CP6]:** See discussion in Attachment 4 to the Comment Letter

**Comment [CP7]:** Consistent with the changes discussed in the comment letter

- i. The presence of acute toxicity must be determined in accordance with USEPA protocol (EPA-821-R-02-012). The presence of chronic freshwater toxicity must be determined in accordance with USEPA protocol (EPA-821-R-02-013).

**2. Stream Assessment Monitoring**

Copermittees must conduct Stream Assessment Monitoring using multiple lines of evidence to assess the condition of biological communities in freshwater receiving waters. Stream assessment must include the collection and reporting of the following specified instream biological, chemical, physical (including habitat) data.

- a. Locations: At a minimum, the program must consist of station identification, sampling, monitoring, and analysis of data for ~~six~~ **three** stream assessment stations in order to determine the biological and physical integrity of streams within the County of Riverside. The two existing mass loading stations at Murrieta and Temecula Creeks ~~must continue to be monitored. Two reference stream bioassessment stations, including and the existing Adobe Creek reference station, must continue to be monitored.~~

**Comment [CP8]:** See discussion in Attachment 4 to the Comment Letter

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identified, sampled, monitored, and analyzed. Copermittees may propose, for San Diego Water Board review and approval, changing the location of a Bioassessment station. Locations of alternate reference stations must be identified according to protocols outlined in "A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams," by Ode, et al. 2005.<sup>3</sup>

**Comment [CP9]:** Language from MLS section. This is to allow for changes in MLS locations, and then allow the stream assessment stations to follow.

b. Frequency: Stream assessment stations must be monitored in May or June (to represent the influence of wet weather on the communities) and ~~or~~ September or October (to represent the influence of dry weather flows on the communities). The timing of monitoring of stream assessment stations must coincide with dry weather monitoring of mass loading stations.

**Comment [CP10]:** See discussion in Attachment 4 to the Comment Letter

c. Parameters / Methods: Stream assessment monitoring must include bioassessment, aquatic chemistry, and aqueous toxicity.

(1) Aquatic chemistry and aqueous toxicity must be conducted as outlined in Tables 1 and 2 using the same parameters and methods as the mass loading station monitoring.

(2) Bioassessment analysis procedures must include calculation of the Index of Biotic Integrity (IBI) for benthic macroinvertebrates for all bioassessment stations, as outlined in "A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams," by Ode, et al. 2005.

(3) Monitoring of stream bioassessment stations ~~Bioassessment~~ must be conducted according to bioassessment Standard Operating Procedures (SOP) developed by the Surface Water Ambient Monitoring Program (SWAMP), as amended.<sup>4</sup> In collecting macroinvertebrate samples, the discharger must use the "Reachwide Benthos (Multihabitat) Procedure." The discharger must conduct, concurrently with all required macroinvertebrate collections, the "full" suite of physical/habitat characterization measurements specified in the SWAMP Bioassessment SOP, and as summarized in the *SWAMP*

**Comment [CP11]:** Only the Bioassessment component of stream assessment monitoring must be conducted according to the SOP.

<sup>3</sup> Ode, et al. 2005. "A Quantitative Tool for Assessing the Integrity of Southern Coastal California Streams." Environmental Management. Vol. 35, No. 1, pp. 1-13.

<sup>4</sup> Ode, P.R. 2007. Standard operating procedures for collecting macroinvertebrate samples and associated physical and chemical data for ambient bioassessments in California. California State Water Resources Control Board Surface Water Ambient Monitoring Program (SWAMP) Bioassessment SOP 001.

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*Stream Habitat Characterization Form — Full Version.*<sup>5</sup>

- (4) Monitoring of stream assessment stations must incorporate assessment of algae using SWAMP's SOP for Collecting Stream Algae Samples.<sup>6</sup> Assessment of freshwater algae must include algal taxonomic composition (diatoms and/or soft algae) and algal biomass. Future bioassessment must incorporate algal IBI scores, when developed.
- d. A qualified professional environmental laboratory must perform all Bioassessment sampling, laboratory, quality assurance, and analytical procedures in accordance with the Southern California Regional Watershed Monitoring Program Bioassessment Quality Assurance Project Plan.<sup>7</sup> The Copermittees must utilize future Quality Assurance Project Plans as developed by SWAMP.
- (1) The Copermittees must have and follow a quality assurance (QA) plan that covers the required stream assessment monitoring. External QA check must be funded by the Copermittees, and performed by the California Department of Fish and Game's Aquatic Bioassessment Laboratory. An alternate laboratory with equivalent expertise and performance may be used if approved in advance in writing by San Diego Water Board.
- (2) Identified organisms must be archived (i.e., retained) by the Copermittee(s) for a period of not less than three years from the date that all QA steps are completed. The identified organisms must be relinquished to the San Diego Water board upon request by the San Diego Board.
- (3) The macroinvertebrate results (i.e., taxonomic identifications consistent with the specified SAFIT STEs, and number of organisms within each taxa) must be submitted to the San Diego Water Board in electronic format. SWAMP is currently developing standardized formats for reporting bioassessment data. All bioassessment data collected after those formats become available must be submitted using the SWAMP

**Comment [CP12]:** This section is referring to the Bioassessment component of stream assessment monitoring

<sup>5</sup> Available at:  
[http://www.waterboards.ca.gov/water\\_issues/programs/swamp/docs/reports/fieldforms\\_fullversion052908.pdf](http://www.waterboards.ca.gov/water_issues/programs/swamp/docs/reports/fieldforms_fullversion052908.pdf)

<sup>6</sup> Fetcher et al. 2009. Standard Operating Procedures for Collecting Stream Algae Samples and Associated Physical Habitat and Chemical Data for Ambient Bioassessments in California.

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formats. Until those formats are available, the biological data must be submitted in MS-Excel<sup>87</sup> (or equivalent) format.

(4) The physical/habitat data must be reported using the standard format titled *SWAMP Stream Habitat Characterization Form — Full Version*.

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**3. Follow-up Analysis and Actions (TIE and TRE Triad Approach)**

When results from the required monitoring indicate water quality impacts at a mass loading station or stream assessment station as defined in Table 3, Copermitees within the watershed(s) that discharge to that location must evaluate the extent and causes of MS4 discharge pollution in receiving waters and prioritize and implement management actions to eliminate or reduce sources of pollutants from the MS4 as described in Table 3. Toxicity Identification Evaluations (TIEs) must be conducted to determine the cause of toxicity as outlined in Table 3 below. Other follow-up activities, which must be conducted by the Copermitees, are also identified in Table 3. Once the cause of toxicity has been identified by a TIE, the Copermitees must perform source identification projects as needed and implement the measures necessary to reduce or eliminate the pollutant discharges and abate the sources causing the toxicity.

<sup>8</sup> Any version of Excel, 2000 or later, may be used.



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approval. Documentation of participation and monitoring must be included in the annual report(s).

**B. Wet Weather MS4 Discharge Monitoring**

Each Copermittee must collaborate with the other Copermittees to develop, conduct, and report on a year-round, watershed-based, Wet Weather MS4 Discharge Monitoring Program. The monitoring program design, implementation, analysis, assessment, and reporting must be conducted on a watershed basis for each of the hydrologic subareas within the Santa Margarita HU under jurisdiction of the Copermittees. The monitoring program must be designed to meet the goals, and answer the questions, listed in Section I above, as well as to implement required Storm Water Action Levels (SALs) in the Order. The monitoring program must include the following components;

**1. MS4 OUTFALL MONITORING**

The Copermittees must collaborate to develop and implement a monitoring program to characterize pollutant discharges from MS4 outfalls in each watershed during wet weather. The program must include the rationale and criteria for selection of outfalls to be monitored. The program must, at a minimum, include collection of samples for pollutants listed in Table 4 (below). This monitoring program must be designed to sample a representative percentage<sup>11</sup> of the major outfalls within each hydrologic subarea and must begin no later than the 2012-2013 monitoring year.

a. The program must comply with Section D of this Order for Storm Water Action Levels (SALs). Samples must be collected during the first 24 hours of the storm water discharge or for the entire storm water discharge if it is less than 24 hours.

(1) Sampling may be done utilizing grab samples, though composite samples are encouraged. Grab samples may be utilized only for pH, indicator bacteria, DO, temperature and hardness.

(2) All other constituents must be sampled using 24-hour composite samples or for the entire storm water discharge if the storm event is less than 24 hours.

b. Sampling to compare MS4 outfall discharges with total metal SALs must include a measurement of receiving water hardness at each

<sup>11</sup> A representative percentage determination must consider hydrologic conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, and land use

**Comment [CP13]:** See discussion in Attachment 4 to the Comment Letter, including footnote

**Comment [CP14]:** See discussion in Attachment 4 to the Comment Letter

Language from the Inland Aquatic Habitat Monitoring section.

