



## California Stormwater Quality Association®

*Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation*

July 20, 2017

Jeanine Townsend, Clerk of the Board  
State Water Resources Control Board  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, CA 95814



Submitted electronically – [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

**Subject: CASQA Comment Letter – Small MS4 Permit Amendment**

Dear Ms. Townsend:

The California Stormwater Quality Association (CASQA) is writing to comment on the proposed amendment (Findings, Provisions, and Attachment G) to the General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Small MS4 General Permit), implementing region-specific total maximum daily load (TMDL) requirements (Proposed Amendment). CASQA understands that the intent of the Proposed Amendment is to revise the Small MS4 General Permit to implement seventy-three (73) TMDLs that include Phase II Permittees as responsible parties.

Our comments focus on issues that are of statewide importance and affect the implementation of most, if not all, of the TMDLs included within the Small MS4 General Permit, Attachment G. Our primary intent is to provide comments that clarify how the wasteload allocations (WLAs) are incorporated into the permit, how attainment of TMDLs/compliance with the Small MS4 General Permit is demonstrated, and what the process is for permittees who are subject to TMDLs that are past their final attainment deadlines. CASQA and its members actively participated in the stakeholder process to revise Attachment G that was initiated in 2013 and submitted similar comments as a part of those stakeholder meetings.

In addition, attached to and referenced within this letter are the comments that we submitted on July 31, 2015 regarding previously proposed revisions to Attachment G. Unfortunately, it appears that these comments were not incorporated.

CASQA provides general comments, followed by specific comments and recommendations on the following sections of the Small MS4 General Permit:

- I. Findings
- II. Provisions
- III. Attachment G

## GENERAL COMMENTS

### **Comment 1: Replace the term “WLA” with terms consistent with the Federal Regulations when referring to a numeric or BMP-based effluent limitation or permit condition.**

Throughout the Proposed Amendment, the term wasteload allocation or WLA is used to describe the point source allocation assigned to the MS4s as defined within the TMDL as well as effluent limitations incorporated into the Small MS4 General Permit.

For the following reasons, CASQA recommends that the term “WLA” be replaced with effluent limitations and/or conditions consistent with the requirements and assumptions in the TMDL when referring to a numeric or BMP-based effluent limitation or permit condition that must be met by the MS4s.<sup>1</sup> This modified terminology will ensure that WLAs will be incorporated into the Small MS4 General Permit with the flexibility provided by the federal regulations.

- Where a TMDL has been approved, National Pollutant Discharge Elimination System (NPDES) permits must contain effluent limitations and conditions consistent with the requirements and assumptions in the TMDL. (40 CFR 122.44(d)(1)(vii)(B).) This approach is affirmed in USEPA’s Permit Writer’s Manual, which states, “[w]here there is a pollutant with a WLA from a TMDL, a permit writer must develop WQBELs or other permit requirements consistent with the assumptions of the TMDL.”<sup>2</sup>
- Effluent limitations and/or permit conditions may be expressed as numeric limitations or as a best management practice (BMP) program of expanded or better-tailored BMPs.<sup>3</sup> Notably, WLAs in TMDLs may be expressed in several different ways - depending on the nature of the pollutant and its impacts on receiving waters and beneficial uses. For example, they may be expressed as the number of allowable exceedance days that a water body may exceed the Basin Plan water quality objectives (WQOs), as receiving water conditions, or as values equivalent to the Basin Plan WQOs as measured at the discharge/outfall. Accordingly, this flexibility needs to be retained.
- In the context of MS4 discharges, effluent limitations and/or permit conditions in NPDES permits may be expressed in the form of either numeric limitations or, best management practices (BMPs). (40 CFR 122.44(k).)
- This approach is similar to that used in the Los Angeles Region MS4 Permit<sup>4</sup>, the San Diego Region MS4 Permit<sup>5</sup>, and the Central Valley Region-wide MS4 General Permit<sup>6</sup>.

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<sup>1</sup> CASQA recognizes that there are still legal, policy, and technical questions regarding the use of numeric limitations within municipal stormwater permits. CASQA’s comments provided here are not intended to advocate for the use of such limits but to state that when the State Water Board or Regional Water Board incorporates a WLA into a permit as a WQBEL, it is imperative that it be incorporated as a BMP-based requirement instead of a numeric limit (which may be subject to Mandatory Minimum Penalties).

<sup>2</sup> NPDES Permit Writers’ Manual, September 2010, Section 6.3.3

<sup>3</sup> November 26, 2014 Memorandum from the USEPA, Revisions to the November 22, 2002 Memorandum “Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs”

<sup>4</sup> Attachment K-R, Order No. R4-2012-0175 as amended by State Water Board Order WQ 2015-0075.

<sup>5</sup> Finding 5, Attachment E, Order No. R9-2013-0001 as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100

### **CASQA Recommendation**

Replace the term “WLA” with effluent limitations and/or conditions consistent with the requirements and assumptions in the TMDL.

### **Comment 2: The Small MS4 General Permit and Proposed Amendment should refer to “compliance” when referencing a permit provision and “attainment” when referencing a TMDL.**

Throughout the Small MS4 General Permit and Proposed Amendment the terms “compliance” and “attainment” are used inconsistently. The term “compliance” should be used when specifically referencing the Small MS4 General Permit or one of its provisions while the term “attainment” should be used when referencing a TMDL-related requirement. Examples of the recommended modifications are as follows:

- *E.15. and F.5.i Total Maximum Daily Loads ~~Compliance~~ Requirements*
- *E.15.b. and F.5.i.2 - In some cases, Attachment G includes dates that fall outside the term of this Order. ~~Attainment Compliance~~ dates that have already passed are enforceable on the effective date of this Order. Permittees may request a time schedule order where a final TMDL attainment date ~~compliance deadline~~ is past. ~~Attainment Compliance~~ dates that exceed the term of this Order are included for reference, and become enforceable in the event that this Order is administratively extended.*
- *Attachment G – throughout*
  - *The final ~~attainment date compliance deadline~~ for the WLA.....*

### **CASQA Recommendation**

Conduct a global search of the Small MS4 General Permit and Proposed Amendment to identify when the terms “compliance” and “attainment” are used and modify the terms, as needed, to ensure that they are used consistently, and that “compliance” is only used when specifically referencing a permit provision.

## **I. FINDINGS**

### **Comment 3: Federal law does not require MS4 Permittees to strictly comply with water quality standards or the associated WLAs of TMDLs.**

Finding 40 alleges that the TMDLs in Attachment G are mandated by federal law and, thus, their inclusion in the Small MS4 General Permit are also mandated by federal law. However, not all TMDLs are the result of federal law or mandated by federal law. In fact, many are adopted under state authority and the state’s discretion. For example, whenever a Regional Water Board expands the number of pollutants and/or waterbodies in a TMDL to include an additional pollutant or waterbody that is not listed on the state’s 303d list, the Regional Water Board is exercising its state authority and using its state discretion. Therefore, this blanket statement as part of the Proposed Amendments is incorrect.

To this point, in recent litigation, the State Water Resources Control Board (State Water Board) argued that it has the discretion to adopt TMDLs for waterbodies and pollutants regardless if a

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<sup>6</sup> Attachment G, Order No. R5-2016-0040

listing of impairment triggers a TMDL. (See *Pyrethroid Working Group v. California Regional Water Quality Control Board, Central Coast Region, et al.*, Case No. 34-2015-80002177, Sacramento County Superior Court, Respondents’ Opposition Brief to Petition for Writ of Mandate.) Specifically, the State Water Board and Central Coast Regional Water Board (collectively referred to as “Water Boards”) argued that the Clean Water Act was a backstop and that the Water Boards have the discretion to ensure that waterbodies meet water quality objectives regardless of reference to the Clean Water Act. “The Regional Board’s authority under state law is not automatically divested because the Regional Board described the waters as ‘impaired’ and elected to develop a ‘TMDL’ or otherwise used language reflected in the Clean Water Act. Using the standard language commonly associated with the development of a program to address water pollution problems enabled the public and stakeholders to easily understand the goal and the implications of the Basin Plan Amendment that incorporated the TMDL. Such language does not vary the Regional Board’s broad state law planning and implementation authority under Water Code section 13242.” (Id. At p. 23:19-25.)

Further, in those instances where TMDLs will be incorporated into the Small MS4 General Permit, the State Water Board should be reminded that federal law does not require MS4s to strictly comply with water quality standards or the associated WLAs of those TMDLs.<sup>7</sup> Any TMDL-related compliance requirement in the Small MS4 General Permit is a “true choice” by the State Water Board, constituting an unfunded state mandate.<sup>8</sup>

### **CASQA Recommendation**

Delete Finding 40.

## **II. PROVISIONS**

### **Comment 4: Include Reciprocating Language within the Effluent Limitations and Receiving Water Limitations that Cross References the TMDL Provisions.**

CASQA appreciates that the Proposed Amendment incorporates language that establishes a direct linkage between TMDLs (Provision E.15.a and F.5.i.1) and Effluent Limitations (Provision C) and Receiving Water Limitations (Provision D). This language is important to specify how Permittees demonstrate compliance with these provisions. However, CASQA strongly recommends that similar language also be included within Provisions C and D so that these provisions are explicitly linked to the corresponding TMDL language and not interpreted as stand-alone Permit provisions.<sup>9</sup>

#### Effluent Limitations

CASQA recommends using an approach similar to that used in the Los Angeles Region MS4 Permit<sup>10</sup>, the San Diego Region MS4 Permit<sup>11</sup>, and the Central Valley Region-wide MS4 General Permit.<sup>12</sup> In these MS4 permits, the effluent limitations are expressed as Technology Based

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<sup>7</sup> *Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1166-1177 (1999); *Divers’ Environmental Conservation Org. v. State Water Resources Control Bd.*, 145 Cal. App. 4th 246, 259 (2006); *Md. Dep’t of the Env’t v. Riverkeeper*, 447 Md. 88, 104 (2016).

<sup>8</sup> *Dep’t of Finance v. Commission on State Mandates*, 1 Cal. 5th 749 (2016).

<sup>9</sup> *NRDC, Inc. v. County of Los Angeles*, 673 F.3d 880 (9th. 2011).

<sup>10</sup> Provision IV.A, Order No. R4-2012-0175 as amended by State Water Board Order WQ 2015-0075.

<sup>11</sup> Provision A.3, Order No. R9-2013-0001 as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100

<sup>12</sup> Provision III, Order No. R5-2016-0040

Effluent Limitations (to meet the MEP standard) and Water Quality Based Effluent Limitations (to meet implementing TMDL WLAs).

### **CASQA Recommendation**

Modify the language for Provision C as follows:

#### ***C. EFFLUENT LIMITATIONS***

*1. Technology Based Effluent Limitations: Permittees shall implement controls as required by this Order to reduce the discharge of pollutants from their MS4s to waters of the U. S. to the MEP.*

*2. Effluent Limitations: This Order establishes effluent limitations or permit conditions consistent with the assumptions and requirements of the applicable TMDL. Permittees shall additionally reduce the discharge of pollutants (1) to achieve TMDL waste load allocations (WLAs) established for discharges by the MS4s. Each Permittee shall comply with applicable effluent limitations or permit conditions as set forth in Attachment G, pursuant to the associated compliance schedules.<sup>13</sup>*

*and (2) to comply with the Special Protections for discharges to ASBS. [move this language to the Discharge Prohibitions or Receiving Water Limitations]*

*2. Storm water discharges regulated by this Order shall not contain a hazardous substance in amounts equal to or in excess of a reportable quantity listed in 40 C.F.R. Part 117 or 40 C.F.R. Part 302. [move this language to the Discharge Prohibitions]*

#### Receiving Water Limitations

CASQA recommends incorporating language that explicitly links the receiving water limitations to the TMDL provisions in Attachment G and recognizes that exceedances of water quality objectives or water quality standards may persist while the TMDL is being implemented.