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types (commercial, residential and industrial), and other considerations as appropriate.

outfall. If a total metal concentration exceeds a SAL in Section D of the Order, that concentration must be compared to the California Toxic Rule criteria and the USEPA 1-hour maximum concentration for the detected level of receiving water hardness associated with that sample. If it is determined that the sample's total metal concentration for that specific pollutant exceeds the SAL but does not exceed the applicable 1-hour criteria for the measured level of hardness, then the SAL shall be considered not exceeded for that measurement.

**Table 4. Analytical Testing for Wet Weather MS4 Discharges**

<b>Conventional, Nutrients, Hydrocarbons</b>	<b>Pesticides</b>	<b>Metals (Total and Dissolved)</b>	<b>Bacteriological</b>
<ul style="list-style-type: none"> <li>• Total Dissolved Solids</li> <li>• Total Suspended Solids</li> <li>• Turbidity*</li> <li>• Total Hardness</li> <li>• pH</li> <li>• Specific Conductance</li> <li>• Temperature</li> <li>• Dissolved Oxygen</li> <li>• Total Phosphorus*</li> <li>• Dissolved Phosphorus</li> <li>• Nitrite °*</li> <li>• Nitrate °*</li> <li>• Total Kjeldahl Nitrogen</li> <li>• Ammonia</li> <li>• Biological Oxygen Demand, 5-day</li> <li>• Chemical Oxygen Demand</li> <li>• Total Organic Carbon</li> <li>• Dissolved Organic Carbon</li> <li>• Oil and Grease</li> <li>• Sulfate</li> </ul>	<ul style="list-style-type: none"> <li>• Diazinon</li> <li>• Chlorpyrifos</li> <li>• Pyrethroids</li> </ul>	<ul style="list-style-type: none"> <li>• Arsenic</li> <li>• Cadmium*</li> <li>• Chromium</li> <li>• Copper*</li> <li>• Lead*</li> <li>• Nickel</li> <li>• Selenium</li> <li>• Zinc*</li> <li>• Mercury</li> <li>• Silver</li> <li>• Thallium</li> <li>• Iron</li> <li>• Manganese</li> </ul>	<ul style="list-style-type: none"> <li>• Fecal Coliform</li> <li>• Enterococcus</li> <li>• E. coli</li> </ul>

° Nitrite and nitrate may be combined and reported as nitrate + nitrite.  
 ★ Pollutant for which there is a Storm Water Action Level

**Comment [CP15]:** See discussion in Attachment 4 to the Comment Letter

**2. SOURCE IDENTIFICATION MONITORING**

The Copermittees must collaborate to develop and implement a monitoring program to identify sources of pollutants causing the priority water quality problems within each hydrologic subarea. The monitoring program must include focused monitoring which moves upstream into each watershed as necessary to identify source areas.

**Comment [CP16]:** Source identifications for wet weather may or may not include "monitoring".  
 See discussion in Attachment 4 to the Comment Letter

**Comment [CP17]:** This presumes we are starting at the "bottom of the watershed". We may approach this differently, but would come up with something to help identify source areas.

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or other methods to identify the societal sources of pollutants, as appropriate. This monitoring program must be implemented within each hydrologic subarea and must begin no later than the 2012-2013 monitoring year.

**Comment [CP18]:** This is necessary because some pollutants have broad societal sources that cannot be pinpointed through focused source ID Monitoring.

3. COMMENCEMENT OF MS4 OUTFALL AND SOURCE IDENTIFICATION MONITORING

The Principal Copermittee must submit to the San Diego Water Board for review and approval, a detailed draft of the wet weather MS4 discharge monitoring program to be implemented. The description must identify and provide the rationale for all constituents monitored, locations of monitoring, frequency of monitoring, and analyses to be conducted with the data generated. The draft must be submitted With the proposed monitoring program (Secion III.A.1).

**C. Non-Storm Water Dry Weather Action Levels and Illicit Discharge Detection and Elimination**

Each Copermittee must collaborate with the other Copermittees to conduct, and report on a year-round watershed based Dry Weather Non-storm Water MS4 Discharge Monitoring Program. The monitoring program's implementation, analysis, assessment, and reporting must be conducted to assess compliance with section B and C of this Order, meet the goals of the MRP, and conduct Illicit Discharge Detection and Elimination Activities under Section F.4 of this Order. The monitoring program must also be designed to assess the contribution of dry weather flows to Clean Water Act Section 303(d) listed impairments. The monitoring program must include the following components:

1. MS4 OUTFALL MONITORING

Each Copermittee's program must be designed to determine levels of pollutants in effluent discharges from the MS4 into receiving waters. Each Copermittee must conduct the following dry weather field screening and analytical monitoring tasks:

a. Dry Weather Non-storm Water Effluent Analytical Monitoring Station Identification

- (1) Sampling Stations must be located at major outfalls pursuant to section C of this Order. Other outfall sampling points (or any other point of access such as manholes) identified by the

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Copermittees as potential high risk sources of polluted effluent or as identified under Section C.4 of the Order must be sampled.

- (2) Each Copermittee must clearly identify each dry weather effluent analytical monitoring station on its MS4 Map as either a separate GIS layer or a map overlay hereinafter referred to as a Dry Weather Non-storm Water Effluent Analytical Stations Map.

b. Develop Dry Weather Non-storm Water Effluent Analytical Monitoring Procedures

Each Copermittee must develop and/or update written procedures for effluent analytical monitoring including field observations, monitoring, and analyses to be conducted. These procedures must be consistent with 40 CFR part 136. At a minimum, the procedures must meet the following guidelines and criteria:

- (1) Determining Sampling Frequency: Effluent analytical monitoring must be conducted at major outfalls and identified stations. The Copermittees must sample ~~a representative number of major outfalls and identified stations within each hydrologic subarea.~~<sup>12</sup> The sampling must be done to assess compliance with dry weather non-storm water action levels pursuant to section C of this Order. All monitoring conducted must be preceded by a minimum of 72 hours of dry weather.
- (2) Sampling of non-storm water discharges may be done utilizing grab samples. If a ponded MS4 discharge is observed at a monitoring station, the Copermittee(s) must record the observation and collect at least one (1) grab sample See discussion in Attachment 4 to the Comment Letter. If flow is evident, a 1-hour composite sample may be taken. The Copermittee(s) must estimate the flow using techniques such as by measuring the width of water surface, approximate depth of water, and approximate flow velocity.
- (3) Effluent samples must undergo analytical laboratory analysis for (a) all constituents described in ~~Table 4. Analytical Testing for Wet Weather MS4 Discharges Table 1. Analytical Testing for Mass Loading and Bioassessment~~ of this Order; (b) Constituents with assigned non-storm water action levels under Section C of this Order; and (c) Total Residual Chlorine.

<sup>12</sup> A representative percentage determination must consider hydrologic conditions, total drainage area of the site, population density of the site, traffic density, age of the structures or buildings in the area, and land use

**Comment [CP19]:** See discussion in Attachment 4 to the Comment Letter, including footnote

**Comment [CP20]:** Table 4 is more appropriate - consistency for all MS4 outfall stations.

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types (commercial, residential and industrial) , and other considerations as appropriate.

- (4) If the station is dry (i.e. no flowing or ponded MS4 discharge is observed), the Copermittee(s) must make and record all applicable observations on the MS4 outfall and receiving waters monitoring site, including any evidence of past non-storm water flows and the presence of trash.

## 2. SOURCE IDENTIFICATION MONITORING

The Copermittees must collaborate to develop and implement a monitoring program to identify sources of pollutants in non-storm water discharges in accordance with Sections C and F.4 of this Order. The source identification portion of the monitoring program must include: the following components:

- a. Development and/or update of response criteria for dry weather non-storm water effluent analytical monitoring results:
  - (1) Response Criteria must include action levels described in Section C of this Order.
  - (2) Response Criteria must include evaluation of LC<sub>50</sub> levels for toxicity to appropriate test organisms.
- b. Develop and/or update Illicit Discharge Detection and Elimination response procedures for source identification follow up investigations and elimination in the event of exceedance of dry weather non-storm water effluent analytical monitoring result criteria (see above). These procedures must be consistent with procedures required in section C, F.4.d, and F.4.e. of this Order.

## 3. COMMENCEMENT OF MS4 OUTFALL AND SOURCE IDENTIFICATION MONITORING

The Copermittees must commence implementation of dry weather effluent analytical monitoring under the requirements of this Order no later than **July 1, 2012**. If monitoring indicates an illicit connection or illegal discharge, the Copermittee(s) must conduct the follow-up investigation and elimination activities described in sections C, F.4.d and F.4.e of this Order. In the interim period until the dry weather non-storm water effluent analytical monitoring program of this Order is implemented, each Copermittee must continue to implement dry weather field screening and analytical monitoring as it was most recently implemented pursuant to Order No. 2004-001.

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**D. High Priority Inland Aquatic Habitat Monitoring**

Comment [CP21]: See discussion in Attachment 4 to the Comment Letter

The Copermittees must develop and submit for approval to the San Diego Water Board by April 01, 2012, an inland aquatic habitat monitoring program for areas supporting high priority aquatic and/or riparian species. The goal of the monitoring program is to assess if MS4 storm water and non-storm water discharges are affecting high priority inland aquatic habitat. The monitoring will assist the Copermittees in preventing the degradation of high quality waters within the jurisdiction of this Order that support high priority species by identifying discharges from MS4s which may cause or have the potential to cause impairment of beneficial uses within these areas.<sup>1310</sup> High priority species include those federally and/or state listed as endangered, threatened, or as a species of concern. The design and goal of the monitoring program must be consistent with the criteria listed in Section I.B of this Monitoring Program, including evaluation of the protection of high priority species in receiving waters. The Copermittees must implement the program unless otherwise directed in writing by the San Diego Water Board.

The monitoring program must include the following components:

1. OUTFALL AND RECEIVING WATER MONITORING

The program must be designed to determine levels of pollutants in storm water and non-storm water effluent discharges from the MS4 discharged into high priority inland aquatic habitat(s) and the level of those pollutants found in ambient receiving waters subject to the discharge. The Copermittees must conduct the following field screening and analytical monitoring tasks:

a. MS4 and Receiving Waters Monitoring Station Identification

- (1) MS4 Discharge Stations must be major outfalls that directly discharge into high priority inland aquatic habitat. MS4 Discharge Stations may be selected in conjunction with monitoring required under Section II.B and II.C of the Receiving Waters and MS4 Discharge Monitoring Program.
- (2) Receiving water station(s) must be located upstream and downstream of the discharge within the high priority inland aquatic habitat. Receiving water stations must be located to prevent any significant co-mingling of receiving water flows with

<sup>10 13</sup>In accordance with requirements of State Water Resources Control Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality Waters in California.

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other sources.

b. Develop Analytical Monitoring Procedures

Each Copermittee must develop procedures for analytical monitoring (these procedures must be consistent with 40 CFR part 136), including field observations, pollutants to be monitored, analyses to be conducted, and quality assurance/control. At a minimum, the procedures must meet the following guidelines and criteria:

- (1) Determining Sampling Frequency: The Copermittees must sample a representative number of major outfalls and receiving waters that are considered high priority inland aquatic habitat. Sampling of the discharge and receiving waters must be paired and occur during both storm and non-storm conditions.
- (2) Sampling may be done utilizing grab samples, though composite samples are encouraged. ~~Sampling of storm and non-storm water discharges from the MS4 must be done in accordance with Section II.B and II.C.~~ If ponded discharge or receiving waters is/are observed at a monitoring station, the Copermittees must make written observations and collect at least one (1) grab sample. The Copermittee(s) must estimate the flow using techniques such as by measuring the width of water surface, approximate depth of water, and approximate flow velocity
- (3) The proposed constituents for which samples will undergo analytical laboratory analysis.
- (4) Procedures for recording applicable observations when monitoring stations are dry (i.e. no flowing water or ponded conditions).

3. ASSESSMENT OF MONITORING RESULTS

The program must include a discussion of monitoring results within the monitoring annual report. The discussion must include an evaluation of the contribution of MS4 discharges to ambient water conditions within high priority inland aquatic habitats, as well as any actions taken to prevent and/or reduce sources of those pollutants.

4. SOURCE IDENTIFICATION MONITORING

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The Copermittees must collaborate to conduct source identification monitoring in accordance with Section II.B and II.C of the Monitoring and Reporting Program of this Order.

**E. Special Studies**

1. The Copermittees must conduct special studies, including any monitoring required for TMDL development and implementation, as directed by the San Diego Water Board.

2. Stormwater Monitoring Coalition Regional Monitoring of Southern California's Coastal Watersheds

The Copermittees must implement the monitoring program developed by the Bioassessment Workgroup of the Stormwater Monitoring Coalition, for Regional Monitoring of the Southern California's Coastal Watersheds within the San Juan Hydrologic Unit. Each Copermittee must evaluate the results of the monitoring program within and downstream of its jurisdiction and integrate the results into program assessments and modifications.

3. Low Impact Development Integrated Management Practices, testing and demonstration facility

The Southern California Stormwater Monitoring Coalition (SMC) is conducting a study to measure the effectiveness of various LID BMPs. The Copermittees must participate in that study through implementation of their plan to construct an LID IMP Testing and Demonstration Facility at the District's headquarters. The project shall monitor effectiveness of the tested BMPs at pollutant reduction. The results of this study shall be summarized in the fourth year annual report and utilized in future revisions to the County's LID BMP manual.

- 2.4. Sediment Toxicity Study

The Copermittees must develop and submit for approval to the San Diego Water Board by April 01, 2012, a special study workplan to investigate the toxicity of sediment in streams and potential impact on benthic macroinvertebrate IBI scores. The Sediment Toxicity Special Study must be implemented in conjunction with the Stream Assessment Monitoring in II.A.2.. The Copermittees must implement the special study unless otherwise directed in writing by the San Diego Water Board.

**Comment [CP22]:**  
See discussion in Attachment 4 to the Comment Letter

**Comment [CP23]:** See discussion in Attachment 4 to the Comment Letter

**Comment [CP24]:** Request remove  
See discussion in Attachment 4 to the Comment Letter



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The Sediment Toxicity Special Study must include the following elements:

- a. **Sampling Locations:** At least 4 the bioassessment locations identified pursuant to II.A.2. must be sampled, including 1 reference site and 1 mass loading site. Selection of sites must be done with consideration of subjectivity of receiving waters to discharges from residential and agricultural land uses.
- b. **Frequency:** At a minimum, sampling must occur once per year at each site for at least 2 years. Sampling must be done in conjunction with the bioassessment sampling required under Section II.A.2 of the Monitoring and Reporting Program of this Order.
- c. **Parameters/Methods:** At a minimum, sediment toxicity analysis must include the measurement of metals, pyrethroids and organochlorine pesticides. The analysis must include estimates of bioavailability based upon sediment grain size, organic carbon and receiving water temperature at the sampling site. Acute and chronic toxicity testing must be done using *Hyalella azteca* in accordance with Table 2.
- d. **Results:** Results and a Discussion must be included in the Monitoring Annual Report (see III.A). The Discussion must include an assessment of the relationship between observed IBI scores under Section II.A.2 and all variables measured.

3-5. **Trash and Litter Investigation**

The Copermittees must develop and submit for approval to the San Diego Water Board by September 01, 2012, a special study workplan to assess trash (including litter) as a pollutant within receiving waters on a watershed based scale. Litter is defined in California Government Code 68055.1g as "...improperly discarded waste material, including, but not limited to, convenience food, beverage, and other product packages or container constructed of steel, aluminum, glass, paper, plastic and other natural and synthetic, materials, thrown or deposited on lands and waters of the state, but not including the properly discarded waste of the primary processing of agriculture, mining, logging, sawmilling, or manufacturing." A lead Copermittee must be selected for the Santa Margarita HU for the purposes of this Special Study. The Copermittees must implement the special study unless

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otherwise directed in writing by the San Diego Water Board

The Trash and Litter Investigation must include the following elements:

- a. Locations: The lead Copermittee must identify suitable sampling locations within the Santa Margarita HU.
- b. Frequency: Trash at each location must be monitored a minimum of twice during the wet season following a qualified monitoring storm event (minimum of 0.1 inches preceded by 72 hours of dry weather) and twice during the dry season.
- c. Protocol: The lead Copermittee for the watershed must use the "Final Monitoring Workplan for the Assessment of Trash in San Diego County Watersheds" and "A Rapid Trash Assessment Method Applied to Waters of the San Francisco Bay Region" to develop a monitoring protocol for the Santa Margarita HU.
- d. Results and Discussion from the Trash and Litter Impairment Study must be included in the Monitoring Annual Report. The Results and Discussion must, at a minimum, include source identification, an evaluation of BMPs for trash reduction and prevention, and a description of any BMPs implemented in response to study results.

4.6. ~~Agricultural, Federal and Tribal Input Study~~

The Copermittees must develop and submit for approval to the San Diego Water Board by September 01, 2012, a special study workplan to investigate the water quality of agricultural, federal and tribal runoff that is discharged into their MS4 (see Finding D.3.c of the Order). The Copermittees must implement the special study unless otherwise directed in writing by the San Diego Water Board.