### **CASQA Recommendation**

Modify the language for Provision D as follows:

#### ***D. RECEIVING WATER LIMITATIONS***

*...The Permittee shall comply with Receiving Water Limitations through timely implementation of control measures/BMPs and other actions to reduce pollutants in the discharges and other requirements of this Order including any modifications. The storm water program shall be designed to achieve compliance with Receiving Water Limitations. If exceedance(s) of water quality objectives or water quality standards persist notwithstanding implementation of other storm water program requirements of this Order including the BMPs designed to comply with the TMDLs as set forth in Attachment G, the Permittee shall assure compliance with Receiving Water Limitations by complying with the following procedure...*

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<sup>13</sup> For TMDLs that are structured to utilize BMP-based requirements to attain a WLA, this language should be modified accordingly “In lieu of WQBELs, this Order establishes BMPs consistent with the assumptions and requirements of the applicable TMDLs....”

**Comment 5: The Small MS4 General Permit Should Allow the Permittees to Utilize Compliance Schedules for TMDLs.**

Provisions E.15.b and F.5.i.2 state, in part,

*....Compliance dates that have already passed are enforceable on the effective date of this Order. Permittees may request a time schedule order where a final TMDL compliance deadline is past.*

The Fact Sheet further states

*Attachment G incorporates the final compliance deadlines for each TMDL; some TMDL compliance deadlines are now past. In these instances, the associated wasteload allocations are effective immediately. Where appropriate, the State Water Board will work with the Regional Water Boards to determine if there is any regulatory flexibility for extension of final compliance dates consistent with any particular TMDL. The State Water Board and the Regional Water Boards additionally have discretion with regard to enforcement actions and will exercise that discretion on a case by case basis based on all the facts underlying a violation, including how recently the Permittee was assigned TMDL-specific requirements in the permit and the Permittee's efforts to date to meet the TMDL-specific requirements. Additionally, a permittee with a past or imminent TMDL compliance deadline may request a Time Schedule Order (TSO) from the applicable Regional Water Board. A Regional Water Board's issuance of a TSO will establish an implementation schedule for the Permittee to comply with the TMDL requirements.*

Although the Fact Sheet states “[w]here appropriate, the State Water Board will work with the Regional Water Boards to determine if there is any regulatory flexibility for extension of final compliance dates consistent with any particular TMDL”, it is unclear what this exactly means. Where is it appropriate, which TMDLs would it apply to, and what is the timing within the context of the adoption of the Proposed Amendment?

Given the significance of TMDL final attainment dates and the resulting impact on these small MS4s, CASQA strongly recommends that these discussions and modifications occur prior to the adoption of Attachment G. In particular, addressing these modifications prior to Attachment G becoming effective is necessary to ensure fairness towards the small MS4 Permittees.

Otherwise, small MS4s will be deemed out of compliance immediately even though they were not subject to the TMDL prior to adoption of Attachment G into the General Permit. Putting these agencies in such a position is untenable and should be avoided. If not resolved prior to adoption, the small MS4s will need to immediately divert resources to request compliance schedules or time schedule orders, all the while being at risk for potential enforcement action and/or third-party lawsuits.

This language, combined with the fact that Attachment G incorporates the numeric WLAs by reference (Comment #7) and does not include alternative compliance pathways (Comment #8), will put a large number of Phase II Permittees in immediate non-compliance with the Permit if they cannot meet the WLAs. In fact, roughly half of the TMDLs in Attachment G have either already passed their final attainment dates or will pass their final attainment dates within two years of the Small MS4 General Permit being amended.

## CASQA Comments on the Proposed Amendment to the Small MS4 General Permit

Region	# of TMDLs with Final Attainment Dates Before 2020	# of TMDLs with Final Attainment Dates After 2020	Notes
1	1	0	No WLAs
2	---	---	7 TMDLs - no dates
3	4	13	
4	11	7	1 TMDL – no date
5	5	1	
6	0	1	
7	---	---	No TMDLs
8	2	1	
9	0	2	
<b>Total</b>	<b>23</b>	<b>25</b>	

As a practical matter, it is unfair to impose stringent requirements for municipalities that are being permitted for the first time and/or being required to meet new resource intensive requirements such as the TMDLs for the first time.

Although the Proposed Amendment states that the Permittees may request a time schedule order (TSO) (a formal enforcement action) where the final TMDL attainment deadline has passed and additional time is necessary to comply with the numeric allocations, this pathway is not appropriate for these small MS4s that are being required for the first time to meet attainment dates that have already passed. Rather, the General Permit needs to be amended to allow small MS4s to receive the same amount of time via compliance schedules that was allowed to others when the TMDL was first adopted, or be amended to develop a watershed management plan that allows the MS4 to be considered to be in compliance with an outdated TMDL.

CASQA's other concerns include the following:

- Many of the TMDLs are older and need to be re-evaluated to ensure that the assumptions and data used to develop the targets, allocations, and/or implementation actions are still appropriate and reflective of current policies and science.
- A significant amount of time is necessary to develop, submit, and obtain approval of the TSO. During this timeframe the Permittee(s) will be out of compliance with the permit and susceptible to potential enforcement and/or third party lawsuits. Additionally, the development of this request is a substantial administrative burden for Phase II permittees.
- A TSO does not protect the Permittee from third party lawsuits (as was acknowledged by State Water Board staff during the Public Hearing on July 5).

The full incorporation of the TMDLs in Attachment G and the sheer amount of new text that has been added supports the fact that this is the first Phase II MS4 permit to implement the TMDLs. In addition, the amount of revisions to Attachment G seems to be inconsistent with the approach that was envisioned and communicated during the stakeholder process.<sup>14</sup> For example, for Region 3, it was communicated that there would be minor edits, not wholesale changes to the TMDL language.

<sup>14</sup> Slide # 15-27 – Regional Board Revisions: Overview; Region Specific Revisions  
[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/docs/phase\\_ii\\_municipal/tmdl\\_kickoff\\_meeting.pdf](http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/phase_ii_municipal/tmdl_kickoff_meeting.pdf)

### CASQA Recommendation

- State Water Board staff should work with the Regional Water Boards and affected stakeholders to determine if there is any regulatory flexibility for extension of final attainment dates consistent with any particular TMDL, or pollutant in a TMDL, prior to the adoption of Attachment G.
- Amend the General Permit to allow Phase II MS4s the ability to prepare a watershed management plan in lieu of immediate compliance with WLAs in TMDLs.
- Modify the language for Provisions E.15.b./ F.5.i.2 as follows:

*In some cases, Attachment G includes dates that fall outside the term of this Order. ~~Compliance~~ Attainment dates that have already passed are enforceable on the effective date of this Order. Permittees may request a time schedule order (TSO) or propose a compliance schedule where a final TMDL attainment ~~compliance~~ deadline is past. Attainment ~~Compliance~~ dates that exceed the term of this Order are included for reference, and become enforceable in the event that this Order is administratively extended.*

*Within six months of notification from the Permittee that a TSO or compliance schedule is needed, a Permittee shall submit a formal request. Between a Permittee's request and timely approval of the request, the Permittee will be deemed in compliance with Provisions C and D for the provisions that would be covered by that TSO or compliance schedule. A Permittee that is timely implementing a duly approved TSO or compliance schedule shall be deemed in compliance with Provisions C and D for the provisions covered by that TSO or compliance schedule.*

*A Permittee requiring additional time to meet applicable requirements set forth in Attachment G that implements a "new, revised, or newly interpreted" water quality objective, as that term is defined in the Compliance Schedule Policy, may propose a compliance schedule. The Permittee's proposed compliance schedule shall include a justification satisfying the following criteria:*

- Diligent efforts have been made to quantify pollutant levels in the discharge and the sources of the pollutant in the waste stream, and the results of those efforts;*
- Source control efforts are currently underway or completed, including compliance with any pollution prevention programs that have been established;*
- A proposed schedule for additional source control measures or waste treatment;*
- Data demonstrating current treatment facility performance to compare against existing permit requirements, as necessary to determine which is the more stringent requirement to apply if a schedule of compliance is granted.*



- e. The highest discharge quality that can reasonably be achieved until final compliance is attained;
- f. The proposed compliance schedule is as short as possible, given the type of facilities being constructed or programs being implemented, and industry experience with the time typically required to construct similar facilities or implement similar programs; and
- g. Additional information and analyses to be determined by the State Water Board or Regional Water Board on a case-by-case basis.

If the Permittee requires additional time beyond a TMDL's final attainment date to meet the applicable requirements that do not implement a "new, revised, or newly interpreted" water quality objective as defined in the Compliance Schedule Policy, the Permittee may request a TSO pursuant to California Water Code section 13300 for the State Water Board's or Regional Water Board's consideration. A request for a TSO shall include sufficient information to demonstrate that the Permittee needs time to implement actions, such as designing and constructing facilities or implementing new or significantly expanded programs and securing financing, if necessary, to meet the applicable requirements. Such information may include the following:

- a. Data demonstrating the current quality of the MS4 discharge(s) in terms of concentration and/or load of the target pollutant(s) to the receiving waters subject to the TMDL;
- b. A detailed description and chronology of structural controls and source control efforts, since the effective date of the TMDL, to reduce the pollutant load in the MS4 discharges to the receiving waters subject to the TMDL;
- c. Justification of the need for additional time to achieve the requirements;
- d. A detailed time schedule of specific actions the Permittee will take in order to achieve the requirements;
- e. A demonstration that the time schedule requested is as short as possible, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the effluent limitation(s); and
- f. If the requested time schedule exceeds one year, the proposed schedule shall include interim requirements and the date(s) for their achievement.

### III. ATTACHMENT G

**Comment 6: Consistent with Comment #1, each of the TMDLs within Attachment G should include language regarding the use of effluent limitations and/or permit conditions when referring to a requirement that must be met by the MS4s.**

Throughout Attachment G, the introductory "Purpose of Provisions" language was deleted from every TMDL. Although some of the language was generic and may not have been necessary,

CASQA recommends that each of the TMDLs include a similar type of introductory section that explains the use of the effluent limitations and/or permit conditions within the permit. Alternatively, this language could be included as an overall statement that is applicable to the entirety of Attachment G.

**CASQA Recommendation**

Include the following language within each one of the TMDLs that is implementing established WLAs:

*Effluent Limitations and/or permit conditions*

*This TMDL includes effluent limitations and/or permit conditions consistent with the assumptions and requirements of the applicable TMDL wasteload allocations (WLAs) established for discharges by the MS4s. The responsible Phase II Entities shall implement BMPs that will attain the applicable effluent limitations and/or permit conditions by the Final Compliance Deadline, approved compliance schedule, or in accordance with an approved Time Schedule Order, and maintain such attainment thereafter.*

**Comment 7: Each of the TMDLs within Attachment G should directly incorporate the WLAs established for discharges by the MS4s.**

Throughout Attachment G and without explanation in the Fact Sheet as to why they are no longer included, the TMDL WLAs were deleted and moved to the Fact Sheet. Each TMDL now includes a statement “The WLA specified/identified in the Fact Sheet of this Order is incorporated by reference.” The Fact Sheet states “Attachment G does not restate the final applicable wasteload allocations for each TMDL; however, those wasteload allocations are specific in the Fact Sheet and Attachment G incorporates them by reference as appropriate.”

While the Fact Sheet may also include the WLAs, the WLAs must be included within Attachment G of the NPDES permit in order to provide clarity as to the specific requirements. Otherwise, it is confusing for the MS4 Permittee and inconsistent with the Code of Federal Regulations to incorporate the WLAs by reference from the Fact Sheet. Fact sheets, which are required for major NPDES permits and general permits per 40 CFR 124.8, “set forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit.” The Fact Sheet is intended to support the basis for the permit requirements, not include additional requirements.

CASQA recommends using an approach similar to that used in the Los Angeles Region MS4 Permit<sup>15</sup>, the San Diego Region MS4 Permit<sup>16</sup>, and Central Valley Region-wide MS4 General Permit.<sup>17</sup>

**CASQA Recommendation**

Include the WLAs (and any associated footnotes, clarifications, etc.) established for discharges by the MS4s directly within Attachment G as effluent limitations and/or permit conditions.

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<sup>15</sup> Attachments K-R, Order No. R4-2012-0175 as amended by State Water Board Order WQ 2015-0075.

<sup>16</sup> Attachment E, Order No. R9-2013-0001 as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100

<sup>17</sup> Attachment G, Order No. R5-2016-0040

**Comment 8: The Proposed Amendment must include language that identifies the TMDL compliance pathways.**

Although the Proposed Amendment includes a similar structure for all of the TMDLs within Attachment G, which CASQA appreciates, the Small MS4 General Permit provisions and Attachment G are missing language that clearly identifies how compliance with TMDL-related provisions will be determined.