The Agricultural, Federal and Tribal Input Special Study must include the following elements:

- a. Locations: The Copermittees must identify a representative number of sampling stations within their MS4 that receive discharges of agricultural, federal, and tribal runoff that has not co-mingled with any other source. At least one station from each category must be identified.

Comment [CP25]: Request remove  
See discussion in Attachment 4 to the  
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- b. Frequency: One storm event must be monitored at each sampling location each year for at least 2 years.
- c. Parameters/Methods: At a minimum, analysis must include those constituents listed in Table 1 of the MRP (see II.A.1). Grab samples may be utilized, though composite samples are preferred. Copermittees must also measure or estimate flow rates and volumes of discharges into the MS4.
- d. Results: Results and Discussion from the Agricultural, Federal and Tribal Input Study must be included in the Monitoring Annual Report.

5. ~~MS4 and Receiving Water Maintenance Study~~

The Copermittees must develop and submit for approval to the San Diego Water Board by April 01, 2012, a special study workplan to investigate receiving waters that are also considered part of the MS4 (see Finding D.3.c of the Order) and which are subject to continual vegetative clearance activities (e.g. mowing). The study must be designed to assess the effects of vegetation removal activities and water quality, including, but not limited to, modification of biogeochemical functions, in-stream temperatures, receiving water bed and bank erosion potential and sediment transport. The Copermittees must implement the special study unless otherwise directed in writing by the San Diego Water Board.

The MS4 and Receiving Water Maintenance Special Study must include the following elements:

- a.e. Locations: The Copermittees must identify suitable sampling locations, including at least one reference system that is not subject to maintenance activities.
- b.f. Parameters/Methods: At a minimum, the Copermittees must monitor pre and post maintenance activities for indicator bacteria, turbidity (NTU), temperature, dissolved oxygen and nutrients (Nitrite, Nitrate, Total Kjeldahl Nitrogen, Ammonia and Total Phosphorous). Copermittees must also measure or estimate flow rates and volumes.
- e.g. Results and Discussion from the MS4 and Receiving Water Maintenance Study must be included in the Annual Monitoring Report. The Discussion must include relevance of findings to CWA

**Comment [CP26]:** Request remove  
See discussion in Attachment 4 to the  
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Section 303(d) listed impaired waters.

6.7. ~~Intermittent and Ephemeral Stream Perennial Conversion Study~~

**Comment [CP27]:** Request remove  
See discussion in Attachment 4 to the  
Comment Letter

The Copermittees must develop and submit for approval to the San Diego Water Board by April 01, 2013, a special study workplan to investigate the extent of any impacts to beneficial uses from the conversion of historically ephemeral or intermittent receiving waters to perennially flowing waters due to the continued discharge of currently exempted non-storm water from the MS4 and/or discharges into MS4s covered under a separate NPDES permit into receiving waters. The goal of the study is to assess if any impacts to beneficial uses, including, but not limited to, WILD, WARM, COLD or RARE, have occurred due to continuous discharge of currently exempted non-storm water discharges, and if the discharges should no longer be exempt. The Copermittees must implement the special study unless otherwise directed in writing by the San Diego Water Board.

The Intermittent and Ephemeral Stream Perennial Conversion Special Study must include the following elements:

- a. **Locations:** The Copermittees must investigate their MS4 and adjacent downstream receiving waters to identify portions that have historically been ephemeral or intermittent but currently exhibit perennial flow due to exempted non-storm water discharges. Investigation must include historic habitat assessments, USGS gauging information, and historic aerial photography. Sampling must occur at a minimum of 2 identified perennially converted locations. Should the Copermittees be unable to locate any converted waters, a full description of the investigation must be documented in the annual report.
- b. **Parameters/Methods:** The Copermittees must conduct water quality monitoring of the non-storm water discharge in accordance with Section C of this Order. In addition, the Copermittees must select a minimum of 2 downstream sampling points within the receiving waters subject the discharge and conduct the following:
  - (1) Grab samples must be taken and analyzed for indicator bacteria, nutrients (Nitrite, Nitrate, Total Kjeldahl Nitrogen, Ammonia and Total Phosphorous), turbidity (NTU), temperature, dissolved oxygen, total hardness, pH and 303(d) listed pollutants for all receiving waters at or downstream of the sampling site. The Copermittees must measure or estimate flow

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2. Monitoring Annual Report: The Principal Copermittee must submit the Receiving Waters and MS4 Discharge Monitoring Annual Report to the San Diego Water Board on October 1 of each year, beginning on **October 1, 2013**. Receiving Waters and MS4 Discharge Monitoring Annual Reports must cover the monitoring activities and results from the previous fiscal year, and must meet the following requirements:

**Comment [CP28]:** See discussion in Attachment 4 to the Comment Letter

- a. Annual monitoring reports must include the data/results, methods of evaluating the data, graphical summaries of the data, and an explanation/discussion of the data for each monitoring program component.
- b. Annual monitoring reports must include a watershed-based analysis of the findings of each monitoring program component (mass loading, bioassessment, etc...). Each watershed-based analysis must include:
  - (1) Identification and prioritization of water quality problems within each watershed.
  - (2) Identification and description of the nature and magnitude of potential sources of the water quality problems within each watershed.
  - (3) Evaluation and presentation of pollutant load and concentration increases or decreases at each mass loading station over time.
  - (4) Evaluation of pollutant loads and concentrations measured at mass loading stations with respect to land use, population, sources, and other characteristics of watersheds using tools such as multiple linear regression, factor analysis, and cluster analysis.
  - (5) Identification of links between source activities/conditions and observed receiving water impacts.
  - (6) Identification of recommended future monitoring to identify and address sources of water quality problems.
  - (7) Results and discussion of any TIE conducted, together with actions that will be implemented to reduce the discharge of pollutants in storm water MS4 discharges, eliminate any discharge of pollutants in non-storm water MS4 discharges, and abate the sources causing the toxicity.
- c. Annual monitoring reports must include an analysis and interpretation of the data for each watershed with respect to the management questions listed in section I.B of this Receiving Waters Monitoring and Reporting Program.

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- d. Annual monitoring reports must include a discussion describing how each of the goals listed in section I.A of this MRP is addressed by the Copermittees' monitoring program for the monitoring year covered by the report.
- e. Annual The 4<sup>th</sup> year monitoring reports must include identification and analysis of any long-term trends in the Copermittees' MS4 storm water discharges or receiving water quality. Appropriate statistical methods shall be used to evaluate the water quality data. Trend analysis must use nonparametric approaches, such as the Mann-Kendall test, including exogenous variables in a multiple regression model, and/or using a seasonal nonparametric trend model, where applicable.
- f. Annual monitoring reports must provide an estimation of total pollutant loads (wet weather loads plus dry weather loads) due to MS4 Discharge for each of the hydrologic subareas, including for 303(d) pollutants specified in Table 2 of the Order.
- g. Annual monitoring reports must, for each monitoring program component listed above, include an assessment of compliance with applicable water quality standards.
- h. Annual monitoring reports must describe monitoring station locations by latitude and longitude coordinates, frequency of sampling, quality assurance/quality control procedures, and sampling and analysis protocols.
- i. Annual monitoring reports must use a standard report format and include the following elements:
  - (1) A stand alone comprehensive executive summary addressing all sections of the monitoring report;
  - (2) Comprehensive interpretations and conclusions; and
  - (3) Recommendations for future actions.
- j. All monitoring reports submitted to the Principal Copermittee or the San Diego Water Board must contain the certified perjury statement described in Attachment B of this Order No. R9-2010-0016.
- k. Annual monitoring reports must be reviewed prior to submittal to the San Diego Water Board by a committee of the Copermittees (consisting of no less than three different Copermittee members).

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Comment [CP29]: See discussion in Attachment 4 to the Comment Letter

Comment [CP30]: See discussion in Attachment 4 to the Comment Letter

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- I. Annual monitoring reports must be submitted in both electronic and paper formats. Electronic formats must be CEDEN or SWAMP-uploadable.<sup>1411</sup>
3. Monitoring programs and reports must comply with section II.F of Receiving Waters and MS4 Discharge Monitoring and Reporting Program No. R9-2010-0016 and Attachment B of this Order.
4. Following completion of an annual cycle of monitoring in October, the Copermittees must make the monitoring data and results available to the San Diego Water Board at the San Diego Water Board's request.