CASQA recommends using an approach similar to that used in the Los Angeles Region MS4 Permit<sup>18</sup>, the San Diego Region MS4 Permit<sup>19</sup>, and Central Valley Region-wide MS4 General Permit.<sup>20</sup> All of these MS4 permits included language that explicitly identifies how compliance is determined and what pathways may be utilized. This language provides clarity and flexibility for the MS4 Permittee and Regional Water Board staff.

CASQA recommends that each of the TMDLs include language that explicitly identifies the compliance pathways for the TMDL-related provisions. Alternatively, this language could be included as an overall statement that is applicable to the entirety of Attachment G.

In addition, in lieu of numeric effluent limitations, for some of the TMDLs the use of BMP-based effluent limitations and/or permit conditions to attain the WLAs is clearly contemplated.<sup>21</sup> In these cases, the language in Attachment G would be inconsistent with the assumptions and requirements of the WLAs if they, instead, incorporate or assume that numeric effluent limitations apply after the final attainment date. Given that there are 73 TMDLs to assess, CASQA recommends that State Water Board staff review the Basin Plan amendments to ensure that the permit language in the Proposed Amendment is consistent with the intent of each one of the TMDLs.

**CASQA Recommendation**

- Ensure that the incorporation of effluent limitations and/or permit conditions (numeric or narrative) in the Proposed Amendment is consistent with each one of the TMDLs.
- Include the following language within each one of the TMDLs or as a permit provision that is applicable to all of the TMDLs in Attachment G:

*Demonstration of Compliance with effluent limitations and/or permit conditions*

*Compliance with the effluent limitations and/or permit conditions in Provision C.2 of this Order associated with the applicable WLAs, on or after the final attainment deadline, may be demonstrated by any one of the following methods:*

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<sup>18</sup> Provision VI.E.2.d and e, Order No. R4-2012-0175 as amended by State Water Board Order WQ 2015-0075.

<sup>19</sup> Attachment E, Order No. R9-2013-0001 as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100

<sup>20</sup> Attachment G, Order No. R5-2016-0040

<sup>21</sup> Example – TMDL for Sacramento and San Joaquin Delta – Diazinon and Chlorpyrifos - Resolution No. R5-2006-0061, Attachment 1, Provision 8. Page 4. “The Executive Officer may require revisions to the management plan if compliance with applicable allocations is not attained or the management plan is not reasonably likely to attain compliance.”

## CASQA Comments on the Proposed Amendment to the Small MS4 General Permit

1. Implementation of the BMPs consistent with an approved watershed plan or similar implementation plan/schedule<sup>22</sup>; OR
2. Receiving water monitoring and/or other information, as authorized by the Regional Water Board Executive Officer, that reasonably demonstrates attainment of applicable effluent limitations in the receiving water (discharges from a Permittee's MS4 did not cause or contribute to an exceedance in the receiving water); OR
3. Attainment of the applicable effluent limitations within the discharge; OR
4. Representative outfall sample results for validated human DNA markers that demonstrate absence (below analytical detection limits or other established thresholds) of anthropogenic waste in MS4 discharges<sup>23</sup>; OR
5. Demonstration that exceedances of the receiving water limitations in the receiving water are due to loads from natural sources and pollutant loads from the MS4s are not causing or contributing to the exceedances<sup>24</sup>; OR
6. Demonstration that no discharges from the Permittee's MS4 to the applicable water body occurred during the relevant time period; OR
7. Demonstration that the pollutant load reductions for the MS4 discharges are greater than or equal to the effluent limitations; OR
8. Timely implementation of a Regional Water Board-approved compliance schedule for meeting the applicable WLAs.

In addition, the State Water Board and Regional Water Boards shall further consider other factors as described by the specific TMDLs<sup>25</sup>.

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<sup>22</sup> In addition to EWMPs, WMPs, WQIPs, etc., CASQA supports the use of an integrated plan as an alternative vehicle for compliance with TMDLs as reflected in the three TMDLs for the Santa Maria River applicable to the City of Santa Maria. An integrated plan is a comprehensive way in which municipalities can plan for attainment of all of their water quality requirements, including TMDLs, and offers a unified method for advancing water quality improvements. CASQA urges the State Board to continue to support the development and use of integrated plans in the appropriate circumstances and asks that the State Board provide guidance to the Regional Water Board regarding support for such plans when municipalities elect to develop them.

<sup>23</sup> This pathway is consistent with the following:

- Implementation language in the Central Coast region's recent bacteria TMDLs (example: Fecal Indicator Bacteria in the Santa Maria River Watershed; Resolution No. R3-2012-0002, Tracking and Evaluation, page 8 – "Responsible parties may also demonstrate that although water quality objectives are not being achieved in receiving waters, controllable sources of pathogens are not contributing to the exceedance";
- Compliance determination language contained in the bacteria TMDL provisions of the San Diego Region MS4 Permit (Attachment E); and
- Natural source exclusion language contained in the Los Angeles Region and San Diego Regions' Basin Plans; and
- The State Water Board's draft statewide bacteria objectives update.

<sup>24</sup> The permittees may lack legal jurisdiction over urban runoff into their systems from some state and federal facilities, utilities and special districts, Native American tribal lands, wastewater management agencies and other point and non-point source discharges otherwise permitted by the State Water Board. The State Water Board recognizes that the permittees should not be held responsible for such facilities and/or discharges. Similarly, certain activities that generate pollutants present in urban runoff may be beyond the ability of the permittees to eliminate. Examples of these include operation of internal combustion engines, atmospheric deposition, brake pad wear, tire wear and leaching of naturally occurring minerals from local geography.

**Comment 9: The TMDL language and requirements should be consistent with the adopted Basin Plan Amendment.**

CASQA is concerned that there are reinterpretations of language and/or discrepancies between the adopted TMDL Basin Plan Amendments (BPAs) and the language included within the Proposed Amendment. These reinterpretations and inconsistencies negate the Basin Planning processes that occurred to establish the TMDLs and contradict the intent for how the TMDLs should be incorporated into the Small MS4 General Permit. As a result, many of the Attachment G requirements are more extensive, more prescriptive, and lack much of the flexibility found in the adopted TMDLs.

After incorporation into a Basin Plan, TMDLs generally constitute the “program of implementation needed for achieving water quality objectives.”<sup>26</sup> Therefore, the MS4 Permit provisions (Attachment G) must be consistent with applicable Basin Plan(s). In fact, the presentation provided as a part of the stakeholder process recognized this as an issue that would be addressed within these revisions.<sup>27</sup>

Specific examples of inconsistencies are included within **Attachments A and B** and include the following TMDLs:

- TMDL for Fecal Indicator Bacteria in the Santa Maria River Watershed
  - Requires the identification of additional milestones, measurable goals, measures, and targets
  - Requires a quantitative analysis to demonstrate reasonable assurance
  - Requires the establishment of interim targets and interprets that they are a measure of compliance
- TMDL for Sediment in Morro Bay, Chorro Creek, Los Osos Creek, and the Morro Bay Estuary
- TMDL for Toxicity and Pesticides in the Santa Maria River Watershed
  - See the comments previously provided in **Attachment B**
- Napa River Sediment TMDL and Habitat Enhancement Plan
  - Includes a number of inconsistencies with the adopted Basin Plan language
- Napa River Pathogen TMDL
  - Includes specific measures pre-determined by Regional Water Board staff, not the MS4s.
  - Does not fully incorporate the collaborative monitoring effort

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<sup>25</sup> To support this portion of the recommended language – as an example, the TMDL for Sacramento and San Joaquin Delta – Diazinon and Chlorpyrifos states “In determining compliance with the wasteload allocations, the Regional Water Board will consider any data or information submitted by the discharger regarding diazinon and chlorpyrifos inputs from sources outside of the jurisdiction of the permitted discharger, including any diazinon and chlorpyrifos present in precipitation and other available relevant information, and any applicable provisions in the discharger’s NPDES permit requiring the discharger to reduce the discharge of pollutants to the maximum extent possible.”, Resolution No. R5-2006-0061, Attachment 1, #11, Page 4.

<sup>26</sup> Water Code § 13050(j).

<sup>27</sup> Slide # 5 – What kind of “necessary revisions” are we talking about?

[http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/docs/phase\\_ii\\_municipal/tmdl\\_kickoff\\_meeting.pdf](http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/phase_ii_municipal/tmdl_kickoff_meeting.pdf)

### **CASQA Recommendation**

Modify Attachment G TMDL language so that it is consistent with applicable Basin Plan(s) and other Phase I Permits that include the same TMDLs.

### **Comment 10: Attachment G should recognize that participation in Regional Monitoring Programs is supported by the Phase II Permit and incorporate commensurate language.**

The Small MS4 General Permit encourages participation in regional monitoring programs (Provision E.13):

“...Permittees are encouraged to participate in a regional monitoring program in order to cost-effectively combine resources and water quality information. Regional monitoring is the collaboration of local and regional monitoring programs that are designed to create a more comprehensive picture of water quality conditions within a watershed.... Regional monitoring programs shall be reviewed and approved by the Executive Officer of the applicable Regional Water Board.”

In addition, the TMDL monitoring requirements (E.13.b) allow the Permittees to:

“...comply with the monitoring requirements included in Attachment G and consult with the Regional Water Board within one year of the effective date of the permit to determine the monitoring study design and a monitoring implementation schedule.”

Therefore, the TMDL monitoring may be satisfied by participation in a regional monitoring program as long as there has been consultation with and approval by the Regional Water Board. This option is especially important for Phase II communities, which have limited resources and benefit from the ability to coordinate efforts regionally.

However, Attachment G does not, in most instances, recognize participation in a regional monitoring program as an option. Language should be added to Provision E.13.b to support participation.

In addition, if a Permittee participates in a regional monitoring program or other collective monitoring effort that is approved by a Regional Water Board Executive Officer, there needs to be flexibility in the types of assessments that are required. Examples are outlined below.

### **CASQA Recommendation**

- Modify Provision E.13.b. as follows – *Permittees shall implement any monitoring requirements assigned to them in Attachment G. With Regional Water Board Executive Officer approval, the Permittees may participate in a regional monitoring program or other collective monitoring effort in lieu of some or all of the individual monitoring requirements specified within Attachment G. The Regional Water Board Executive Officer may require additional monitoring, per Water Code 13383.*

Include the following language within the TMDLs to provide the flexibility necessary if participating in regional monitoring:

CASQA Comments on the Proposed Amendment to the Small MS4 General Permit

Region 5

- *TMDL for Lower San Joaquin River – Diazinon and Chlorpyrifos & TMDL for Sacramento and San Joaquin Delta – Diazinon and Chlorpyrifos & TMDL for Sacramento and Feather Rivers - Diazinon and Chlorpyrifos*
  - *1a. ...Conduct an assessment....OR*
  - *1b....With Central Valley.....*
- *TMDL for Lower San Joaquin River, San Joaquin River, Stockton DWSC – Organic Enrichment and Low Dissolved Oxygen*
  - *1. ...By [Hard date: one year from the effective date] ....OR*
  - *2....With Central Valley.....*
- *TMDL for the Delta – Methylmercury*
  - *1a. ...The Permittees shall begin monitoring....OR*
  - *1b....With Central Valley.....*
- *TMDL for Clear Lake – Nutrients*
  - *1. ...By [Hard date: 6 months from the effective date] ....OR*
  - *2....With Central Valley.....*

Thank you for your thoughtful consideration of these observations, comments, and recommendations. If you have any questions, please contact CASQA Executive Director Geoff Brosseau at (650) 365-8620.