**B. Interim Reporting Requirements**

Prior to July 1, 2012 For the ~~October 2010 to October 2012~~ monitoring period, the Principal Copermittee must submit the Receiving Waters Monitoring Annual Report as required under Order No. 2004-0001. The Receiving Waters Monitoring Annual Report must address the monitoring conducted to comply with the requirements of Order No. 2004-0001.

**Comment [CP31]:** The existing monitoring program is reported on a fiscal year basis. Need to align the monitoring report with the fiscal year and the JUMP annual report.  
  
Also consistent with the change requested in III.A.2.

**C. Reporting Dates**

**Table 5.** Table of Required MRP Reporting Dates and Frequencies.

Submittal	Section	Completion Date	Frequency
Description of Proposed Monitoring Program	III.A.1	June 1, 2012	One Time
Receiving Waters and MS4 Discharge Monitoring Annual Reports, Including Proposed Updates to the Monitoring Program	III.A.2	Starting October 1, 2013	Annual
Copermittees submit Interim Monitoring Program Annual Report	III.B	As required under Order No. 2004-001	One Time
Draft Wet Weather MS4 Discharge Monitoring Program	II.B	July 01, 2012	One Time
Draft High Priority Inland Aquatic Habitat Monitoring	II.D	April 01, 2012	One Time
Draft Sediment Toxicity Special Study	II.E.2	April 01, 2012	One Time
Draft Trash and Litter Impairment Special Study	II.E.3	September 01, 2012	One Time

**Comment [CP32]:** See discussion in Attachment 4 to the Comment Letter related to the special studies changes.

<sup>11 14</sup> For updates to the SWAMP templates and formats, see <http://www.waterboards.ca.gov/swamp>.

'Attachment 9':  
Comments on the Monitoring and Reporting Program

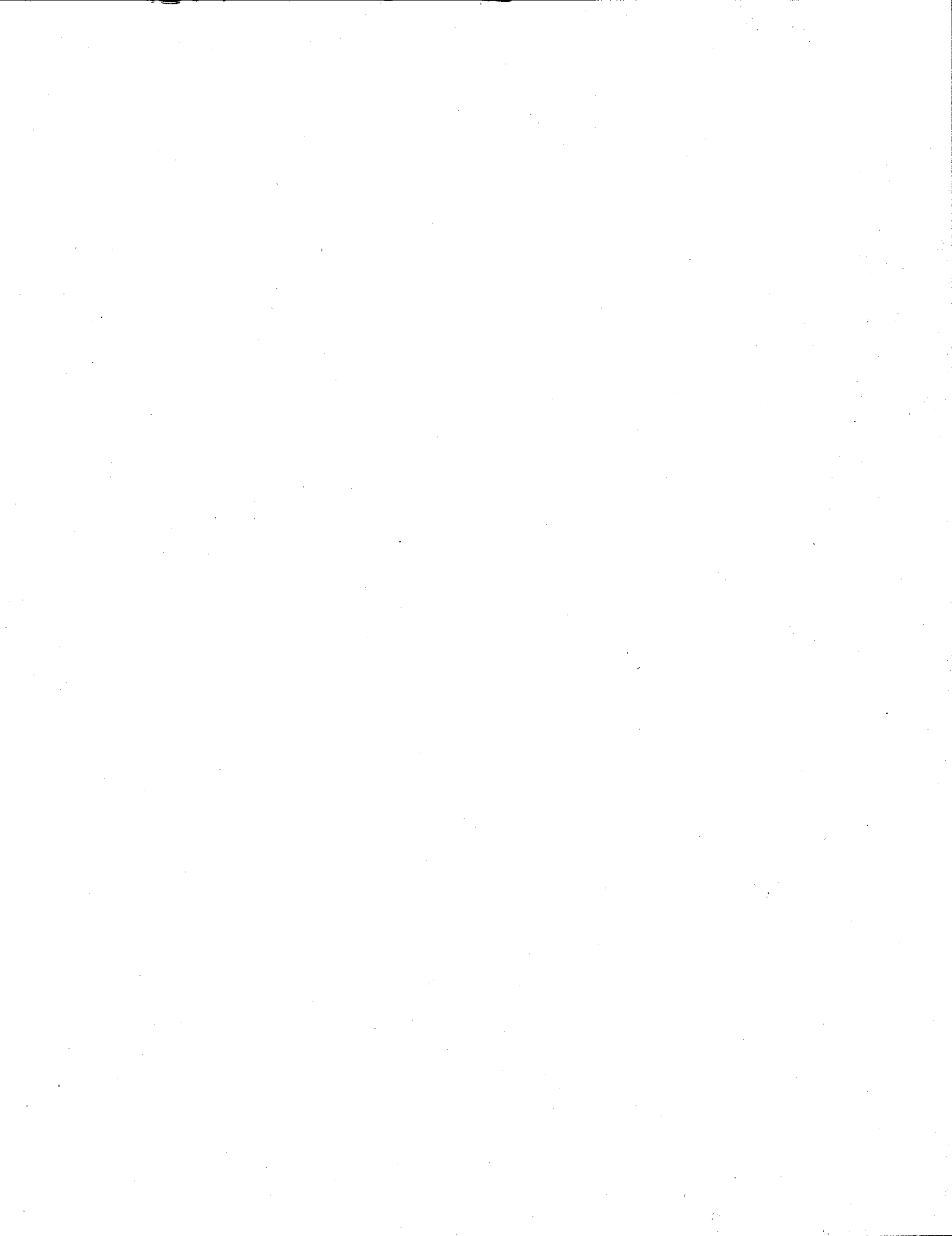
Receiving Waters  
and MS4 Discharge Monitoring  
and Reporting Program  
No. R9-2010-0016

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TBA

<b>Submittal</b>	<b>Section</b>	<b>Completion Date</b>	<b>Frequency</b>
Draft Agricultural, Federal and Tribal Input Study	II.E.4	September 01, 2012	One Time
Draft MS4 and Receiving Water Maintenance Study	II.E.5	April 01, 2012	One Time
Draft Intermittent and Ephemeral Stream Perennial Conversion Study	II.E.6	April 01, 2013	One Time





# Attachment 10: Fact Sheet Comments

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## Introduction

These comments on the Fact Sheet should be read in conjunction with the other white papers submitted as part of the comments on the Tentative Order.

### **Fact Sheet Text, Page 7:**

"The First and Second Term Permits, Order Nos. 90-46 and 98-02, provided maximum flexibility. San Diego Water Board Order No. 90-46 contained the "essentials" of the 1990 regulations, but the requirements were written in very broad, generic terms. This was done in order to provide the maximum amount of flexibility to the Copermittees in implementing the new requirements (flexibility was, in fact, the stated reason for issuing the permit in advance of the final regulations). From staff's perspective however, "flexibility" in the form of lack of specificity, combined with the Copermittees' *lack of funding and political will*, also provided the Copermittees with ample reasons to take few substantive steps towards achieving water quality standards. The situation was exacerbated by the San Diego Water Board's own lack of storm water resources for oversight."

### Problem with Text:

The statement regarding a 'lack of funding and political will' is unsupported and inflammatory, and provides no benefit in a public document.

### Suggestion:

Delete this statement.

### **Fact Sheet Text, Page 12 and 13:**

"It is very difficult to ascertain the true cost of implementation of the Copermittees' management programs because of inconsistencies in reporting by the Copermittees. Reported costs of compliance for the same program element can vary widely from city to city, often by a very wide margin that is not easily explained.<sup>6</sup> Despite these problems, efforts have been made to identify management program costs, which can be helpful in understanding the costs of program implementation....

A study on Phase I MS4 program cost was also conducted by the California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Water Board), where program costs reported in the municipalities' annual reports were assessed. The Los Angeles Water Board estimated that average per household cost to implement the MS4 program in Los Angeles County was \$12.50. <sup>8</sup> Since the Los Angeles County permit is very similar to Order No. R9-2004-001, this estimate is also useful in assessing general program costs in Riverside County.

The State Water Board also commissioned a study by the California State University, Sacramento to assess costs of the Phase I MS4 program. This study includes an assessment of costs incurred by Phase I MS4s throughout the State to implement their programs. Annual cost per household in the study ranged from \$18-46, with the Fresno-Clovis Metropolitan Area (FCMA) representing the lower end of the range, and the City of Encinitas (in San Diego County) representing the upper end of the range.<sup>9</sup> Included in the study is the City of Corona, which is in Riverside County

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under the jurisdiction of the California Regional Water Quality Control Board, Santa Ana Region (Santa Ana Water Board).

The annual cost per household for the City of Corona's program was estimated to be \$32, which should be similar to the costs to implement the MS4 programs in the Riverside County portion of the San Diego Region. In contrast, the cost of the City of Encinitas' program, with an annual cost per household estimated to be \$46, may represent the upper range of Riverside County MS4 programs. However, the City of Encinitas's program cost can be considered as the high end of the spectrum for management program costs because the City has a consent decree with environmental groups regarding its program, and City of Encinitas has received recognition for implementing a superior program.