Sincerely,



Jill Bicknell, Chair  
California Stormwater Quality Association

Attachment A: TMDL Basin Plan Amendment Language vs. Attachment G Text  
Attachment B: Letter Submitted to the State Water Resources Control Board - *Proposed Revisions to Stormwater Phase II General Permit, Attachment G (TMDL Requirements)*, CASQA, July 31, 2015

cc: Jonathan Bishop, State Water Board  
Karen Larsen, State Water Board  
Phillip Crader, State Water Board  
Diana Messina, State Water Board  
Gayleen Perreira, State Water Board  
Bill Hereth, State Water Board  
CASQA Board of Directors, Executive Program Committee, Policy & Permitting Subcommittee, Phase II Subcommittee

**Attachment A**  
**Comment #9 – Examples of Inconsistent Language**  
**TMDL Basin Plan Amendment Language Vs. Attachment G Text**  
**July 20, 2017**

- 1. TOTAL MAXIMUM DAILY LOADS FOR FECAL INDICATOR BACTERIA IN THE SANTA MARIA RIVER WATERSHED (INCLUDING ALAMO CREEK, BLOSSER CHANNEL, BRADLEY CHANNEL, BRADLEY CANYON CREEK, CUYAMA RIVER, LA BREA CREEK, LITTLE OSO FLACO CREEK, MAIN STREET CANAL, NIPOMO CREEK, ORCUTT CREEK, OSO FLACO CREEK, OSO FLACO LAKE, SANTA MARIA RIVER ESTUARY, AND SANTA MARIA RIVER).**

[http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/tmdl/docs/santa\\_maria/fib/index.shtml](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/santa_maria/fib/index.shtml)

**Basin Plan Amendment Text (March 15, 2012)**

[http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/tmdl/docs/santa\\_maria/fib/sm\\_fib\\_tmdl\\_att1\\_re\\_soln\\_amendmar2012\\_signed.pdf](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/santa_maria/fib/sm_fib_tmdl_att1_re_soln_amendmar2012_signed.pdf)

**Implementation (pages 5-6)**

STORM DRAIN DISCHARGES TO MS4s:

The Central Coast Water Board will require the MS4 entities to develop and submit for Executive Officer approval a Wasteload Allocation Attainment Program (WAAP). The WAAP shall be submitted within one year of approval of the TMDL by the Office of Administrative Law, or within one year of a stormwater permit renewal, whichever occurs first. The WAAP shall include descriptions of the actions that will be taken by the MS4 entity to attain the TMDL wasteload allocations, and specifically address:

1. Development of an implementation and assessment strategy;
2. Source identification and prioritization;
3. Best management practice identification, prioritization, implementation schedule, analysis, and effectiveness assessment;
4. Monitoring and reporting program development and implementation. Monitoring program goals shall include: 1) assessment of stormwater discharge and receiving water discharge quality 2) assessment of best management effectiveness, and 3) demonstration and progress towards achieving interim targets and wasteload allocations. Demonstration of achieving wasteload allocations, interim targets, and progress shall be accomplished quantitatively through a combination of the following:
  - a. Assessing discharge water quality.
  - b. Assessing receiving water quality.
  - c. Assessing mass load reduction.
  - d. Best management practices capable of achieving interim targets and wasteload allocations in combination with water quality monitoring for a balanced approach to determine effectiveness.
  - e. Any other effluent limitations and conditions which are consistent with the assumptions and requirements of the wasteload allocations.
5. Coordination with stakeholders; and
6. Other pertinent factors.

*Monitoring*

The City of Santa Maria, City of Guadalupe, County of San Luis Obispo (Nipomo), County of Santa Barbara (Orcutt) and the Santa Maria Fairpark are required to develop and submit monitoring programs as part of their WAAP. The goals of the monitoring programs are described in the requirements of the WAAP.

Staff encourages the City of Santa Maria, City of Guadalupe, County of San Luis Obispo (Nipomo), County of Santa Barbara (Orcutt) and the Santa Maria Fairpark to develop and submit creative and meaningful monitoring programs. Monitoring strategies can use a phased approach, for example, whereby outfall or receiving water monitoring is phased in after best management practices have been implemented and assessed for effectiveness. Pilot projects where best management practices are implemented in well-defined areas covering a fraction of the MS4 that facilitates accurate assessment of how well the best management practices control pollution sources, is acceptable, with the intent of



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successful practices then being implemented in other or larger parts of the MS4.

*Interim Targets*

The target date to achieve the TMDLs is 15 years from the date of TMDL approval by the Office of Administrative Law. Implementing parties must demonstrate progress towards achieving their allocations. Interim targets are a tool to gauge progress during the 15-year implementation phase. Implementing parties may develop and propose interim targets as part of their WAAP as demonstration of progress. If implementing parties choose not to develop and propose interim targets, the following interim targets are expected as demonstration of progress towards achieving wasteload allocations:

- 20% progress towards achieving wasteload allocations at the end of the fifth year following TMDL approval by OAL.
- 50% progress towards achieving wasteload allocations at the end of the 10th year following TMDL approval by OAL.
- 100% progress towards achieving wasteload allocations at the end of the 15th year following TMDL approval by OAL.

Interim targets are goals and not wasteload allocations.

**Attachment G (June 2017)**

**Requirements for Implementing the TMDL [Example New/Inconsistent Requirements are bolded in red -this would need to be discussed with Regional Board staff]**

By [Hard Date: four months from adoption], the Phase II entities identified in this TMDL section (hereafter referred to in this TMDL section as “the MS4”) shall each develop, submit, and begin implementation of a Wasteload Allocation Attainment Program, or an integrated plan, that identifies the actions they will take to attain their wasteload allocations. The Wasteload Allocation Attainment Programs or integrated plans shall include:

1. A detailed description of the strategy the MS4 will use to guide BMP selection, assessment, and implementation, to ensure that BMPs implemented will be effective at abating pollutant sources, reducing pollutant discharges, and achieving wasteload allocations according to the TMDL schedule.
2. Identification of sources of the impairment within the MS4’s jurisdiction, including specific information on various source locations and their magnitude within the jurisdiction.
3. Prioritization of sources within the MS4’s jurisdiction, based on suspected contribution to the impairment, ability to control the source, and other pertinent factors.
4. Identification of BMPs that will address the sources of impairing pollutants and reduce the discharge of impairing pollutants.
5. Prioritization of BMPs, based on suspected effectiveness at abating sources and reducing impairing pollutant discharges, as well as other pertinent factors.
6. Identification of BMPs the MS4 will implement, including a detailed implementation schedule. **For each BMP, identify milestones the MS4 will use for tracking implementation, measurable goals the MS4 will use to assess implementation efforts, and measures and targets the MS4 will use to assess effectiveness.** MS4s shall include expected BMP implementation for future implementation years, with the understanding that future BMP implementation plans may change as new information is obtained.
7. **A quantifiable numeric analysis that uses published BMP pollutant removal estimates, performance estimates, modeling, best professional judgment, and/or other available tools to demonstrate that the BMP selected for implementation will likely achieve the MS4’s wasteload allocation by the schedule**

**Attachment A**  
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**identified in the TMDL. This analysis will most likely incorporate modeling efforts. The MS4 shall conduct repeat numeric analyses as the BMP implementation plans evolve and information on BMP effectiveness is generated.** Once the MS4 has water quality data from its monitoring program, the MS4 shall incorporate water quality data into the numeric analyses to validate BMP implementation plans.

8. A detailed description, including a schedule, of a monitoring program the MS4 will implement to assess discharge and receiving water quality, BMP effectiveness, and progress towards any interim targets and ultimate attainment of the MS4s' wasteload allocations. The monitoring program shall be designed to validate BMP implementation efforts and quantitatively demonstrate attainment of interim targets and wasteload allocations.
9. **The MS4 shall establish interim targets (and dates when stormwater discharge conditions will be evaluated) that are equally spaced in time over the TMDL compliance schedule and represent measurable, continually decreasing MS4 discharge concentrations or other appropriate interim measures of pollution reduction and progress towards the wasteload allocation. At least one interim target and date must occur during the first five-year period or by December 31, 2021, whichever is sooner. The MS4 shall achieve its interim targets by the date it specifies in the Wasteload Allocation Attainment Program.** If the MS4 does not specify interim targets as described above in its Wasteload Allocation Attainment Program, the interim targets identified in the TMDL apply. If the MS4 does not achieve any interim target by the date specified, the MS4 shall develop and implement more effective BMPs **that it can quantitatively demonstrate will achieve the next interim target.**
10. A detailed description of how the MS4 will assess BMP and program effectiveness. The description shall incorporate the assessment methods described in the CASQA Municipal Storm Water Program Effectiveness Assessment Guide.
11. A detailed description of how the MS4 proposes to assess its **compliance with interim targets** and the final wasteload allocation.
12. A detailed description of how the MS4 will modify the program to improve upon BMPs determined to be ineffective during the effectiveness assessment.
13. A detailed description of information the MS4 will include in annual reports to demonstrate adequate progress towards attainment of wasteload allocations according to the TMDL schedule.
14. A detailed description of how the MS4 will collaborate with other agencies, stakeholders, and the public to develop and implement the Wasteload Allocation Attainment Program or integrated plan.
15. Any other items identified by Integrated Report fact sheets, TMDL Project Reports, TMDL Resolutions, or that are currently being implemented by the MS4 to control its contribution to the impairment, including public education and participation items identified above.

The wasteload allocations identified in the Fact Sheet of this Order are incorporated by reference. The wasteload allocations shall be achieved February 21, 2028.

**Attachment A**  
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2. TOTAL MAXIMUM DAILY LOADS FOR TOXICITY AND PESTICIDES IN THE SANTA MARIA WATERSHED INCLUDING BLOSSER CHANNEL, BRADLEY CANYON CREEK, BRADLEY CHANNEL, GREENE VALLEY CREEK, LITTLE OSO FLACO CREEK, MAIN STREET CANAL, ORCUTT CREEK, OSO FLACO CREEK, OSO FLACO LAKE, AND SANTA MARIA RIVER.  
[http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/tmdl/docs/santa\\_maria/pesticide/index.shtml](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/santa_maria/pesticide/index.shtml)

**(Also See Attachment B)**

**Basin Plan Amendment Text (January 30, 2014)**

[http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/tmdl/docs/santa\\_maria/pesticide/1smof\\_pest\\_tmdl\\_att1\\_resoln\\_bpa\\_apprvd.pdf.pdf](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/santa_maria/pesticide/1smof_pest_tmdl_att1_resoln_bpa_apprvd.pdf.pdf)

**Implementation (pages 19-20)**

STORM DRAIN DISCHARGES FROM MS4s:

The Central Coast Water Board will require municipal separate storm sewer systems (MS4) entities to develop, submit, and implement a Wasteload Allocation Attainment Program (WAAP). WAAP development, submittal and implementation will be required in the Phase II municipal stormwater permit. The WAAP will be required to include descriptions of the actions that will be taken by the MS4 entity to attain the TMDL waste load allocations, and specifically address:

1. Development of an implementation and assessment strategy.
2. Source identification and prioritization.
3. Best management practice identification, prioritization, implementation scheduling, analysis, and effectiveness assessment.
4. Monitoring and reporting. Monitoring program goals will be required to include:
  - a. assessment of stormwater discharge and/or receiving water quality,
  - b. assessment of best management practice effectiveness, and
  - c. demonstration of progress towards achieving interim goals and waste load allocations.
5. Coordination with stakeholders.
6. Other pertinent factors.

The WAAP will be allowed to include participation in statewide efforts, by organizations such as California Stormwater Quality Association (CASQA), that coordinate with DPR and other organizations taking actions to protect water quality from the use of pesticides in the urban environment.

*Monitoring*

MS4 entities with operations and storm water conveyance systems in the TMDL project areas will be required to develop and submit monitoring programs as part of their WAAP. The goals of the monitoring programs are described in the requirements of the WAAP.

The MS4s should develop and submit creative and meaningful monitoring programs. Monitoring strategies may be able to use a phased approach, for example, whereby outfall or receiving water monitoring is phased-in after best management practices have been implemented and assessed for effectiveness. Pilot projects where best management practices are implemented in well-defined areas covering a fraction of the MS4 that facilitate accurate assessment of how well the best management practices control pollution sources may be acceptable, with the intent of successful practices then being implemented in other or larger parts of the MS4 jurisdiction.

**Attachment A**  
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*Determination of Compliance with Waste Load Allocations*

Waste load allocations will be achieved through implementation of management practices and strategies to reduce pesticide loading, and wasteload allocation attainment will be demonstrated through water quality monitoring. Implementation can be conducted by MS4s specifically and/or through statewide programs addressing urban pesticide water pollution.

To allow for flexibility, Water Board staff will assess compliance with waste load allocations using one or a combination of the following:

- A. Attaining the waste load allocations in the receiving water.
- B. Demonstrating compliance by measuring pesticide concentrations and toxicity in stormwater outfalls.
- C. Implementation and assessment of pollutant loading reduction projects (BMPs) capable of achieving interim and final waste load allocations identified in this TMDL in combination with water quality monitoring for a balanced approach to determining program effectiveness.
- D. Any other effluent limitations and conditions that are consistent with the assumptions and requirements of the waste load allocations.

**Attachment G (June 2017)**

**Requirements for Implementing the TMDL [Example New/Inconsistent Requirements are bolded in red -this would need to be discussed with Regional Board staff]**

By [Hard Date: four months from adoption], the Phase II entities identified in this TMDL section (hereafter referred to in this TMDL section as “the MS4”) shall each develop, submit, and begin implementation of a Wasteload Allocation Attainment Program, or an integrated plan, that identifies the actions they will take to attain their wasteload allocations. The Wasteload Allocation Attainment Programs or integrated plans shall include:

1. A detailed description of the strategy the MS4 will use to guide BMP selection, assessment, and implementation, to ensure that BMPs implemented will be effective at abating pollutant sources, reducing pollutant discharges, and achieving wasteload allocations according to the TMDL schedule.
2. Identification of sources of the impairment within the MS4’s jurisdiction, including specific information on various source locations and their magnitude within the jurisdiction.
3. Prioritization of sources within the MS4’s jurisdiction, based on suspected contribution to the impairment, ability to control the source, and other pertinent factors.
4. Identification of BMPs that will address the sources of impairing pollutants and reduce the discharge of impairing pollutants.
5. Prioritization of BMPs, based on suspected effectiveness at abating sources and reducing impairing pollutant discharges, as well as other pertinent factors.
6. Identification of BMPs the MS4 will implement, including a detailed implementation schedule. **For each BMP, identify milestones the MS4 will use for tracking implementation, measurable goals the MS4 will use to assess implementation efforts, and measures and targets the MS4 will use to assess effectiveness.** MS4s shall include expected BMP implementation for future implementation years, with the understanding that future BMP implementation plans may change as new information is obtained.
7. **A quantifiable numeric analysis that uses published BMP pollutant removal estimates, performance estimates, modeling, best professional judgment, and/or other available tools to demonstrate that the BMP selected for implementation will likely achieve the MS4’s wasteload allocation by the schedule identified in the TMDL. This analysis may incorporate modeling efforts. The MS4 shall conduct repeat numeric analyses as the BMP implementation plans evolve and information on BMP effectiveness is**

**Attachment A**  
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**generated.** Once the MS4 has water quality data from its monitoring program, the MS4 shall incorporate water quality data into the numeric analyses to validate BMP implementation plans.

8. A detailed description, including a schedule, of a monitoring program the MS4 will implement to assess discharge and receiving water quality, BMP effectiveness, and progress towards any interim targets and ultimate attainment of the MS4s' wasteload allocations. The monitoring program shall be designed to validate BMP implementation efforts and quantitatively demonstrate attainment of interim and final wasteload allocations. The Central Coast Water Board may approve participation in statewide or regional monitoring programs as meeting all, or a portion of monitoring requirements.
9. A detailed description of how the MS4 will assess BMP and program effectiveness. The description shall incorporate the assessment methods described in the CASQA Municipal Storm Water Program Effectiveness Assessment Guide.
10. A detailed description of how the MS4 proposes to assess its **compliance with interim targets and the final wasteload allocation.**
11. A detailed description of how the MS4 will modify the program to improve upon BMPs determined to be ineffective during the effectiveness assessment.
12. A detailed description of information the MS4 will include in annual reports to demonstrate adequate progress towards attainment of wasteload allocations according to the TMDL schedule.
13. A detailed description of how the MS4 will collaborate with other agencies, stakeholders, and the public to develop and implement the Wasteload Allocation Attainment Program or integrated plan.
14. Any other items identified by Integrated Report fact sheets, TMDL Project Reports, TMDL Resolutions, or that are currently being implemented by the MS4 to control its contribution to the impairment, including public education and participation items identified above.

Waste load allocations will be achieved through implementation of management practices and strategies to reduce pesticide loading, and wasteload allocation attainment will be demonstrated through water quality monitoring. Implementation can be conducted by MS4s specifically and/or through statewide programs addressing urban pesticide water pollution. The Wasteload Allocation Attainment Program may include participation in statewide efforts, by organizations such as California Stormwater Quality Association (CASQA), that coordinate with Department of Pesticide Regulation and other organizations taking actions to protect water quality from the use of pesticides in the urban environment.

The wasteload allocations identified in the Fact Sheet of this Order are incorporated by reference. The target date to achieve the TMDLs for pyrethroids is November 1, 2029. This estimate is based on the widespread availability of pyrethroids, including consumer usage, and current limited regulatory oversight. The target date to achieve the TMDLs for organochlorine pesticides (DDT, DDD, DDE, chlordane, eldrin, toxaphene, dieldrin) is November 1, 2044.

**Attachment A**  
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**3. MORRO BAY TOTAL MAXIMUM DAILY LOAD AND IMPLEMENTATION PLAN FOR SEDIMENT INCLUDING CHORRO CREEK, LOS OSOS CREEK AND THE MORRO BAY ESTUARY**

[http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/tmdl/docs/morro/sediment/index.shtml](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/morro/sediment/index.shtml)

**Basin Plan Amendment Text (May 16, 2003)**

[http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/tmdl/docs/morro/sediment/1morrobay\\_sed\\_tmdl\\_resoln2002-0051.pdf](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/morro/sediment/1morrobay_sed_tmdl_resoln2002-0051.pdf)

**Implementation (page 8)**

The sediment load to Morro Bay, Los Osos Creek and Chorro Creek derives from nonpoint sources (NPS) and point sources. As such, implementation will rely on the State's Plan for NPS pollution control (CWC § 13369) and continued implementation of existing regulatory controls as appropriate for point sources, including storm water pursuant to NPDES surface water discharge regulations and Waste Discharge Requirements (Porter Cologne).

At this time, implementation emphasizes the activities of the Morro Bay National Estuary Program, Coastal San Luis Resources Conservation District, and other public and private groups that are not currently identified as dischargers responsible for sediment loading, to implement self-determined activities: (see Table: Trackable Implementation Actions). Other actions, currently required because of another program, will be evaluated to make sure progress is taking place: (see Table: Trackable Implementation Actions identifying Responsible Dischargers). Regional Board Staff will meet annually with the implementing parties identified in the list of Trackable Implementation Actions to provide technical assistance and to evaluate and track progress (see Implementation Schedule for details). If at the end of year three implementing parties fail to complete these self-determined activities or resulting management practices fail to reduce sediment loads, then Regional Board staff may conduct inspections and investigations to identify individual responsible discharges (e.g., landowners or public agencies). Regional Board staff may rely on Section 13267 of the California Water Code or other appropriate authorities for investigation and identification of individual responsible dischargers. Regional Board staff will also rely on Section 13267 of the California Water Code to require reporting and/or monitoring to determine the level of implementation of identified activities to reduce erosion and sediment. If necessary, the Regional Board may rely on enforcement authority, pursuant to California Water Code Section 13304, to require dischargers to clean-up and abate sediment discharges and/or prevent the threat of discharges on a case-by-case basis. Additionally, Implementation Actions (in the Table of Implementation Actions) may be required as conditions of compliance with storm water permits and Waste Discharge Requirements.

If at the end of the third year, self-determined actions have not been completed, staff will develop a Regulatory approach (rather than a self-determined approach) and present a revised implementation plan to the Regional Board as a Basin Plan Amendment.

Direct measurement of sediment loading is not proposed for this TMDL. Numeric Targets, which characterize the effect of loading are to be measured in lieu of loading. The 50-year schedule for achieving the TMDL acknowledges that implementation actions taken in the near term are expected to take years to produce a response as measured through Numeric Target monitoring. Allocations will achieve the targets because over the long term, these allocated sediment loads are expected to result in changes in sediment distributions in die channel and the estuary that meet water quality objectives.

Numeric targets and other parameters will be monitored to ensure that numeric targets are met. The Regional Board will rely on existing or planned efforts for this monitoring (e.g.. Morro Bay National Estuary Program, Central Coast



**Attachment A**  
**Comment #9 – Examples of Inconsistent Language**  
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Ambient Monitoring Program).

**Attachment G (June 2017)**

**Requirements for Implementing the TMDL [In general – this language is much more specific than the Basin Plan Amendment - this would need to be discussed with Regional Board staff]**

Effective immediately, The County of San Luis Obispo shall implement practices that will assure their allocation is achieved, including identifying and implementing specific road sediment control measures. Within one year of adoption of this Order, the County of San Luis Obispo (hereafter referred to in this TMDL section as “the MS4”) shall develop, submit, and begin implementation of implement a Wasteload Allocation Attainment Program that identifies the actions it will take to attain its wasteload allocation. The Wasteload Allocation Attainment Program shall include:

1. A detailed description of the strategy the MS4 will use to guide BMP selection, assessment, and implementation, to ensure that BMPs implemented will be effective at abating pollutant sources, reducing pollutant discharges, and achieving wasteload allocations according to the TMDL schedule.
2. Identification of sources of the impairment within the MS4’s jurisdiction, including specific information on various source locations and their magnitude within the jurisdiction.
3. Prioritization of sources within the MS4’s jurisdiction, based on suspected contribution to the impairment, ability to control the source, and other pertinent factors.
4. Identification of BMPs that will address the sources of impairing pollutants and reduce the discharge of impairing pollutants.
5. Prioritization of BMPs, based on suspected effectiveness at abating sources and reducing impairing pollutant discharges, as well as other pertinent factors.
6. Identification of BMPs the MS4 will implement, including a detailed implementation schedule. For each BMP, identify milestones the MS4 will use for tracking implementation, measurable goals the MS4 will use to assess implementation efforts, and measures and targets the MS4 will use to assess effectiveness. MS4s shall include expected BMP implementation for future implementation years, with the understanding that future BMP implementation plans may change as new information is obtained.
7. A quantifiable numeric analysis that uses published BMP pollutant removal estimates, performance estimates, modeling, best professional judgment, and/or other available tools to demonstrate that the BMP selected for implementation will likely achieve the MS4’s wasteload allocation by the schedule identified in the TMDL. A quantifiable numeric analysis demonstrating the BMPs selected for implementation will likely achieve, based on modeling, published BMP pollutant removal performance estimates, best professional judgment, and/or other available tools, the MS4’s wasteload allocation according to the schedule identified in the TMDL. This analysis will most likely incorporate modeling efforts. The MS4 shall conduct repeat numeric analyses as the BMP implementation plans evolve and information on BMP effectiveness is generated. Once the MS4 has water quality data from its monitoring program, the MS4 shall incorporate water quality data into the numeric analyses to validate BMP implementation plans.
8. A detailed description, including a schedule, of a monitoring program the MS4 will implement to assess discharge and receiving water quality, BMP effectiveness, and progress towards any interim targets and ultimate attainment of the MS4s’ wasteload allocation. The monitoring program shall be designed to validate BMP implementation efforts and quantitatively demonstrate attainment of interim targets and wasteload allocations.
9. If the approved TMDL does not explicitly include interim targets, the MS4 shall establish interim targets (and dates when stormwater discharge conditions will be evaluated) that are equally spaced in time over the TMDL compliance schedule and represent measurable, continually decreasing MS4 discharge concentrations or other appropriate interim measures of pollution reduction and progress towards the wasteload allocation. At

**Attachment A**  
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least one interim target and date must occur during the first five-year period or by December 31, 2021, whichever is sooner. At least one interim target and date must occur during the five-year term of this Order. The MS4 shall achieve its interim targets by the date it specifies in the Wasteload Allocation Attainment Program. If the MS4 does not achieve its interim target by the date specified, the MS4 shall develop and implement more effective BMPs that it can quantitatively demonstrate will achieve the next interim target.

10. A detailed description of how the MS4 will assess BMP and program effectiveness. The description shall incorporate the assessment methods described in the CASQA Municipal Storm water Program Effectiveness Assessment Guide.
11. A detailed description of how the MS4 will modify the program to improve upon BMPs determined to be ineffective during the effectiveness assessment.
12. A detailed description of information the MS4 will include in annual reports to demonstrate adequate progress towards attainment of wasteload allocations according to the TMDL schedule.
13. A detailed description of how the MS4 will collaborate with other agencies, stakeholders, and the public to develop and implement the Wasteload Allocation Attainment Program.
14. Any other items identified by Integrated Report fact sheets, TMDL Project Reports, TMDL Resolutions, or that are currently being implemented by the MS4 to control its contribution to the impairment.