The annual costs for the City of Corona and City of Encinitas were estimated from data collected in 2003-2004. Between 2003 and 2008, the number of households in both cities has increased by approximately 3 percent and 7 percent, respectively.<sup>10</sup> In contrast, between 2003 and 2008 the number of households in the City of Temecula has increased from 23,199 to 31,135 (34 percent)<sup>11</sup> and the City of Murrieta has increased from 22,020 to 32,664 (48 percent).<sup>12</sup> This significant increase in number of households indicates a significant increase in the tax base (sales and property tax) available to fund the implementation of the MS4 programs for the City of Temecula and City of Murrieta, as well as for the County of Riverside and recently incorporated cities."

### Problem with Text:

The text notes that it is difficult to compare costs between Cities for stormwater program implementation since the cost accounting varies widely, and the specific issues also vary widely. Despite this fact, the fact sheet goes on to make just such comparisons and further implies that the Santa Margarita Region Cities are underfunding their programs by comparison. For example, the City of Encinitas is cited as an example of a city that is spending on the upper end for a stormwater program. The City of Encinitas varies significantly from the cities in the Santa Margarita area in that it must address a major outfall (Cottonwood Creek) at its primary beach (Moonlight Beach). Cottonwood Creek has perennial dry weather flow from urban sources and exceeds REC-1 and REC-2 water quality standards. Since Cottonwood Creek discharges at Moonlight Beach, frequent sanitary standard exceedences were noted on a year-round basis. The City of Encinitas constructed a dry weather flow treatment plant near Moonlight Beach to treat Cottonwood Creek to correct this problem. No such compliance problems exist for the Copermittees. The comparisons in this part of the fact sheet are not valid.

In addition, the Fact Sheet leaves the inaccurate impression that the Copermittees have ample financial resources to fund MS4 programs by completely ignoring the effects of the current national recession. (See Attachment 2). As pointed out in Attachment 2 (Economic Assessment), declines in home values and tax receipts have crippled the ability of the Copermittees to finance such programs. The Fact Sheet selectively examines the period 2003-2008, when there was significant growth, but ignores the period 2008-2010, when that growth ended and the economy declined precipitously, affecting property and sale tax receipts as well as other sources of revenue.

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## Suggestion:

Delete the text on Page 13 and 14 of the Fact Sheet.

## **Fact Sheet Text Page 15:**

"The vast majority of costs that will be incurred as a result of implementing Order No. R9-2010-0016 is not new. Storm water management programs have been in place in Riverside County for over 15 years. As shown in the discussion above, the amount spent for MS4 Permit compliance per household in the municipalities in the Riverside County portion of the San Diego Region is already low compared to other regions. Any increase in cost to the Copermittees, however, is still expected to be incremental in nature. Since Order No. R9-2010-0016 "fine tunes" the requirements of Order No. R9-2004-001, these cost increases are expected to be modest.

Where there may be additional elements that will incur new costs, the Riverside County Copermittees are given the time to develop the budgets and funding mechanisms to phase those elements into their programs. Additionally, development of these additional elements by the Riverside County Copermittees will have the benefit of the experiences and work already done by the San Diego County and Orange County Copermittees."

## Problem with Text:

The Fact Sheet states that the vast majority of costs for implementing the Tentative Order are 'not new'. This is not correct. Almost every program in the Tentative Order has been amended and require new resources. Specific programs include, but are not limited to, the monitoring program (over fivefold increase in costs), hydromodification management programs, new development programs, inspection programs, irrigation runoff prohibitions, retrofit studies and MS4 maintenance programs. The very prescriptive and detailed requirements of the Tentative Order impose new requirements on the Copermittees at a time when funding sources are drying up. The Copermittees estimate that implementation of the regional components of the new Order (as written) will cost approximately \$11,500,000 (e.g. the costs to write the new compliance documents, develop the retrofit, hydromodification programs and develop and implement the new monitoring program). These costs are on top of the current expenditures to implement the existing regional monitoring program (approximately \$5,000,000 for the five-year permit term). These costs are further amplified by the direct cost of implementation that will be incurred by the individual Permittees (e.g. the cost to implement the new compliance documents and hydromodification programs). The text further indicates that the Tentative Order provides time for the Permittees to 'develop...funding mechanisms'. This statement assumes that the Copermittees have the ability to collect additional funds from taxpayers to support the stormwater program implementation. This is false, since any such funds, outside of inspection or plan review fees, would be required to be submitted to a vote of the people pursuant to Propostion 218. In the current economic and political climate, a successful vote to increase taxes is extremely remote. The Copermittees further note that in the City of Encinitas in Orange County, cited by the staff as an example of proactive MS4 regulation, a minimal stormwater proposition recently was voted down.

## Suggestion:

Delete the text noted above in the Fact Sheet and add a discussion on the difficulties of funding expansions to the Copermittees' stormwater programs due to Proposition 218.

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## **Fact Sheet Text Page 16:**

"For example, household willingness to pay for improvements in fresh water quality for fishing and boating has been estimated by USEPA to be \$158-210.18. This estimate can be considered conservative, since it does not include important considerations such as marine waters benefits, wildlife benefits, or flood control benefits. The California State University, Sacramento study reports that the annual household willingness to pay for statewide clean water is approximately \$180.19. When viewed in comparison to household costs for existing management programs, household willingness to pay estimates exhibit that per household costs incurred by the Riverside County Copermittees to implement their management programs are very low."

### Problem with Text:

The discussion in the referenced text is not represented correctly. The figure cited in the California State University, Sacramento study includes the cost of wastewater treatment. The author of the study notes:

'The survey question was for restoring water quality for all waters throughout the state from all impairment, not just within a city or region and not just for impairment from stormwater pollution.' The current cost for sewer fees exceed \$200 per year, Thus, the vast majority of the "household willingness" figure relates to sanitary sewer costs, and not to the costs of addressing stormwater.

### Suggestion:

Delete this text in the fact sheet and note that the cost consumers are currently paying for clean water in the Permit area exceeds that which studies cited have found they are willing to pay.

## **Fact Sheet Text Page 17:**

"University of California, Los Angeles assessed the costs and benefits of implementing various approaches for achieving compliance with the MS4 permits in the Los Angeles Region. The study found that non-structural systems would cost \$2.8 billion but provide \$5.6 billion in benefit. If structural systems were determined to be needed, the study found that total costs would be \$5.7 to \$7.4 billion, while benefits could reach \$18 billion.<sup>21</sup> Costs are anticipated to be borne over many years – probably ten years at least. As can be seen, the benefits of the programs are expected to considerably exceed their costs. Such findings are corroborated by USEPA, which found that the benefits of implementation of its Phase II storm water rule would also outweigh the costs."

### Problem with Text:

It is a basic principle that public spending should have a positive cost-benefit. The Fact Sheet implies that since spending on stormwater has a positive cost-benefit, such spending should be increased. The reality is that there are also other public spending priorities such as police, fire, ambulance, and public utilities competing for the same funding, all of which have positive cost-benefit ratios. Moreover, the UCLA study specifically focused on the benefit of improving beach water quality, which is a very significant economic factor in terms of tourism in coastal Los Angeles County. No beaches exist in the Santa Margarita Region, and given the ephemeral nature of many of the Region's waterways, attempting to extrapolate the UCLA study is not appropriate. In the absence of a similar cost-benefit study being undertaken in the Santa Margarita Region, the studies cited by staff do not provide any basis for the conclusions reached in the Fact Sheet.

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## Suggestion:

As the fundamental basis for this comment is flawed, in the absence of any local data for inland waterbodies in semi-arid climates, the text should be deleted.

## **Fact Sheet Text Page 35:**

"Trash, as litter in both solid and liquid form, is consistently found on and adjacent to roadways. A California Department of Transportation Litter Management Pilot Study found that of roadway trash, plastics and Styrofoam accounted for 33 percent of trash by weight, and 43 percent by volume. Further, the study found that approximately 80 percent of the litter associated with roadways was floatable, indicating that, without capture, this litter would enter Waters of the State after a storm event, resulting in the impairment of Beneficial Uses.<sup>45</sup> The study, however, relied upon a mesh capture size of 0.25 inches (6.35 millimeters). This size is too large to effectively capture plastic pre-production pellets (a.k.a. "nurdles"), which are roughly 3 mm in size, and likely underestimated the total contribution of plastics. Furthermore, pre-production plastic pellets, which are small enough to be easily digested, have been found to carry persistent organic pollutants, including PCBs and DDT."