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**4. NAPA RIVER SEDIMENT TOTAL MAXIMUM DAILY LOAD AND HABITAT ENHANCEMENT PLAN**

[http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/TMDLs/napariversedimenttmdl.shtml](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/napariversedimenttmdl.shtml)

**Basin Plan Amendment Text (September 9, 2009)**

[http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/TMDLs/napasediment/NapaSedBPA090909.pdf](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/napasediment/NapaSedBPA090909.pdf)

**Implementation (pages 7-17)**

The actions described below, including the processes by which sediment and runoff control practices are proposed and implemented, are necessary to achieve TMDL targets and allocations and habitat enhancement goals. In addition, actions specified in this plan are expected to enhance steelhead run size and facilitate establishment of a self-sustaining Chinook salmon run.

The only point sources of sediment identified in Tables 2 and 3b are those associated with urban stormwater runoff (e.g., municipal stormwater, runoff from State highways, and industrial and construction discharges) and wastewater treatment plants, which are regulated by NPDES permits. Table 4.0 shows implementation measures required of these sources.

**Table 4.0 TMDL Implementation Measures for Sediment Discharges Associated with Urban Stormwater Runoff and Wastewater Discharges**

Source Category	Actions	Implementing Parties
Urban stormwater runoff and wastewater discharges	Comply with applicable NPDES permits	Napa County, City of Napa, Town of Yountville, City of St. Helena, City of Calistoga, City of American Canyon, State of California, Department of Transportation, California Veterans' Home, owners or operators of industrial facilities and construction projects > 1 acre

Problems associated with channel incision, related rapid bank erosion, and loss of essential habitat features, reflect and integrate multiple historical and ongoing disturbances, some of which are local and direct, and others that are indirect and distal. Effectively addressing these issues will require cooperative and coordinated actions by multiple landowners, working with public agencies, over significant distances along the river. The most effective means of controlling channel incision and reducing related fine sediment delivery to the river is a channel restoration program that re-establishes width-to-depth ratios and sinuosity values conducive to formation of alternate bars and a modest flood plain. The Water Board will work with stakeholders along the Napa River, through local stewardship groups, to implement such channel restoration/habitat enhancement projects. Tables 5.1 to 5.4 (Recommended Measures to Protect or Enhance Habitat), specify actions to address adverse impacts of channel incision on salmon habitat quantity and quality, and to accomplish habitat enhancement goals for flow, temperature, and fish passage for steelhead and salmon.

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**Table 4.4 Required TMDL Implementation Measures for Sediment Discharges associated with Parks and Open Space, and/or Municipal Public Works<sup>1</sup>**

Landowner Type	Performance Standards	Actions	Implementing Parties	Completion Dates
<b>PARKS AND OPEN SPACE AND PUBLIC WORKS</b>	<p>Roads: Road-related sediment delivery to channels <math>\leq</math> 500 cubic yards per mile per 20-year period<sup>2</sup>; and</p> <p>Gullies and/or shallow landslides: Accelerate natural recovery and prevent human-caused increases in sediment delivery from unstable areas.</p>	<p>Submit a Report of Waste Discharge<sup>2</sup> to Water Board that provides, at a minimum, the following: description of the road network and/or segments; identification of erosion and sediment control measures to achieve performance standard(s) specified in this table; and a schedule for implementation of identified control measures. For paved roads, erosion and sediment control actions could primarily focus on road crossings to meet the performance standard.</p> <p>Adopt and implement best management practices for maintenance of unimproved (dirt/gravel) roads, and conduct a survey of stream-crossings associated with paved public roadways, and develop a prioritized implementation plan for repair and/or replacement of high priority crossings/culverts to reduce road-related erosion and protect stream-riparian habitat conditions.</p>	<p>Napa County Stormwater Management Program</p> <p>State of California, Department of Parks and Recreation</p> <p>State of California, Department of Transportation</p>	October 2014
		<p>Comply with applicable Waste Discharge Requirements (WDRs) or waiver of WDRs.</p>	Landowners	As specified in applicable WDRs or waiver of WDRs, and/or the SWMP
		<p>Report progress on development and implementation of best management practices to control road-related erosion.<sup>3</sup></p>	Landowners	As specified in applicable WDRs or waiver of WDRs, and/or SWMP

<sup>1</sup>To achieve TMDL allocations and consistent with the *Policy for Implementation and Enforcement of the Nonpoint Source Pollution Control Program* (State Board, 2004).

<sup>2</sup>Or compliance with applicable conditional waivers of WDRs that may be adopted by the Water Board.

<sup>3</sup>These reports may be prepared individually or jointly or through a recognized third party.

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**Table 5.1 Recommended Actions to Reduce Sediment Load and Enhance Habitat Complexity in Napa River and its Tributaries**

Stressor	Management Objective(s)	Actions	Implementing Parties	Completion Dates and Notes
Habitat degradation as a result of mainstem Napa River and lower reaches of its larger tributaries incising.	Reduce rates of sediment delivery (associated with incision and accelerated bank erosion) to channels, by 50 percent.  Enhance channel habitat as needed to support self-sustaining run of Chinook salmon and enhance the overall health of the native fish community.	1.1. Develop and implement plans to enhance stream-riparian habitat conditions, and reduce fine sediment supply in mainstem Napa River and lower tributary reaches.	Landowners and/or designated agents, and reach-based stewardships	Comply with conditions of Clean Water Act Section 401 certifications (implementation of Rutherford Project completed by fall 2017, other projects by 2027)
Habitat degradation as a result of reduction in large woody debris in stream channels.	Enhance quality of rearing habitat for juvenile salmonids.	1.2. Develop and implement performance standards for protection of ecologically significant large woody debris in stream channels.	Napa County Stormwater Management Program and State Department of Parks and Recreation	Performance standards will be developed by Fall 2010, and implemented by Fall 2011

**Table 5.2 Recommended actions to protect or enhance baseflow**

Stressor	Management Objective	Action(s)	Implementing Parties	Schedule/Notes
Low flows during dry season	Maintain suitable conditions for juvenile rearing, and smolt migration to Napa River estuary.	2.1. Local, State, and federal agencies to participate in a cooperative partnership to develop a plan for joint resolution of water supply reliability and fisheries conservation concerns.	Local municipalities working with Water Board, State Water Board (Division of Water Rights), National Oceanic and Atmospheric Administration Fisheries Service (NOAA), and California Department Fish and Game (DFG)	Adopt plan by Fall 2012
		2.2. Install and maintain dial-up water-level gage programs and implement public education program in 10 key tributaries for steelhead.	Local public agencies	Accomplish by Spring 2012
		2.3. Develop water-level guidelines to support juvenile salmonid rearing and migration.	Local public agencies	Adopt guidelines by Spring 2012
		2.4. Conduct water rights compliance survey to protect fish and water rights.	State Water Board(Division of Water Rights)	Schedule per consultation with National Oceanic and Atmospheric Administration Fisheries Service (NOAA), California Department Fish and Game (DFG), and Water Board

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**Table 5.3 Recommended Actions to Restore to Fish Passage**

Stressor	Management Objective(s)	Action(s)	Implementing Parties	Schedule/Notes
Structures in channels that block or impede fish migration (note: flow-related barriers are addressed above)	No significant structural impediments to salmonid migration in mainstem or in 10 key tributaries for steelhead (including but not limited to the following): Dry, Milliken, Redwood, Sulphur, and York.  Designation of remaining tributaries will be determined in consultation with Napa County RCD, CDFG, NOAA Fisheries, and USEPA.	3.1. Enhance conditions for adult and juvenile salmon and juvenile steelhead passage at Zinfandel Lane.	Local public agencies and landowners	Project completed by Fall 2012
		3.2. Restore passage for adult and juvenile steelhead to-and-from York Creek upstream of Upper Dam.	City of St. Helena	Schedule to be determined based on consultation with NOAA, and DFG
		3.3. Identify and develop a plan-to remedy all significant structural impediments to salmonid migration in ten key steelhead tributaries (including York).	Local public agencies and landowners	Complete comprehensive fish passage surveys in 10 key tributaries by Fall 2012. Schedule for barrier remediation to be determined based on consultation with NOAA and DFG

**Table 5.4 Recommended Actions to Protect and/or Enhance Stream Temperature**

Stressor	Management Objective(s)	Action(s)	Implementing Parties	Schedule/Notes
Stressful summer water temperatures in tributaries	Protect and/or enhance baseflow.	4.1. As described in Table 5.2	As indicated in Table 5.2	As described in Table 5.2
	Enhance amount of ecologically significant large woody debris in channels.	4.2. As described in Table 5.1	As indicated in Table 5.1	As described in Table 5.1
	Enhance potential shade along riparian corridors.	4.3. Implement management actions to accelerate recovery of native riparian tree species.	As indicated in Tables 4.1 to 4.4.	As described in Tables 4.1 to 4.4.

**Attachment G (June 2017)**

**Requirements for Implementing the TMDL [In general – this language is inconsistent with the Basin Plan Amendment - this would need to be discussed with Regional Board staff]**

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**A. Implementation of Sediment Wasteload Allocations (WLAs)**

i. To attain the wasteload allocation, municipalities identified in this TMDL section shall comply with the construction and maintenance storm water requirements, sections E.10 and E.11, in this Order.

**B. Implementation of Sediment Load Allocations (LAs) [This needs to be consistent with the language in Table 4.4]**

i. To attain the shared load allocation of 27,000 metric tons/year, **municipalities identified in this TMDL section [this should only be Napa County]** shall implement ~~measures opportunities~~ to ~~retrofit-repair~~ and/or reconstruct road crossings to minimize road-related sediment delivery ( $\leq 500$  cubic yards/mile per 20-year period) to stream channels. Specifically, to reduce road-related erosion and protect stream-riparian habitat conditions, ~~the municipalities [this should only be Napa County]~~ shall by ~~September 30, 2017~~ **October 31, 2014 [BPA specifies this date]**:

- ~~Continue to implement best management practices for maintenance of unimproved (dirt/gravel) roads [There are no publicly-owned unimproved/dirt/gravel roads in Napa County].~~
- Finalize a survey of stream-crossings associated with paved public roadways, and
- By [Hard Date: one year from adoption date], submit a schedule for the ~~retrofit-repair~~ and/or replacement of high priority crossings/culverts to the Regional Water Board Executive Officer for approval.

For paved roads, erosion and sediment control actions ~~could shall~~ primarily focus on road crossings to meet the ~~performance standard sediment load allocation. [Table 4.4]~~

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**5. NAPA RIVER PATHOGEN TOTAL MAXIMUM DAILY LOAD**

[http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/TMDLs/napariverpathogentmdl.shtml](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/napariverpathogentmdl.shtml)

**Basin Plan Amendment Text (November 13, 2006)**

[http://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/TMDLs/napapathogens/Napapathogensfinalbpa.pdf](http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/napapathogens/Napapathogensfinalbpa.pdf)

**Implementation (pages 5-11)**

It is important to note that the numeric targets and load allocations in the TMDL are not directly enforceable. To demonstrate attainment of applicable allocations, responsible parties must demonstrate that they are in compliance with specified implementation measures and any applicable waste discharge requirements (WDRs) or waiver conditions.

<b>Table 7-e</b>			
<b>Trackable Implementation Measures for the Napa River Pathogen Total Maximum Daily Load</b>			
Source Category	Action	Implementing Party	Completion Dates
On-Site Sewage Disposal Systems (OSDS)	Submit to the Water Board Executive Officer for approval a plan and implementation schedule for evaluating OSDS performance and correcting deficiencies in OSDSs identified as potentially discharging to surface waters. Priority should be given to the Browns Valley Creek, Murphy Creek, and Salvador Channel subwatersheds	Napa County	January 2008
	Report progress on implementation of OSDS evaluation and repair program		January 2011 and biennially thereafter
	Comply with applicable County, Water Board, or State Water Board requirements	Septic system owners	As specified in applicable requirements
Municipal Runoff	Comply with approved stormwater management plans. Update/amend storm water management plans as needed to include specific measures to reduce discharge of human and animal wastes	Napa County, City of Napa, Town of Yountville, City of St. Helena, City of Calistoga, City of American Canyon	As specified in approved stormwater management plan and in applicable NPDES permit
	Report progress on implementation of human and animal waste runoff reduction measures		

Beginning in 2011 and approximately every five years thereafter, the Water Board will evaluate site-specific, subwatershed-specific, and watershed-wide compliance with the trackable implementation measures specified in Table 7-e. In evaluating compliance with the trackable implementation measures, the Water Board will consider levels of participation for each source category as well as for individual dischargers (as documented by Water Board staff or third parties).