## Problem with Text:

While the Fact Sheet suggests that there is a compelling argument to address trash along Caltrans highways, such a problem is not found on municipal streets. The Caltrans studies found that a substantial portion of the litter load comes from uncovered loads on commercial and private vehicles. The low speed roadways operated by the Copermittees do not create similar conditions or handle similar traffic. Further, the text discusses pre-production plastics (nurdles), yet fails to acknowledge that there are no industries within the Copermittees' jurisdiction that manufacture or use this material. The Fact Sheet's citation of studies that have no bearing on actual conditions within the Santa Margarita Region cannot be used to justify programs in the Tentative Order addressing such non-existent conditions. The ROWD has a more informed discussion of trash issues based on actual conditions in the Santa Margarita Region.

## Suggestion:

Revise the fact sheet text to discuss the current findings relative to trash in the Permit region based on the ROWD.

## **Fact Sheet Text Page 50 and 51**

Pg. 50 - "To date the San Diego Water Board and the Copermittees have identified overspray and drainage from potable and reclaimed water landscape irrigation as a substantial source and conveyance mechanism for pollutants into waters of the United States."

Pg. 51 - "The San Diego Water Board and the Copermittees have identified irrigation water as a source of pollutants and conveyance of pollutants to waters of the United States, when applied improperly in excess and thereafter entering the MS4, in the following documents:"

## Problem with Text:

The documents cited in the Fact Sheet do not support the conclusion that irrigation water is a source of pollutants or conveyance of pollutants in the *Santa Margarita Region*. First, the comments in the public education document cited in the Fact Sheet were borrowed from an Orange County publication, and do not represent any official conclusion by the Copermittees that irrigation water represents a water quality

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threat. Plainly over-irrigation is to be discouraged, as even if the water is clean, it adds to the Copermitees' costs of addressing such waters. Second, this public education document is the *only* document from a Santa Margarita Region source. The other documents cited by staff are studies conducted in other areas, with different hydrology and climate. For a more comprehensive assessment of the irrigation runoff issues, please see Attachment 6 (Prohibition of Irrigation Runoff).

## Suggestion:

Delete the referenced text and the quotes referencing Permittee education materials. Also remove the improperly supported irrigation runoff prohibition.

Revise the text to accurately reflect the lack of any connection between irrigation runoff and impairments of receiving waters in the Santa Margarita Region.

## **Fact Sheet Text Page 58:**

"Enforcement and inspection activities conducted by the San Diego Water Board during the previous permit term have found a lack of source control for many unpaved roads within the jurisdiction of the Copermitees."

## Problem with Text:

The Copermitees submit that there is no evidence reflecting any substantial water quality problem relating to MS4 discharges affected by unpaved roads. Moreover, the mileage of unpaved roads in the jurisdiction of the Copermitees is a small percentage of the total mileage of unpaved roads in the Santa Margarita Region, given that many of these roads are operated by such jurisdictions as the U.S. Forest Service. Please see Attachment 5 (Unpaved Roads). Further, the Fact Sheet notes on page 27 that Permits "will cover municipal systems discharges in unincorporated portions of the county, it is the intent of EPA that management plans and other components of the program focus on the urbanized and developing area of the County". Dedicating resources to unpaved roads diverts already limited resources from the urbanized areas intended to be addressed by USEPA regulations.

## Suggestion:

The references and associated program requirements should be removed from the Permit and addressed through a separate general permit for unpaved roads, if in fact unpaved roads are a significant source of pollutants.

## **Fact Sheet Text Page 69:**

"The order also found that the SSMP requirements are appropriately applied to the majority of the Priority Development Project categories that are also contained in section F.1 of this Order. The State Water Board also gave California Regional Water Quality Control Boards (Regional Water Boards) the needed discretion to include additional categories and locations, such as retail gasoline outlets(RGOs), in SSMPs "

"The provisions of the SSMP section of the Order are also consistent with those previously issued by the San Diego Water Board for Riverside County (Order No. R9-2004-001), Southern Orange County (Order Nos. R9-2002-0001 and R9-2009-0002) and San Diego County."

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## Problem with Text:

Several PDP categories or thresholds are not supported by Order WQ 2000-11 such as the 10,000 square feet requirement for residential areas nor the 1-acre threshold for all development projects. Further the Order ignores other applicable portions of Order WQ 2000-11. Specifically, the memo from State Board Chief Counsel Craig S. Wilson transmitted WQ Order 2000-11 to the Regional Board executive officers states that with regard to discretion that:

"3. The Order allows broader discretion by the Regional Water Boards to decide whether to include additional types of development in future SUSMPs. These areas for potential future inclusion in SUSMPs include retail gasoline outlets, ministerial projects (only discretionary projects are included in the approved SUSMPs), and projects in environmentally sensitive areas. **If Boards include these types of developments in future permits, the Order explains the types of evidence and findings that are necessary.**"

Order 2000-11 requires that revisions to regulatory thresholds be justified economically. The Copermittees have expressed their concern with requirement F.1.d.(2)(a) regulating residential developments of 10,000 sq. ft. or more and requirement F.1.d.(1)(c) regulating any project 1-acre or more. These thresholds, and their relative impact on project proponents, have not been adequately justified. The Permittees have noted that these regulations will negatively impact the construction of custom homes (individual lot developments). The relative economic impact of meeting the SSMP requirements for individual homeowners has not been justified in the fact sheet.

## Suggestion:

As shown in the redline markup (Attachment 9); The 1-acre SSMP threshold (F.1.d.(1)(c) ) should be deleted and the 10,000 square feet threshold for residential areas (F.1.d.(2)(a) ) should be made the same as the requirement contained in the Riverside County Santa Ana NPDES MS4 Permit.

## **Fact Sheet Text Page76:**

"The success of future stream restoration and stabilization is, however, dependent on preventing and reducing physical impacts from activities upstream. Therefore, hydromodification management measures are necessary upstream of modified (e.g. concrete, rip rap, etc.) channels in addition to non-modified channels."

## Problem with Text:

In some areas, hardened channels may be needed for flood control and public safety. In those areas, channel restoration may not be feasible and onsite controls are not warranted. The protection of public safety from flooding is a statutorily required duty of the District. See Water Code App. Section 48-9. Any provisions of the Tentative Order that would presume to challenge this duty must be deleted. The District assumes that the Regional Board and staff are not placing themselves in the position of making flood control judgments, as the agency is neither charged by the Legislature with such obligation nor is the agency equipped to do so.

## Suggestion:

Revise the text to add "except where hardened channels are required for the protection of public safety"



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### **Fact Sheet Text Page 77:**

"Since municipalities are the lead permitting authority for industrial land use and construction activities, they are also the lead for enforcement regarding runoff discharges from these sites."

### Problem with Text:

This is a leap of logic we should probably not let pass. The Copermittees can greatly influence the design and construction, but the Industrial Permit is focused on the operation of the facility, and that is where the authority of the Board lies - and is arguably the most important aspect of runoff quality from the site.

### Suggestion:

Delete the sentence.

### **Fact Sheet Text Page 79:**

"To clarify, an unaltered natural drainage, which receives runoff from a point source (channeled by a Copermittee to drain an area within their jurisdiction), which then conveys the runoff to an altered natural drainage or a man-made MS4, is both an MS4 and a receiving water."

### Problem with Text:

As noted in Attachment 7 (General Legal Comments) regarding Finding D.3.c., a natural drainage, whether or not it conveys point source runoff to a man-made MS4, is not itself part of the MS4.

### Suggestion:

Delete text.

### **Fact Sheet Text Page 79:**

"As operators of the MS4s, the Copermittees cannot passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or otherwise control. These discharges may cause or contribute to a condition of contamination or a violation of water quality standards."

### Problem with Text:

First, the Copermittees, as operators of the MS4, are required to address storm drainage. During storm conditions in particular, the District is required to handle flood waters so as to protect the lives and property of residents of Riverside County. The failure to do so is a violation of state law. See Water Code App. Section 48-9. Thus, the Copermittees must "passively receive and discharge" waters from third parties, which waters may contain pollutants. Moreover, the operator of the MS4 is NOT accepting responsibility for discharges from other MS4 systems. There is no provision for joint liability under the federal Clean Water Act or the California Water Code. The former directs its prohibitions against a "discharger," and no others. 33 U.S.C. §§ 1319 and 1342. A party is responsible only for its own discharges or those over which it has control. *Jones v. E.R. Snell Contractor, Inc.*, 333 F.Supp.2d 1344, 1348 (N.D. Ga. 2004); *United States v. Sargent County Water Dist.*, 876 F.Supp. 1081, 1088 (D.N.D. 1992).

The Clean Water Act MS4 regulations, moreover, specifically provide that Copermittees under an MS4 Permit are required to "comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are operators." 40 C.F.R. § 122.26(a)(3)(vi) (emphasis supplied). Moreover,

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the Regional Board, as the permitting agency for stormwater and Industrial Permits, and the State Board as the overall agency responsible for compliance with the Clean Water Act in California, are responsible for ensuring that the discharges from such permitted facilities, whether or not they enter the MS4, are in compliance with the requirements of those permits. Finally, many sources of pollutants are beyond the control of the MS4 operators but are within the control of other agencies, if those agencies elect to exercise their authority. A major example is the discharge of metals from motor vehicle brake pads, which contributes to exceedances of copper, zinc and potentially other metals in stormwater. The MS4 operators cannot control the composition of brake pads, nor can the MS4 operators control air emissions from domestic and foreign sources that discharge pollutants onto the surface area of the region, which can then wash into the MS4 systems.

Suggestion:

Delete cited text.

**Fact Sheet Text Page 81:**

"Since treatment generally does not occur within the MS4, in such cases reduction of storm water pollutants to the MEP must occur prior to discharges entering the MS4."

Problem with Text:

Nothing in the MS4 regulations prohibits use of the MS4 for treatment. Frankly, some of the most effective treatment facilities for pollutants may be located in the MS4 as part of regional treatment systems. An example are catch basins, which collect trash and other debris and detention and retention basins that can be used to capture, treat and infiltrate runoff.

Suggestion:

Delete cited text.

**Fact Sheet Text Page 84:**

"When appropriately applied as in this Order, retrofitting existing development meets MEP."

Problem with Text:

Only retrofits that are applied with the requirements of the Order meet MEP, which is not the case.

Suggestion:

Delete the text.

**Fact Sheet Text Page 88:**

"The RWL language in the Order requires storm water compliance with water quality standards through an iterative approach for implementing improved and better-tailored BMPs over time. The iterative BMP process requires the implementation of increasingly stringent BMPs until receiving water quality standards are achieved. This is necessary because implementation of BMPs alone cannot ensure attainment of receiving water quality standards."

Problem with Text:

61 Federal Register 57425 (1996), Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits states "expanded or better-tailored BMPs in subsequent permits, where necessary, to provide for the attainment of water quality standards."

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Suggestion:

The second sentence should be revised to reflect the actual text from federal regulations (specifically "in subsequent permits"). Further the last sentence does not make sense and is contrary to the proceeding text and should be deleted.

**Fact Sheet Text Page 112:**

"The San Diego Water Board has responded to complaints about and observed runoff from over-irrigation entering the MS4s in the Riverside County portion of the San Diego Region."

Problem with Text:

There is no evidence in the fact sheet supporting this statement.

Suggestion:

Provide evidence or delete statement.

**Fact Sheet Text Page 130:**

"This section requires the use of native and/or low water use plants for landscaping."

Problem with Text:

There was an agreement that this would be suggested but not a requirement. This requirement also mandates the means of compliance, in violation of Water Code section 13360.

Suggestion:

Change the text:

"Section ~~requires~~ suggests the use of native and/or low water use plants for landscaping,"

**Fact Sheet Text Page 136:**

"This requirement is needed because to date, the Copermittees have generally approved low removal efficiency treatment control BMPs without justification or evidence that use of higher efficiency treatment BMPs was considered and found to be infeasible."

Problem with Text:

The Copermittees challenge the accuracy of this Statement. Riverside County has been requiring landscaped based low impact development BMPs since 2005. The District has also spent a substantial sum of money and time developing BMP manuals with specific criteria to ensure the effectiveness of BMPs.

Suggestion:

Delete the unsupported and offensive statement.

**Fact Sheet Text Page 142:**

"Where streams are hardened and/or buried to convey storm water, they cannot provide adequate water quality."

Problem with Text:

Unsupported and incorrect. Hardened channels can be designed to provide both flood protection and natural stream function. For example, hardened levees can be designed to be set back and backfilled with native material, effectively providing a natural substrate for stream function. Similarly, porous channel materials such as gabions can provide both flood protection and substrate for native habitat. Finally,

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even underground systems can be connected to regional treatment systems that provide requisite water quality benefits where appropriate.

Suggestion:

Delete.

**Fact Sheet Text Page 145:**

"Redevelopment projects, however, must be able to achieve post-project runoff flow rates and durations that are less than or equal to pre-project and down to pre-development runoff flow rates and durations to be eligible to receive a waiver under the program."

Problem with Text:

This requirement is self-defeating. By placing regulatory obligations on redevelopments that make the cost of redevelopment greater than the cost of developing on virgin land, the Permit effectively promotes inner-city blight as existing structures are abandoned and suburban development is promoted due to economic factors. The Permit should include accommodations for redevelopment to ensure that existing developed areas are economically preferable for new development and to prevent the onset of unnecessary additional impervious area.

Suggestion:

The Permit and fact sheet should be revised to offer exemptions for hydromodification requirements for redevelopments where such improvements are infeasible.

**Fact Sheet Text Page 160:**

"Retrofitting existing development is practicable for a municipality through a systematic evaluation, prioritization and implementation plan focused on impaired water bodies, pollutants of concern, areas of downstream."

Problem with Text:

Although the current requirement simply calls for a study, it is expected that future permits will require implementation of said study. This study exceeds the requirements for Copermittees to evaluate opportunities for retrofit of the MS4 contained in the federal regulations and federal Clean Water Act. There are no revenues to promote such a program.

Suggestion:

The Board should recognize in the fact sheet that without funding provided by the state, there is no revenue for such a program.

**Fact Sheet Text Page 161:**

"Section F.3.d.(4) requires each Copermittee to cooperate with private property owners to encourage the implementation of site specific retrofitting projects. Because the Copermittees have limited authority to directly require retrofitting projects on private property, the Copermittees must encourage private property owners to implement retrofitting projects through indirect programs and incentives."

Problem with Text:

If the Board wishes to promote urban retrofit, then they also need to incentivize the program. Currently, property owners wishing to volunteer for urban retrofit projects are required to comply with the SSMP,

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including hydromodification and LID requirements, opt into BMP inspection programs and subject themselves to ongoing scrutiny through business inspection programs required by the Permit. The permit places an ECONOMIC DISINCENTIVE in the way of promoting a general good for the watershed. The purpose of this requirement is to promote acceleration of water quality benefits from existing urban areas. The requirements, as written, promote a program that is doomed to failure.

Suggestion:

The Board should clearly exempt urban retrofit projects from the new development requirements of the Permit if they wish to accelerate water quality improvements from existing urban areas.

**Fact Sheet Text Page 162:**

"Periodic inspections may be performed to ensure the site owner has not removed the retrofit BMPs."

Problem with Text:

Similar to the prior comment, this creates a disincentive to retrofit BMPs.

Suggestion:

Delete.

**Fact Sheet Text Page 163:**

"Section F.4.b ...access points (i.e. manholes), connections..."

Problem with Text:

The text from the Phase I rule implementing the NPDES regulations and the requirement of the storm drain system map is:

(from Federal Register, Vol 55, No 222, Friday Nov 18, 1990):

"[submit] a USGS 7.5 minute topographic map...[showing] The location of known municipal storm sewer system outfalls discharging to waters of the United States...the location of major structural controls for storm water discharge (retention basins etc) and the identification of publicly owned parks, recreation areas and other open lands."

The proposed requirements exceed the federal regulatory requirements for MS4 mapping. Further, the mapping of manholes is a significant economic burden that would have no benefit for our staff. Manholes are typically placed at regular intervals (300 – 500 feet) on underground storm drain systems. Once a map providing the location of the MS4 system is available, manholes are quickly located through visual inspection in the field. Further, storm drain plans that are available to Permittee staff can be used to locate specific manholes where absolutely necessary. The economic costs of mapping potentially thousands of manholes is not offset by any known benefit.

Suggestion:

Delete requirement to map manholes.

## Attachment 10: Fact Sheet Comments

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### Fact Sheet Text Page 198:

"Section II.D (High Priority Inland Aquatic Habitat) of the MRP describes required monitoring to be done in order to assess if MS4 storm water and/or non-storm water discharges are affecting high priority aquatic and/or riparian species."

### Problem with Text:

This requirement was deleted from the Orange County NPDES MS4 Permit when the provision to assess outfalls using NALs and SALs was added. It is not clear why such an accommodation would not also be provided to the Riverside County NPDES MS4 Program. This region has significantly less economic resources than south Orange County or San Diego County to implement monitoring programs. The Permittees specifically request this be deleted as impacts to aquatic habitat will be detected through the NAL/SAL program.

### Suggestion:

This requirement should be deleted.