In addition to the programmatic monitoring described above, Water Board staff, in collaboration with stakeholders, will conduct water quality monitoring to evaluate E. coli concentration trends in the Napa River and its tributaries. Five years after TMDL adoption, the Water Board will evaluate monitoring results and assess progress made toward attaining TMDL targets (Table 7-a) and load allocations (Table 7-c).

Approximately every five years, the Water Board will review the Napa River Pathogen TMDL and evaluate new and



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relevant information from monitoring, special studies, and the scientific literature.

**Attachment G (June 2017)**

**Requirements for Implementing the TMDL [In general – this language is inconsistent with the Basin Plan Amendment - this would need to be discussed with Regional Board staff]**

The Phase II entities identified in this TMDL section shall implement the following actions, effective immediately:

**[The Basin Plan Amendment does not include this specific information – the MS4s should be allowed the opportunity to identify the “specific measures to reduce discharge of human and animal waste”.]**

- i. Public Participation and Outreach. Educate the public regarding sources of fecal coliform and associated health risks of fecal coliform in surface waters. Educate the public regarding actions that individuals can take to reduce pathogen loading.**
- ii. Pet Waste Management. Implement enforceable means of reducing/eliminating fecal coliform loading from pet waste.**
- iii. Illicit Discharge Detection and Elimination. Implement strategies to detect and eliminate illicit discharges (whether mistaken or deliberate) of sewage to the Napa River.**
- iv. Pollution Prevention and Good Housekeeping. Implement strategies to reduce/eliminate fecal coliform loading from streets, parking lots, sidewalks, and other urban areas that potentially collect and discharge fecal coliform to the Napa River.**
- v. As indicated in the TMDL, participate in the Regional Water Board’s **led** stakeholder effort to conduct water quality monitoring at baseline monitoring sites.
- vi. As a part of iv, c**Conduct baseline water quality monitoring to evaluate *E.coli* concentration trends in the Napa River and its tributaries. Table 7-g in Chapter 7, Water Quality Attainment Strategies, presents locations and frequency for the required baseline water quality monitoring.
- vii. Report yearly, in the Annual Report, (on participation in the stakeholder group and progress made on implementation of human and animal runoff reduction measures.



## California Stormwater Quality Association®

*Dedicated to the Advancement of Stormwater Quality Management, Science and Regulation*

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July 31, 2015

Mr. Bill Hereth  
State Water Resources Control Board  
Division of Water Quality, Storm Water

Subject: Proposed Revisions to Stormwater Phase II General Permit, Attachment G (TMDL Requirements)

Dear Mr. Hereth:

On behalf of the California Stormwater Quality Association (CASQA), thank you for this opportunity to comment regarding the proposed revisions to Attachment G of the NPDES Phase II Stormwater General Permit (Water Quality Order No. 2013-0001-DWQ, NPDES General Permit CAS000004, regulating storm water discharges from Small MS4s). The Draft Amendment to the Phase II General Permit proposes to amend the existing permit to adjust the Total Maximum Daily Load (TMDL) implementation requirements contained in Attachment G.

Our principal concerns are that some of the draft TMDL requirements included in the proposed revisions to Attachment G are inconsistent with the TMDLs as adopted in the respective Basin Plan Amendments, and that some of the proposed requirements are technically and economically infeasible. For pesticide-impaired waters in particular, CASQA is concerned that inclusion of such requirements in Attachment G could set a precedent for pesticide-impaired waters that would be similarly unattainable in other urban areas of the state.

As an example of inconsistency between adopted TMDLs and the proposed revisions to Attachment G, CASQA is in particular concerned with the extensive requirements included in the draft amendment pertaining to the “Total Maximum Daily Loads for Toxicity and Pesticides in the Santa Maria River Watershed” (re: Resolution No. R3-2014-0009, Effective 10/29/2014; see pp. 54-58 in the proposed revised Attachment G). This TMDL is newly added to Attachment G in the proposed draft amendment, as the TMDL was adopted after promulgation of the original Phase II General Permit.

The TMDL requirements listed in the proposed revisions to Attachment G for the Santa Maria Watershed Pesticides/Toxicity TMDL – in particular the Wasteload Allocation Attainment Program (WAAP) requirements – do not conform well to and are inconsistent with the requirements of the Water Board-adopted TMDL as defined by Resolution No. R3-2014-0009. The proposed Attachment G requirements are more extensive, more prescriptive, and lack much of the flexibility found in the adopted TMDL. We have provided specific comments on the proposed/draft Attachment G requirements for that TMDL in Attachment 1 to this letter. For that TMDL, our primary concerns related to inconsistency between the adopted TMDL and the proposed Attachment G revisions are as follows:



- 1) The adopted TMDL contains language acknowledging the important roles of the California Department of Pesticide Regulation (DPR) in monitoring and mitigation of pesticide water quality impairments in urban areas; this language is missing from the draft proposed Attachment G. This pertains to issues of statewide importance relating to pesticide pollution control:
  - a. Pesticide loading reductions that may be achievable through local BMPs are generally believed to be less substantial than those that can be achieved through state and/or federal pesticide regulation<sup>1</sup>.
  - b. Monitoring being performed by DPR as part of DPR's Surface Water Protection Program<sup>2</sup>, in conjunction with statewide water quality assessments performed as part of the Surface Water Ambient Monitoring Program (SWAMP) and the Perennial Streams Assessment (PSA), should constitute the principal means for assessment of the status and causes of water quality impairments due to pesticides in urban areas.
- 2) The adopted TMDL contains language regarding flexibility in implementation, including options for participation in statewide efforts and tracking of development of the Central Valley Pyrethroids TMDL, which is lacking in the proposed Attachment G revisions.
- 3) The proposed Attachment G revisions include prescriptive monitoring, modeling and data analysis requirements that are not included in the adopted TMDL, and which are, we believe, technically and economically infeasible.

These issues have potentially far-reaching ramifications because pesticide-related water pollution has created a persistent regulatory burden for many of CASQA's municipal agency members. Hundreds of California water bodies are listed as impaired by pesticides under Section 303(d) of the Clean Water Act (CWA).<sup>3</sup> In 2013, CASQA compiled a report of statewide monitoring data for current-use pesticides, documenting the widespread presence of pesticides and pesticide-caused toxicity in both the waters and sediments of California's urban waterways.<sup>4</sup>

Because local agencies in California, as in most other states, lack the statutory authority to regulate pesticide use in urban areas, it is essential that state and federal agencies employ their

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<sup>1</sup> *e.g.*, for pyrethroids, estimates of reductions expected from DPR's Urban Surface Water Protection Regulations (see: [http://cdpr.ca.gov/docs/legbills/rulepkgs/11-004/text\\_final.pdf](http://cdpr.ca.gov/docs/legbills/rulepkgs/11-004/text_final.pdf)) are provided in Jorgenson *et al.*, 2013:

Jorgenson, Brant, Larry Brown, Erica Fleishman, Kate Macneale, Daniel Schlenk, Nat Scholz, Julann Spromberg, Inge Werner, Don Weston, Thomas M. Young, Minghua Zhang, and Qingfu Zhao. 2013. Predicted Transport Of Pyrethroid Insecticides From An Urban Landscape To Surface Water. *Environ Toxicol Chem.* 2013 Nov; 32(11): 2469–2477.

<sup>2</sup> CA Dept. of Pesticide Regulation (DPR) Surface Water Protection Program addresses both agricultural and nonagricultural sources of pesticide residues in surface waters. See: <http://cdpr.ca.gov/docs/emon/surfwtr/index.htm>

<sup>3</sup> The State's Final 2012 Integrated Report (CWA Section 303(d) List / 305(b) Report); Category 5, 2012 CALIFORNIA 303(d) LIST OF WATER QUALITY LIMITED SEGMENTS is available at:

[http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/2012state\\_ir\\_reports/category5\\_report.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/2012state_ir_reports/category5_report.shtml)

<sup>4</sup> Ruby, Armand (2013). Review of Pyrethroid, Fipronil and Toxicity Monitoring Data from California Urban Watersheds. Prepared for the California Stormwater Quality Association (CASQA). July 10. Available at: <https://www.casqa.org/LinkClick.aspx?fileticket=t%2btwBGMxunc%3d&tabid=194&mid=995>

pesticide regulatory processes to adequately assess and prevent urban water quality impacts from pesticide applications in urban areas. Once pesticides are present in urban runoff, it is technically and economically infeasible for municipal stormwater agencies to reduce pesticide levels sufficiently to meet CWA requirements in the receiving waters.

Because there are many pesticide-impaired waters in urban areas of the state, CASQA has significant concerns that requirements contained in the proposed revisions to Attachment G (such as the draft requirements for modeling in the Santa Maria Watershed Pesticides/Toxicity TMDL) that are inconsistent with the related, adopted TMDLs and are unattainable could be used as a precedent for other pesticide TMDLs affecting municipal stormwater agencies.

It is therefore important to make revisions to the Attachment G requirements for the Santa Maria Watershed Pesticides/Toxicity TMDL, as detailed in Attachment 1 to this letter, to restore consistency with the adopted TMDL, and take other steps as needed to prevent these requirements from being duplicated elsewhere within California. Fundamentally, this requires that the State Water Resources Control Board continue to work with the Regional Water Boards, DPR, CASQA, and stakeholders to develop and implement a coordinated, statewide approach to address pesticide pollution in urban surface waters.

CASQA appreciates the opportunity to provide comments during this informal comment period. Thank you for your consideration of our comments. If you have any questions, please contact Dave Tamayo, CASQA Pesticide Subcommittee Co-Chair, at (916) 874-8024 (tamayod@SacCounty.net); or CASQA Executive Director Geoff Brosseau at (650) 365-8620.

Sincerely,



Gerhardt Hubner, Chair, California Stormwater Quality Association

cc: Lucas Sharkey, State Water Resources Control Board  
Peter Meertens, Central Coast Regional Water Quality Control Board  
Dominic Roques, Central Coast Regional Water Quality Control Board  
Shad Springer, City of Santa Maria  
Shannon Sweeney, City of Santa Maria  
Ellen Pritchett, City of Santa Maria  
Andrew Carter, City of Guadalupe  
Cathleen Garnand, County of Santa Barbara  
Shawn Hagerty, Best Best & Krieger  
CASQA Board of Directors, Executive Program Committee, and Pesticides Subcommittee

**ATTACHMENT 1 - SPECIFIC COMMENTS**  
**Santa Maria Watershed Pesticides/Toxicity TMDL**

As an example to illustrate the main points made in the above comment letter, CASQA is in particular concerned with the requirements included in the draft amendment pertaining to the **“Total Maximum Daily Loads for Toxicity and Pesticides in the Santa Maria River Watershed”, Resolution No. R3-2014-0009**, Effective 10/29/2014 (pp. 54-58 in the proposed revised Attachment G). The following issues are related to nonconformance between the adopted Santa Maria Watershed Pesticides/Toxicity TMDL and the draft revisions to Attachment G.

**Proposed WAAP Requirements Do Not Reflect the Adopted TMDL**

The Wasteload Allocation Attainment Program (WAAP) requirements specified in the proposed Attachment G revisions reflect language in the Final Project Report (Jan. 30, 2014; Attachment 2 to the TMDL Staff Report) rather than the Water Board-adopted TMDL language.

*> CASQA respectfully requests that the WAAP requirements included in Attachment G for the Santa Maria Watershed Pesticides/Toxicity TMDL be modified to reflect the language and intent of the adopted TMDL.*

**Proposed Attachment G Revisions Do Not Reference DPR Responsibilities**

The adopted Santa Maria Watershed Pesticides/Toxicity TMDL (Resolution No. R3-2014-0009, Effective 10/29/2014) recognizes the importance of the statewide efforts being undertaken by CASQA in conjunction with the CA Water Boards and CA Department of Pesticide Regulation (DPR) to address the widespread problem of surface water contamination by pesticides in urban waterways. Although stated in the adopted TMDL under the Implementation requirements for “DISCHARGES FROM IRRIGATED AGRICULTURAL LANDS” (Res. R3-2014-0009, p. 18), the following TMDL text clearly applies to urban runoff discharges as well:

The TMDL implementation plan also utilizes an interagency approach among the California Department of Pesticide Regulation (DPR), the State Water Resources Control Board, and the Central Coast Water Board to address impairments. The approach is described in the California Pesticide Management Plan for Water Quality (California Pesticide Plan)<sup>5</sup>, which is an implementation plan of the Management Agency Agreement (MAA) between DPR and the Water Boards.

The Department of Pesticide Regulation, the county agricultural commissioners, and USEPA are taking regulatory steps to address pesticide impairments. In accordance with the MAA, DPR has approved urban pesticide regulations to address pyrethroid pesticide water quality pollution.

The TMDL Staff Report also explicitly recognizes that State and Federal pesticide regulators – not municipalities – have the authority and primary responsibility to curtail urban pesticide water pollution caused by legal pesticide uses.

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<sup>5</sup> California Pesticide Management Plan for Water Quality (California Pesticide Plan). Available at: <http://www.cdpr.ca.gov/docs/emon/surfwtr/maaplan.htm>

### **Proposed Attachment G Revisions Lack Flexibility of Adopted TMDL**

The adopted TMDL also includes the following relevant language pertaining to Implementation for “STORM DRAIN DISCHARGES FROM MS4s” (Res. R3-2014-0009, p. 20):

The WAAP will be allowed to include participation in statewide efforts, by organizations such as California Stormwater Quality Association (CASQA), that coordinate with DPR and other organizations taking actions to protect water quality from the use of pesticides in the urban environment.

Monitoring strategies may be able to use a phased approach, for example, whereby outfall or receiving water monitoring is phased-in after best management practices have been implemented and assessed for effectiveness.

Waste load allocations will be achieved through implementation of management practices and strategies to reduce pesticide loading, and wasteload allocation attainment will be demonstrated through water quality monitoring. Implementation can be conducted by MS4s specifically and/or through statewide programs addressing urban pesticide water pollution. [*Note: these two sentences are also included in the proposed Attachment G revisions for this TMDL.*]

To allow for flexibility, Water Board staff will assess compliance with waste load allocations using one or a combination of the following:

- A. Attaining the waste load allocations in the receiving water.
- B. Demonstrating compliance by measuring pesticide concentrations and toxicity in stormwater outfalls.
- C. Implementation and assessment of pollutant loading reduction projects (BMPs) capable of achieving interim and final waste load allocations identified in this TMDL in combination with water quality monitoring for a balanced approach to determining program effectiveness.
- D. Any other effluent limitations and conditions that are consistent with the assumptions and requirements of the waste load allocations.

The preceding provisions allow for flexibility in both development and implementation of the WAAP, as well as in monitoring that is required to assess WAAP effectiveness and compliance with waste load allocations. With the exception noted above [\*], this flexibility is not reflected in the draft revisions to Attachment G for the Santa Maria Watershed Pesticides/Toxicity TMDL.

### **TMDL Approval Resolution Requires Compatibility with Central Valley Pyrethroids TMDL**

Furthermore, State Water Resources Control Board Resolution No. 2014-0033<sup>6</sup>, approving the Santa Maria Watershed Pesticides/Toxicity TMDL (July 2, 2014), states that the State Board:

3. Expects the Central Coast Water Board to follow the evolving regulation of pyrethroids in the Central Valley region, engage as appropriate in that process, conduct further stakeholder process locally within the Central Coast region, and to consider revisions consistent with whereas 8.

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<sup>6</sup> STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2014-0033. Available at: [http://www.waterboards.ca.gov/centralcoast/water\\_issues/programs/tmdl/docs/santa\\_maria/pesticide/smf\\_pest\\_tmdl\\_resln\\_sb2014\\_0033.pdf](http://www.waterboards.ca.gov/centralcoast/water_issues/programs/tmdl/docs/santa_maria/pesticide/smf_pest_tmdl_resln_sb2014_0033.pdf)

The preliminary drafts of the Central Valley Pyrethroids TMDL<sup>7</sup> have included substantive references to the importance of the pesticide regulatory processes for which CA DPR and USEPA are responsible. This language is also not reflected in the draft revisions to Attachment G for the Santa Maria Watershed Pesticides/Toxicity TMDL.

*> CASQA respectfully requests that references to the important roles played by DPR and other state agencies be explicitly included within the revisions to Attachment G for the Santa Maria Watershed Pesticides/Toxicity TMDL, and that additional flexibility be included in the revisions to Attachment G for the Santa Maria Watershed Pesticides/Toxicity TMDL to reflect the language and intent of the adopted TMDL.*

### **Monitoring Requirements Are Less Flexible in Draft Attachment G**

The monitoring required in the proposed Attachment G revisions for the Santa Maria Watershed Pesticides/Toxicity TMDL, per draft WAAP Provision 8 (pp. 57-58, draft revised Attachment G), includes somewhat less flexibility than is indicated in the adopted TMDL (Res. R3-2014-0009, pp. 19-20). However, the most notable issue is the lack of accounting in Attachment G for recent developments in DPR's Surface Water Protection Program<sup>8</sup>, including representative monitoring of discharges and receiving waters in urban areas, and compilation of relevant data into a comprehensive database of pesticides monitoring data. These developments clearly pertain to the relevant language regarding the important role of DPR found in both the adopted TMDL (Resolution R3-2014-0009) and the State Board approval resolution (Resolution No. 2014-0033), as quoted above, and should be explicitly referenced in Attachment G.

*> CASQA's position is that the monitoring being performed by DPR as part of the Surface Water Protection Program, in conjunction with statewide water quality assessments performed as part of the Surface Water Ambient Monitoring Program (SWAMP) and the Perennial Streams Assessment (PSA), should constitute the principal means for assessment of the status and causes of water quality impairments due to pesticides in urban areas. CASQA requests that references to these monitoring programs and associated use of the data they generate be explicitly included in the revised Phase II General Permit Attachment G requirements for the Santa Maria Watershed Pesticides/Toxicity TMDL.*

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<sup>7</sup> Central Valley Pyrethroid Pesticides TMDL and Basin Plan Amendment web page:  
[http://www.waterboards.ca.gov/centralvalley/water\\_issues/tmdl/central\\_valley\\_projects/central\\_valley\\_pesticides/pyrethroid\\_tmdl\\_bpa/index.shtml](http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/central_valley_pesticides/pyrethroid_tmdl_bpa/index.shtml)

<sup>8</sup> CA Dept. of Pesticide Regulation (DPR), Surface Water Protection Program addresses both agricultural and nonagricultural sources of pesticide residues in surface waters. See: <http://cdpr.ca.gov/docs/emon/surfwtr/index.htm>  
CA Dept. of Pesticide Regulation (DPR), Surface Water Database (SURF). SURF contains monitoring results for pesticides in samples taken from California rivers, creeks, agricultural drains, urban streams and estuaries. As of June 2015, SURF contained results from 321 studies conducted by federal, state, and local agencies, private industry, and environmental groups. Samples were collected in 58 counties from over 3000 sample sites between August 1990 and January 2015. The database contains over 554,000 chemical analysis records. [From: Surface Water Protection Program, DPR Updates: July 14, 2015] <http://cdpr.ca.gov/docs/emon/surfwtr/surfdata.htm>

### **Proposed WAAP Assessment Requirements are Technically and Economically Infeasible**

The Region 3 TMDLs covered in Attachment G to the Phase II General Permit generally include Wasteload Allocation Attainment Program (WAAP) requirements that are extremely ambitious, detailed, and technically rigorous. When applied to pesticides, these WAAP requirements are simply unachievable, given the level of available local agency resources and the technical capabilities of available tools that can be applied to modeling and analysis of pesticide runoff, fate and transport, and mitigation.

The WAAP requirements listed in the proposed revised Attachment G for the Santa Maria Watershed Pesticides/Toxicity TMDL are nearly identical to those listed for the Region 3 Fecal Indicator Bacteria and Nutrients TMDLs, without consideration for the distinct differences in the regulation of these very different pollutants.

The Region 3 Santa Maria River Watershed Pesticides/Toxicity TMDL WAAP provisions begin on p. 57 of the proposed revised Attachment G with this introduction:

#### **Provisions for Implementing the TMDL**

By June 30, 2015<sup>9</sup>, the County of Santa Barbara, City of Santa Maria, and City of Guadalupe shall each develop, submit, and begin implementation of a Wasteload Allocation Attainment Program, or an integrated plan, that identifies the actions they will take to attain their wasteload allocations. The Wasteload Allocation Attainment Programs or integrated plans shall include:...

[- skipping to the WAAP provision we are most concerned with:]

7. A quantifiable numeric analysis demonstrating the BMPs selected for implementation will likely achieve, based on modeling, published BMP pollutant removal performance estimates, best professional judgment, and/or other available tools, the MS4's wasteload allocations according to the schedule identified in the TMDL. This analysis will most likely incorporate modeling efforts. The MS4 shall conduct repeat numeric analyses as the BMP implementation plans evolve and information on BMP effectiveness is generated. Once the MS4 has water quality data from its monitoring program, the MS4 shall incorporate water quality data into the numeric analyses to validate BMP implementation plans.

The pesticides in question represent multiple classes of organic chemicals, with each pesticide exhibiting unique physical and chemical properties, including differential responses to biological, chemical and physical transformation processes when entrained within urban runoff. Reliable and quantifiable numeric analysis or modeling ideally would account for a number of factors, including physical transport via urban runoff through the different types of urban landscapes under a representative range of hydrological conditions, relative solubility of each pesticide and partitioning into liquid (dissolved) vs. solid phases (via attachment to particles), fate and transport in both water column and sediments, and relative toxicity of each pesticide to sensitive species in both water and sediments within the range of expected environmental temperatures, including accounting for factors affecting bioavailability.

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<sup>9</sup> This submittal date has passed; needs revision.

Other stormwater pollutants (suspended sediment, metals, nutrients) have received more technical attention and are more amenable to simplified modeling approaches than pesticides. We are not aware of any commercially-available modeling approach that could be applied to quantitative pesticide urban runoff fate and transport modeling without extensive customization, and prohibitively high associated costs. There is also very little information available on treatment effectiveness for pesticides in typical stormwater BMPs, including those being contemplated by California Phase II MS4s for other TMDL WAAPs (particularly for pyrethroids, for which there are no pollutant removal data in the National Stormwater Quality Database).

The projections of BMP effectiveness and subsequent achievement of wasteload allocations required by draft WAAP Provision 7 (proposed revisions to Phase II General Permit Attachment G, p. 57) are therefore of dubious value, particularly because the most effective mitigation will likely occur as a result of regulatory actions by state and federal pesticide regulators.

CASQA therefore requests that the requirements for detailed numeric analysis and modeling be replaced with simplified requirements for assessment of BMP effectiveness and assessment of compliance with waste load allocations, providing for flexibility in how those goals are achieved.

### **Conclusions**

CASQA respectfully requests that the proposed revisions to Attachment G for the Santa Maria Watershed Pesticides/Toxicity TMDL be modified as follows:

- 1) Include acknowledgement of the important roles of the California Department of Pesticide Regulation in monitoring and mitigation of pesticide water quality impairments, to better conform to the language in the adopted TMDL (Resolution No. R3-2014-0009) and the State Board approval resolution (Resolution No. 2014-0033), and acknowledge that more significant pollutant loading reductions may be achievable through state and/or federal regulation of urban pesticide applications, rather than through implementation of local BMPs and
- 2) Include additional flexibility in TMDL compliance and WAAP implementation, more closely reflecting the language of the adopted TMDL (Resolution No. R3-2014-0009), to include the option of participating in statewide efforts, coordination with DPR programs, and tracking of the Central Valley Pyrethroids TMDL;
- 3) Eliminate the detailed modeling and numerical analysis requirements in proposed WAAP provision 7, and provide for flexibility in the requirements for assessment of BMP effectiveness and assessment of compliance with waste load allocations.